



City of Hillsdale

City Council Agenda

August 21, 2017
7:00 p.m.

City Council Chambers
97 N. Broad Street
Hillsdale, MI 49242

- I. Call to Order and Pledge of Allegiance**
- II. Roll Call**
- III. Approval of Agenda**
- IV. Public Comments on Agenda Items**
- V. Consent Agenda**
 - A. Approval of Bills
 1. [City Claims of August 10, 2017: \\$562,412.38](#)
 2. [BPU Claims of August 10, 2017: \\$191,795.89](#)
 3. [Payroll of August 10, 2017: \\$160,501.22](#)
 - B. [City Council Meeting Minutes of August 7, 2017](#)
 - C. [EDC Minutes of June 15, 2017 and July 24, 2017](#)
 - D. [Agreement for Use of Mrs. Stock's Park – Mr. Kyle Hart](#)
 - E. [Agreement for Use of Owen Memorial Park – Indiana Outboard Races](#)
- VI. Communications/Petitions**
 - A. [Certificate of Appreciation to Ms. Melaney Wells](#)
 - B. [Michigan South Central Power Agency Integrated Resource Plan](#)
 - C. [Correspondence from Hillsdale County Clerk re: Election Equipment](#)
 - D. [Correspondence from Comcast re: Cable Television changes](#)
 - E. [Correspondence re: Placement of Political Signs](#)
- VII. Introduction and Adoption of Ordinance/Public Hearing**
- VIII. Unfinished Business**
- IX. Old Business**
 - A. [Discussion of City of Hillsdale's Social Media Policy](#)
 - B. [Discussion of Regulating Medical Marijuana Facilities within the City of Hillsdale](#)
- X. New Business**
 - A. [Resolution 3318: Approving an Application for a Neighborhood Enterprise Zone Rehabilitated Certificate for David Roberts Located at 88 North West Street](#)
 - B. [Acceptance of the MERS Valuation Report of Financial Impact](#)

- XI. Miscellaneous Reports**
- XII. City Manager's Report**
- XIII. General Public Comment**
- XIV. Council Comment**
- XV. Adjournment**

GL Number	GL Desc	Vendor	Invoice Desc.	Invoice	Chk Date	Amount	Check
Check 100							
101-000.000-228.003	DUE TO MMERS-RETIREMENT	MERS	RETIREMENT CONTRIBUTIONS	00072522-14	08/11/17	7,610.70	100
101-172.000-716.000	RETIREMENT	MERS	RETIREMENT CONTRIBUTIONS	00072522-14	08/11/17	2,017.47	100
101-209.000-716.000	RETIREMENT	MERS	RETIREMENT CONTRIBUTIONS	00072522-14	08/11/17	498.91	100
101-215.000-716.000	RETIREMENT	MERS	RETIREMENT CONTRIBUTIONS	00072522-14	08/11/17	644.87	100
101-219.000-716.000	RETIREMENT	MERS	RETIREMENT CONTRIBUTIONS	00072522-14	08/11/17	533.27	100
101-253.000-716.000	RETIREMENT	MERS	RETIREMENT CONTRIBUTIONS	00072522-14	08/11/17	1.00	100
101-301.000-716.000	RETIREMENT	MERS	RETIREMENT CONTRIBUTIONS	00072522-14	08/11/17	15,891.91	100
101-336.000-716.000	RETIREMENT	MERS	RETIREMENT CONTRIBUTIONS	00072522-14	08/11/17	1,696.00	100
101-372.000-716.000	RETIREMENT	MERS	RETIREMENT CONTRIBUTIONS	00072522-14	08/11/17	268.96	100
101-400.000-716.000	RETIREMENT	MERS	RETIREMENT CONTRIBUTIONS	00072522-14	08/11/17	334.23	100
101-441.000-716.000	RETIREMENT	MERS	RETIREMENT CONTRIBUTIONS	00072522-14	08/11/17	764.78	100
208-751.000-716.000	RETIREMENT	MERS	RETIREMENT CONTRIBUTIONS	00072522-14	08/11/17	380.17	100
271-790.000-716.000	RETIREMENT	MERS	RETIREMENT CONTRIBUTIONS	00072522-14	08/11/17	164.70	100
588-588.000-716.000	RETIREMENT	MERS	RETIREMENT CONTRIBUTIONS	00072522-14	08/11/17	282.79	100
640-444.000-716.000	RETIREMENT	MERS	RETIREMENT CONTRIBUTIONS	00072522-14	08/11/17	303.47	100
699-441.000-716.000	RETIREMENT	MERS	RETIREMENT CONTRIBUTIONS	00072522-14	08/11/17	893.46	100
Total For Check 100						32,286.69	
Check 77779							
640-444.000-726.000	SUPPLIES	1ST AYD CORPORTATION	BRAKE PARTS CLEANER	PSI107616	08/04/17	212.13	77779
Total For Check 77779						212.13	
Check 77780							
208-000.000-653.001	YOUTH PROGRAM FEES	AMBER SANDERSON	T-BALL REFUND	REFUND	08/04/17	25.00	77780
Total For Check 77780						25.00	
Check 77781							
101-215.000-801.000	CONTRACTUAL SERVICES	ACCUSHRED	DOCUMENT SHREDDING SERVICE	39639	08/10/17	55.00	77781
Total For Check 77781						55.00	
Check 77782							
101-336.000-930.000	REPAIRS & MAINTENANCE	AMERICAN COPPER AND B	LIGHT STRIPS	17INV028868	08/10/17	130.00	77782
101-336.000-930.000	REPAIRS & MAINTENANCE	AMERICAN COPPER AND B	14.1 50LB NAT. TIE (F.D.)	17INV03007	08/10/17	4.65	77782
101-756.000-726.000	SUPPLIES	AMERICAN COPPER AND B	LED STRIP LIGHT	17INV030631	08/10/17	686.00	77782
101-756.000-726.000	SUPPLIES	AMERICAN COPPER AND B	FIP CAP	17INV033699	08/10/17	2.92	77782
Total For Check 77782						823.57	
Check 77783							
101-215.000-726.000	SUPPLIES	ARROW SWIFT PRINTING	CITY WINDOW ENVELOPES	143184	08/10/17	420.05	77783
Total For Check 77783						420.05	
Check 77784							
271-790.000-982.000	BOOKS	BAKER & TAYLOR COMPAN	JULY ADULT BOOK PURCHASE	2033026881	08/10/17	266.77	77784
271-790.000-982.000	BOOKS	BAKER & TAYLOR COMPAN	ADULT BOOK ORDER	2033026880	08/10/17	59.40	77784
Total For Check 77784						326.17	
Check 77785							
101-441.000-862.000	LODGING AND MEALS	BAVARIAN INN LODGE	LODGING FOR MAMC CONFERENCE - FLAU	LODGING	08/10/17	228.90	77785
101-441.000-862.000	LODGING AND MEALS	BAVARIAN INN LODGE	LODGING FOR MAMC CONFERENCE - FLAU	LODGING	08/10/17	228.90	77785
Total For Check 77785						457.80	
Check 77786							
101-209.000-862.000	LODGING AND MEALS	ALAN BEEKER	MAA CONFERENCE	EXPENSE	08/10/17	31.61	77786
101-253.000-862.000	LODGING AND MEALS	ALAN BEEKER	MAA CONFERENCE	EXPENSE	08/10/17	31.60	77786

GL Number	GL Desc	Vendor	Invoice Desc.	Invoice	Chk Date	Amount	Check
Check 77786							
Total For Check 77786						63.21	
Check 77787							
101-172.000-715.000	HEALTH AND LIFE INSURANC	BLUE CROSS & BLUE SHI	DENTAL & VISION INSURANCE GROUP 00	SEPT 2017 0002	08/10/17	27.60	77787
101-215.000-715.000	HEALTH AND LIFE INSURANC	BLUE CROSS & BLUE SHI	DENTAL & VISION INSURANCE GROUP 00	SEPT 2017 0002	08/10/17	123.35	77787
101-219.000-715.000	HEALTH AND LIFE INSURANC	BLUE CROSS & BLUE SHI	DENTAL & VISION INSURANCE GROUP 00	SEPT 2017 0002	08/10/17	55.20	77787
101-301.000-715.000	HEALTH AND LIFE INSURANC	BLUE CROSS & BLUE SHI	DENTAL & VISION INSURANCE GROUP 00	SEPT 2017 0002	08/10/17	178.55	77787
101-301.000-715.000	HEALTH AND LIFE INSURANC	BLUE CROSS & BLUE SHI	DENTAL & VISION INSURANCE GROUP 00	SEPT 2017 0000	08/10/17	788.34	77787
101-336.000-715.000	HEALTH AND LIFE INSURANC	BLUE CROSS & BLUE SHI	DENTAL & VISION INSURANCE GROUP 00	SEPT 2017 0001	08/10/17	164.02	77787
101-400.000-715.000	HEALTH AND LIFE INSURANC	BLUE CROSS & BLUE SHI	DENTAL & VISION INSURANCE GROUP 00	SEPT 2017 0002	08/10/17	95.75	77787
101-441.000-715.000	HEALTH AND LIFE INSURANC	BLUE CROSS & BLUE SHI	DENTAL & VISION INSURANCE GROUP 00	SEPT 2017 0002	08/10/17	150.95	77787
208-751.000-715.000	HEALTH AND LIFE INSURANC	BLUE CROSS & BLUE SHI	DENTAL & VISION INSURANCE GROUP 00	SEPT 2017 0002	08/10/17	55.20	77787
271-790.000-715.000	HEALTH AND LIFE INSURANC	BLUE CROSS & BLUE SHI	DENTAL & VISION INSURANCE GROUP 00	SEPT 2017 0002	08/10/17	55.20	77787
588-588.000-715.000	HEALTH AND LIFE INSURANC	BLUE CROSS & BLUE SHI	DENTAL & VISION INSURANCE GROUP 00	SEPT 2017 0002	08/10/17	55.20	77787
588-588.000-715.000	HEALTH AND LIFE INSURANC	BLUE CROSS & BLUE SHI	DENTAL & VISION INSURANCE GROUP 00	SEPT 2017 0006	08/10/17	99.16	77787
640-444.000-715.000	HEALTH AND LIFE INSURANC	BLUE CROSS & BLUE SHI	DENTAL & VISION INSURANCE GROUP 00	SEPT 2017 0002	08/10/17	27.60	77787
640-444.000-715.000	HEALTH AND LIFE INSURANC	BLUE CROSS & BLUE SHI	DENTAL & VISION INSURANCE GROUP 00	SEPT 2017 0006	08/10/17	85.92	77787
699-441.000-715.000	HEALTH AND LIFE INSURANC	BLUE CROSS & BLUE SHI	DENTAL & VISION INSURANCE GROUP 00	SEPT 2017 0002	08/10/17	27.60	77787
699-441.000-715.000	HEALTH AND LIFE INSURANC	BLUE CROSS & BLUE SHI	DENTAL & VISION INSURANCE GROUP 00	SEPT 2017 0006	08/10/17	418.06	77787
Total For Check 77787						2,407.70	
Check 77788							
101-756.000-801.000	CONTRACTUAL SERVICES	BOARD OF PUBLIC UTILI	COLIFORM TESTING	17-0000129	08/10/17	75.00	77788
202-460.000-801.000	CONTRACTUAL SERVICES	BOARD OF PUBLIC UTILI	STREET LIGHT MAINTENANCE	17-0000127	08/10/17	40.56	77788
203-460.000-801.000	CONTRACTUAL SERVICES	BOARD OF PUBLIC UTILI	STREET LIGHT MAINTENANCE	17-0000127	08/10/17	61.10	77788
Total For Check 77788						176.66	
Check 77789							
101-209.000-801.000	CONTRACTUAL SERVICES	BS&A SOFTWARE	ACCESS MY GOV - INTERNET SERVICES	113469	08/10/17	1,144.00	77789
101-253.000-801.000	CONTRACTUAL SERVICES	BS&A SOFTWARE	ACCESS MY GOV - INTERNET SERVICES	113469	08/10/17	1,144.00	77789
Total For Check 77789						2,288.00	
Check 77790							
101-441.000-955.588	MISC. - CDL LICENSING/TE	CE & A PROFESSIONAL S	PREEMPLOYMENT TESTING	33324	08/10/17	54.00	77790
588-588.000-955.588	MISC. - CDL LICENSING/TE	CE & A PROFESSIONAL S	RANDOM TESTING	33526	08/10/17	54.00	77790
Total For Check 77790						108.00	
Check 77791							
271-790.000-982.000	BOOKS	CENGAGE LEARNING	ADULT BOOK ORDER	60949192	08/10/17	101.21	77791
271-790.000-982.000	BOOKS	CENGAGE LEARNING	LARGE PRINT STANDING ORDER FOR 201	60945714	08/10/17	1,499.00	77791
Total For Check 77791						1,600.21	
Check 77792							
208-751.000-726.000	SUPPLIES	COUNTRY SIDE TROPHIES	T-BALL/COACH PITCH MEDALS	1483	08/10/17	391.50	77792
208-751.000-726.000	SUPPLIES	COUNTRY SIDE TROPHIES	COACH PITCH TROPHIES	1499	08/10/17	90.00	77792
Total For Check 77792						481.50	
Check 77793							
101-174.000-801.000	CONTRACTUAL SERVICES	CURRENT OFFICE SOLUTI	COPIER LEASE/COPIES	288492	08/10/17	19.99	77793
101-209.000-726.000	SUPPLIES	CURRENT OFFICE SOLUTI	2ND FLOOR - HANGING FOLDERS/TABS	443669	08/10/17	133.65	77793
101-209.000-726.000	SUPPLIES	CURRENT OFFICE SOLUTI	2ND FLOOR - TABS/HANGING FOLDERS/F	443794	08/10/17	114.68	77793
101-209.000-801.000	CONTRACTUAL SERVICES	CURRENT OFFICE SOLUTI	COPIER LEASE/COPIES	288492	08/10/17	71.35	77793
101-215.000-801.000	CONTRACTUAL SERVICES	CURRENT OFFICE SOLUTI	COPIER LEASE/COPIES	288492	08/10/17	168.46	77793
101-215.000-801.000	CONTRACTUAL SERVICES	CURRENT OFFICE SOLUTI	COPIER LEASE/COPIES	288492	08/10/17	57.43	77793
101-253.000-726.000	SUPPLIES	CURRENT OFFICE SOLUTI	CITY HALL PAPER SUPPLIES/TREASURER	443780	08/10/17	28.90	77793

GL Number	GL Desc	Vendor	Invoice Desc.	Invoice	Chk Date	Amount	Check
Check 77793							
101-253.000-726.000	SUPPLIES	CURRENT OFFICE SOLUTI	CITY HALL PAPER SUPPLIES/TREASURER	443780	08/10/17	28.31	77793
101-265.000-726.000	SUPPLIES	CURRENT OFFICE SOLUTI	CITY HALL PAPER SUPPLIES/TREASURER	443780	08/10/17	121.45	77793
101-265.000-726.000	SUPPLIES	CURRENT OFFICE SOLUTI	CITY HALL PAPER SUPPLIES/TREASURER	443780	08/10/17	115.95	77793
101-301.000-801.000	CONTRACTUAL SERVICES	CURRENT OFFICE SOLUTI	COPIER LEASE/COPIES	288492	08/10/17	7.74	77793
101-336.000-726.000	SUPPLIES	CURRENT OFFICE SOLUTI	PENS	590482	08/10/17	32.00	77793
101-372.000-801.000	CONTRACTUAL SERVICES	CURRENT OFFICE SOLUTI	COPIER LEASE/COPIES	288492	08/10/17	28.60	77793
101-400.000-801.000	CONTRACTUAL SERVICES	CURRENT OFFICE SOLUTI	COPIER LEASE/COPIES	288492	08/10/17	28.60	77793
101-441.000-801.000	CONTRACTUAL SERVICES	CURRENT OFFICE SOLUTI	COPIER LEASE/COPIES	288492	08/10/17	91.35	77793
208-751.000-801.000	CONTRACTUAL SERVICES	CURRENT OFFICE SOLUTI	COPIER LEASE/COPIES	288492	08/10/17	112.31	77793
271-790.000-726.000	SUPPLIES	CURRENT OFFICE SOLUTI	TAPE/CUTTER/LABEL/CD SLEEVE/CAN LI	588282	08/10/17	119.57	77793
271-790.000-726.000	SUPPLIES	CURRENT OFFICE SOLUTI	LABELS/TAPE	589429	08/10/17	146.68	77793
271-790.000-801.000	CONTRACTUAL SERVICES	CURRENT OFFICE SOLUTI	LANIER COPIER LEASE AND COPIES	288493	08/10/17	171.09	77793
Total For Check 77793						1,598.11	
Check 77794							
271-790.000-726.000	SUPPLIES	DEMCO, INC	BOOK JACKET/REPAIR TAPE	72200303	08/10/17	111.31	77794
271-790.000-726.000	SUPPLIES	DEMCO, INC	BOOK JACKET/REPAIR TAPE	72200303	08/10/17	10.02	77794
Total For Check 77794						121.33	
Check 77795							
101-295.000-925.000	TELEPHONE	DMCI BROADBAND, LLC	QUARTERLY INTERNET/PHONE - AIRPORT	08/01/17	08/10/17	363.35	77795
Total For Check 77795						363.35	
Check 77796							
101-175.000-801.000	CONTRACTUAL SERVICES	DOBERMAN TECHNOLOGIES	SERVER MANAGEMENT MONTHLY FEES	CW-6406	08/10/17	1,340.00	77796
271-790.000-801.000	CONTRACTUAL SERVICES	DOBERMAN TECHNOLOGIES	MANAGED USER SUPPORT PLAN - LIBRAR	CW-6415	08/10/17	295.00	77796
271-790.000-801.000	CONTRACTUAL SERVICES	DOBERMAN TECHNOLOGIES	REPLACEMENT BATTERY CARTRIDGE - LI	CW-6361	08/10/17	54.00	77796
Total For Check 77796						1,689.00	
Check 77797							
101-301.000-742.000	CLOTHING / UNIFORMS	THAD DOTY	2017 EQUIPMENT ALLOWANCE	2017 EQUIP	08/10/17	200.00	77797
101-301.000-861.000	TRAINING & SEMINARS	THAD DOTY	HCSC GYM MEMBERSHIP FOR PHYSICAL F	2017 PHYS FIT R	08/10/17	100.00	77797
Total For Check 77797						300.00	
Check 77798							
203-480.000-726.000	SUPPLIES	DOUBLE A LAWNSCAPING	STRAW BLANKET ROLLS, FABRIC, ANCHO	34431	08/10/17	223.00	77798
Total For Check 77798						223.00	
Check 77799							
101-265.000-801.000	CONTRACTUAL SERVICES	EAST 2 WEST ENTERPRIS	MONTHLY CLEANING - DISPATCH	7187	08/10/17	40.00	77799
Total For Check 77799						40.00	
Check 77800							
101-336.000-726.000	SUPPLIES	EMERGENCY MEDICAL PRO	MEDICAL SUPPLIES	1918883	08/10/17	133.75	77800
101-336.000-726.000	SUPPLIES	EMERGENCY MEDICAL PRO	MEDICAL SUPPLIES	1918883	08/10/17	2.12	77800
101-336.000-726.000	SUPPLIES	EMERGENCY MEDICAL PRO	MEDICAL SUPPLIES	1918883	08/10/17	2.12	77800
101-336.000-726.000	SUPPLIES	EMERGENCY MEDICAL PRO	MEDICAL SUPPLIES	1918883	08/10/17	3.18	77800
101-336.000-726.000	SUPPLIES	EMERGENCY MEDICAL PRO	MEDICAL SUPPLIES	1918883	08/10/17	2.12	77800
101-336.000-726.000	SUPPLIES	EMERGENCY MEDICAL PRO	MEDICAL SUPPLIES	1918883	08/10/17	2.12	77800
101-336.000-726.000	SUPPLIES	EMERGENCY MEDICAL PRO	MEDICAL SUPPLIES	1918883	08/10/17	2.12	77800
101-336.000-726.000	SUPPLIES	EMERGENCY MEDICAL PRO	MEDICAL SUPPLIES	1918883	08/10/17	27.60	77800
Total For Check 77800						175.13	
Check 77801							
101-441.000-955.441	MISCELLANEOUS - SHOE ALL	FRANK ENGLE	SHOE ALLOWANCE	REIMBURSE	08/10/17	83.78	77801

GL Number	GL Desc	Vendor	Invoice Desc.	Invoice	Chk Date	Amount	Check
Check 77801							
						Total For Check 77801	83.78
Check 77802							
247-000.000-082.001	DUE FROM OTHERS - BRIDGE	EVANS DRYWALL	DRYWALL INSTALLATION - 25 HILLSDAL	TIFA BRIDGE LOA	08/10/17	3,000.00	77802
						Total For Check 77802	3,000.00
Check 77803							
640-444.000-726.000	SUPPLIES	FAMILY FARM & HOME	400 MEDIUM GRIT BLASTING SAND	57	08/10/17	79.90	77803
						Total For Check 77803	79.90
Check 77804							
409-756.000-801.000	CONTRACTUAL SERVICES	FORTRESS PRODUCTIONS	2017 MRS. STOCK'S PARK CONCERT SE	18008082017_046	08/10/17	1,080.00	77804
						Total For Check 77804	1,080.00
Check 77805							
101-336.000-742.000	CLOTHING / UNIFORMS	GALL'S, INC	TWILL PDU CARGO PANTS - BURKE/HAWK	007925226	08/10/17	109.98	77805
						Total For Check 77805	109.98
Check 77806							
101-265.000-801.790	CONTRACTUAL SRV-MITCHELL	GELZER & SON INC	PLUNGER W/HOLDER (MRC)	A15047	08/10/17	17.49	77806
101-295.000-726.000	SUPPLIES	GELZER & SON INC	FASTNERS & ANCHORS	C252267	08/10/17	8.88	77806
101-295.000-726.000	SUPPLIES	GELZER & SON INC	ORANGE PAINT - AIRPORT	C251574	08/10/17	17.96	77806
101-295.000-930.000	REPAIRS & MAINTENANCE	GELZER & SON INC	HARDWARE	A150879	08/10/17	17.25	77806
101-295.000-930.000	REPAIRS & MAINTENANCE	GELZER & SON INC	FASTNERS & ANCHORS	C250406	08/10/17	2.78	77806
101-336.000-726.000	SUPPLIES	GELZER & SON INC	WALL PLATE/HDMI CABLE/LINE MARKING	A150458	08/10/17	0.49	77806
101-336.000-726.000	SUPPLIES	GELZER & SON INC	WALL PLATE/HDMI CABLE/LINE MARKING	A150458	08/10/17	12.99	77806
101-336.000-726.000	SUPPLIES	GELZER & SON INC	WALL PLATE/HDMI CABLE/LINE MARKING	A150458	08/10/17	7.98	77806
101-441.000-726.000	SUPPLIES	GELZER & SON INC	NIFTY WRAPPER	C251503	08/10/17	29.99	77806
101-756.000-726.000	SUPPLIES	GELZER & SON INC	PAINT (PARKS)	A150684	08/10/17	116.97	77806
101-756.000-726.000	SUPPLIES	GELZER & SON INC	PAINT, BRUSH, CUP, BOLTS (PARKS)	A150034	08/10/17	115.09	77806
640-444.000-730.000	VEH./EQUIP. MAINT. SUPPL	GELZER & SON INC	ELBOW, BOLTS,NIPPLE (#23)	A150035	08/10/17	12.87	77806
640-444.000-730.000	VEH./EQUIP. MAINT. SUPPL	GELZER & SON INC	KEYS	A150228	08/10/17	17.92	77806
640-444.000-730.000	VEH./EQUIP. MAINT. SUPPL	GELZER & SON INC	THREAD ADAPTER (#23)	A150041	08/10/17	4.58	77806
640-444.000-730.000	VEH./EQUIP. MAINT. SUPPL	GELZER & SON INC	SPRING	A150638	08/10/17	1.77	77806
						Total For Check 77806	385.01
Check 77807							
640-444.000-730.000	VEH./EQUIP. MAINT. SUPPL	GODFREY BROTHERS, INC	BEARINGS	S30661	08/10/17	209.10	77807
						Total For Check 77807	209.10
Check 77808							
101-265.000-801.000	CONTRACTUAL SERVICES	CAROL HAWKES	CITY HALL CLEANING SERVICE	1257	08/10/17	633.00	77808
101-265.000-801.000	CONTRACTUAL SERVICES	CAROL HAWKES	CITY HALL CLEANING SERVICE	1257	08/10/17	633.00	77808
						Total For Check 77808	1,266.00
Check 77809							
101-265.000-726.000	SUPPLIES	HEFFERNAN SOFT WATER	WATER DELIVERY SERVICE	105787	08/10/17	38.00	77809
101-441.000-726.000	SUPPLIES	HEFFERNAN SOFT WATER	WATER DELIVERY SERVICE	105787	08/10/17	19.00	77809
271-790.000-726.000	SUPPLIES	HEFFERNAN SOFT WATER	WATER DELIVERY SERVICE	105787	08/10/17	14.25	77809
						Total For Check 77809	71.25
Check 77810							
265-301.000-726.000	SUPPLIES	HILLSDALE CO PROSECUT	10% OF FUNDS SEIZED (\$109/\$10.90 C	17-3385	08/10/17	10.90	77810
						Total For Check 77810	10.90

GL Number	GL Desc	Vendor	Invoice Desc.	Invoice	Chk Date	Amount	Check
Check 77811							
101-215.000-905.000	PUBLISHING / NOTICES	HILLSDALE MEDIA GROUP	PUBLIC NOTICE	300023096	08/10/17	80.25	77811
101-215.000-905.000	PUBLISHING / NOTICES	HILLSDALE MEDIA GROUP	PUBLIC HEARING NOTICE	300024324	08/10/17	80.25	77811
Total For Check 77811						160.50	
Check 77812							
101-174.000-801.000	CONTRACTUAL SERVICES	HILLSDALE POLICY GROU	CONTRACUTUAL SERVICES AND EXPENSES JULY 2017	JULY 2017	08/10/17	12.71	77812
101-174.000-801.000	CONTRACTUAL SERVICES	HILLSDALE POLICY GROU	CONTRACUTUAL SERVICES AND EXPENSES JULY 2017	JULY 2017	08/10/17	20.00	77812
101-174.000-801.000	CONTRACTUAL SERVICES	HILLSDALE POLICY GROU	CONTRACUTUAL SERVICES AND EXPENSES JULY 2017	JULY 2017	08/10/17	30.00	77812
101-174.000-801.000	CONTRACTUAL SERVICES	HILLSDALE POLICY GROU	CONTRACUTUAL SERVICES AND EXPENSES JULY 2017	JULY 2017	08/10/17	3,613.50	77812
Total For Check 77812						3,676.21	
Check 77813							
101-756.000-801.000	CONTRACTUAL SERVICES	HOOP LAWN & SNOW, LLC	FERTILIZING OF FOD	7272017HR	08/10/17	1,080.00	77813
Total For Check 77813						1,080.00	
Check 77814							
101-441.000-726.000	SUPPLIES	HOWARD T MORIARTY COM	CHAPS, GLOVES, PIN SET, BARRICADES	00313204	08/10/17	927.85	77814
101-441.000-726.000	SUPPLIES	HOWARD T MORIARTY COM	CONES	00313224	08/10/17	1,295.00	77814
Total For Check 77814						2,222.85	
Check 77815							
640-444.000-730.000	VEH./EQUIP. MAINT. SUPPL	JACK DOHNEY COMPANIES	LEAD HOSE	A05502	08/10/17	156.82	77815
Total For Check 77815						156.82	
Check 77816							
588-588.000-730.000	VEH./EQUIP. MAINT. SUPPL	JACKSON TRUCK SERVICE	LED LIGHTS	PC001295438	08/10/17	23.56	77816
Total For Check 77816						23.56	
Check 77817							
101-000.000-477.000	PERMITS	JOHNSON SIGN CO	OVERPAYMENT- SIGN PERMIT	REFUND	08/10/17	125.00	77817
Total For Check 77817						125.00	
Check 77818							
640-444.000-730.000	VEH./EQUIP. MAINT. SUPPL	KIMBALL MIDWEST	GREASE & PINS	5751885	08/10/17	102.83	77818
Total For Check 77818						102.83	
Check 77819							
101-441.000-726.000	SUPPLIES	KSS ENTERPRISES	LINERS, TOILER PAPER, CLEANER, BLE	1047350	08/10/17	378.98	77819
101-441.000-726.000	SUPPLIES	KSS ENTERPRISES	SAFETY GLASSES	1047350-1	08/10/17	75.11	77819
588-588.000-726.000	SUPPLIES	KSS ENTERPRISES	PAPER TOWEL/TOILET PAPER - DART	1050001	08/10/17	167.70	77819
Total For Check 77819						621.79	
Check 77820							
208-751.000-726.006	CONCESSION SUPPLIES	KUSTER'S DAIRY PRODUC	CONCESSIONS PRODUCTS - SANDY BEACH	802 080217	08/10/17	105.40	77820
208-751.000-726.006	CONCESSION SUPPLIES	KUSTER'S DAIRY PRODUC	CONCESSIONS PRODUCTS - SANDY BEACH	802 072617	08/10/17	134.03	77820
208-751.000-726.006	CONCESSION SUPPLIES	KUSTER'S DAIRY PRODUC	CONCESSIONS PRODUCTS - SANDY BEACH	802 073117	08/10/17	82.35	77820
Total For Check 77820						321.78	
Check 77821							
271-792.000-726.010	SUPPLIES-SUMMER READING	LITTLE CAESARS PIZZA	LIBRARY FOOD ORDER	SUMMER READING	08/10/17	40.00	77821
Total For Check 77821						40.00	
Check 77822							
640-444.000-730.000	VEH./EQUIP. MAINT. SUPPL	LYDEN OIL COMPANY	LUBRIC 888 OIL	1352271	08/10/17	87.45	77822
Total For Check 77822						87.45	

GL Number	GL Desc	Vendor	Invoice Desc.	Invoice	Chk Date	Amount	Check
Check 77823							
208-000.000-692.000	OTHER REVENUE	KENDRA MANICK	PAVILION REFUND (RECEIPT #22298)	22298	08/10/17	75.00	77823
						75.00	
Total For Check 77823							
Check 77824							
101-276.000-801.000	CONTRACTUAL SERVICES	MANPOWER OF LANSING	TEMP EMPLOYEES W/E 7/23/2017	31670523	08/10/17	120.48	77824
101-441.000-801.000	CONTRACTUAL SERVICES	MANPOWER OF LANSING	TEMP EMPLOYEES W/E 7/23/2017	31670523	08/10/17	504.51	77824
101-441.000-801.000	CONTRACTUAL SERVICES	MANPOWER OF LANSING	TEMP EMPLOYEES W/E 7/30/2017	31695742	08/10/17	240.96	77824
101-756.000-801.000	CONTRACTUAL SERVICES	MANPOWER OF LANSING	TEMP EMPLOYEES W/E 7/23/2017	31670523	08/10/17	67.77	77824
202-450.000-801.000	CONTRACTUAL SERVICES	MANPOWER OF LANSING	TEMP EMPLOYEES W/E 7/23/2017	31670523	08/10/17	143.07	77824
202-450.000-801.000	CONTRACTUAL SERVICES	MANPOWER OF LANSING	TEMP EMPLOYEES W/E 7/30/2017	31695742	08/10/17	112.95	77824
202-460.000-801.000	CONTRACTUAL SERVICES	MANPOWER OF LANSING	TEMP EMPLOYEES W/E 7/23/2017	31670523	08/10/17	15.06	77824
202-480.000-801.000	CONTRACTUAL SERVICES	MANPOWER OF LANSING	TEMP EMPLOYEES W/E 7/30/2017	31695742	08/10/17	195.78	77824
203-450.000-801.000	CONTRACTUAL SERVICES	MANPOWER OF LANSING	TEMP EMPLOYEES W/E 7/23/2017	31670523	08/10/17	188.25	77824
203-450.000-801.000	CONTRACTUAL SERVICES	MANPOWER OF LANSING	TEMP EMPLOYEES W/E 7/30/2017	31695742	08/10/17	60.24	77824
203-480.000-801.000	CONTRACTUAL SERVICES	MANPOWER OF LANSING	TEMP EMPLOYEES W/E 7/23/2017	31670523	08/10/17	67.77	77824
203-480.000-801.000	CONTRACTUAL SERVICES	MANPOWER OF LANSING	TEMP EMPLOYEES W/E 7/30/2017	31695742	08/10/17	233.43	77824
						1,950.27	
Total For Check 77824							
Check 77825							
101-336.000-726.000	SUPPLIES	MARKET HOUSE	WATER	106041	08/10/17	11.96	77825
208-751.000-726.006	CONCESSION SUPPLIES	MARKET HOUSE	CLEANING/CHIPS/BUNS/FREEZER BARS	106540	08/10/17	98.06	77825
208-751.000-726.006	CONCESSION SUPPLIES	MARKET HOUSE	CONCESSION SUPPLIES - SANDY BEACH	106531	08/10/17	53.87	77825
208-751.000-726.006	CONCESSION SUPPLIES	MARKET HOUSE	SALES TAX REFUND	106135	08/10/17	(2.16)	77825
271-792.000-726.010	SUPPLIES-SUMMER READING	MARKET HOUSE	SUMMER READING - WATER	106763	08/10/17	23.92	77825
						185.65	
Total For Check 77825							
Check 77826							
101-172.000-810.000	DUES AND SUBSCRIPTIONS	MICH ECONOMIC DEVELOP	DUES /BASIC ECON DEV COURSE - KELL	11699	08/10/17	280.00	77826
101-172.000-861.000	TRAINING & SEMINARS	MICH ECONOMIC DEVELOP	DUES /BASIC ECON DEV COURSE - KELL	11699	08/10/17	625.00	77826
						905.00	
Total For Check 77826							
Check 77827							
409-756.000-726.000	SUPPLIES	DIANNE MILLER	MRS STOCKS PARK PLANTS	REIMBURSE	08/10/17	122.40	77827
						122.40	
Total For Check 77827							
Check 77828							
101-101.000-861.000	TRAINING & SEMINARS	MSU ANR EVENT SERVICE	MSUE TRAINING - MEDICAL MARIJUANA	161232	08/10/17	55.00	77828
101-101.000-861.000	TRAINING & SEMINARS	MSU ANR EVENT SERVICE	MSUE TRAINING - MEDICAL MARIJUANA	161233	08/10/17	55.00	77828
101-400.000-861.000	TRAINING & SEMINARS	MSU ANR EVENT SERVICE	MSUE TRAINING - MEDICAL MARIJUANA	159700	08/10/17	50.00	77828
101-400.000-861.000	TRAINING & SEMINARS	MSU ANR EVENT SERVICE	MSUE TRAINING - MEDICAL MARIJUANA	159700	08/10/17	50.00	77828
101-400.000-861.000	TRAINING & SEMINARS	MSU ANR EVENT SERVICE	MSUE TRAINING - MEDICAL MARIJUANA	159700	08/10/17	50.00	77828
101-400.000-861.000	TRAINING & SEMINARS	MSU ANR EVENT SERVICE	MSUE TRAINING - MEDICAL MARIJUANA	159700	08/10/17	50.00	77828
101-400.000-861.000	TRAINING & SEMINARS	MSU ANR EVENT SERVICE	MSUE TRAINING - MEDICAL MARIJUANA	159700	08/10/17	50.00	77828
244-174.000-810.000	DUES AND SUBSCRIPTIONS	MSU ANR EVENT SERVICE	MSUE TRAINING - MEDICAL MARIJUANA	159700	08/10/17	50.00	77828
244-174.000-810.000	DUES AND SUBSCRIPTIONS	MSU ANR EVENT SERVICE	MSUE TRAINING - MEDICAL MARIJUANA	159700	08/10/17	50.00	77828
						460.00	
Total For Check 77828							
Check 77829							
101-215.000-801.000	CONTRACTUAL SERVICES	MUNICIPAL CODE CORPOR	ANNUAL WEB HOSING 08/01/17 - 07/31	00293567	08/10/17	950.00	77829
						950.00	
Total For Check 77829							
Check 77830							
640-444.000-801.301	POLICE VEHICLE REPAIR	NORM'S TIREMAN	WHEEL/TIRE UNIT 2-4 (14 EXPLORER)	5200039536	08/10/17	183.00	77830
640-444.000-801.301	POLICE VEHICLE REPAIR	NORM'S TIREMAN	PURSUIT TIRE & INSTALL	5200039583	08/10/17	127.80	77830
640-444.000-801.301	POLICE VEHICLE REPAIR	NORM'S TIREMAN	PURSUIT TIRE & INSTALL	5200039583	08/10/17	17.49	77830

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Check 77830							
640-444.000-801.301	POLICE VEHICLE REPAIR	NORM'S TIREMAN	PURSUIT TIRE & INSTALL	5200039583	08/10/17	2.50	77830
640-444.000-801.301	POLICE VEHICLE REPAIR	NORM'S TIREMAN	4 TIRES UNIT 2-6 (10 IMPALA)	5200040044	08/10/17	376.92	77830
640-444.000-801.301	POLICE VEHICLE REPAIR	NORM'S TIREMAN	4 TIRES UNIT 2-6 (10 IMPALA)	5200040044	08/10/17	69.96	77830
640-444.000-801.301	POLICE VEHICLE REPAIR	NORM'S TIREMAN	4 TIRES UNIT 2-6 (10 IMPALA)	5200040044	08/10/17	10.00	77830
Total For Check 77830						787.67	
Check 77831							
101-301.000-726.000	SUPPLIES	NYE UNIFORM COMPANY	CLOTH NAME TAGS(DOTY/HEPHNER)	614192	08/10/17	24.00	77831
101-301.000-742.000	CLOTHING / UNIFORMS	NYE UNIFORM COMPANY	TEK 3 CARGO PANT(BRENDEL)	614191	08/10/17	137.00	77831
101-301.000-742.000	CLOTHING / UNIFORMS	NYE UNIFORM COMPANY	TEK 3 CARGO PANT(BRENDEL)	614191	08/10/17	13.36	77831
101-336.000-742.000	CLOTHING / UNIFORMS	NYE UNIFORM COMPANY	S/S SHIRTS (BURKE/HAWKINS)	614575	08/10/17	52.99	77831
101-336.000-742.000	CLOTHING / UNIFORMS	NYE UNIFORM COMPANY	S/S SHIRTS (BURKE/HAWKINS)	614575	08/10/17	12.14	77831
101-336.000-742.000	CLOTHING / UNIFORMS	NYE UNIFORM COMPANY	S/S SHIRTS (BURKE/HAWKINS)	614578	08/10/17	52.99	77831
101-336.000-742.000	CLOTHING / UNIFORMS	NYE UNIFORM COMPANY	PANTS/S/S SHIRT (MCD)	614703	08/10/17	52.99	77831
101-336.000-742.000	CLOTHING / UNIFORMS	NYE UNIFORM COMPANY	PANTS/S/S SHIRT (MCD)	614703	08/10/17	47.99	77831
101-336.000-742.000	CLOTHING / UNIFORMS	NYE UNIFORM COMPANY	PANTS/S/S SHIRT (MCD)	614703	08/10/17	13.31	77831
Total For Check 77831						406.77	
Check 77832							
640-444.000-801.301	POLICE VEHICLE REPAIR	PARNEY'S CAR CARE	SERVICE REPAIR - R&R RIGHT SIDE BL	61348	08/10/17	85.25	77832
640-444.000-801.301	POLICE VEHICLE REPAIR	PARNEY'S CAR CARE	SERVICE REPAIR - R&R RIGHT SIDE BL	61348	08/10/17	50.99	77832
640-444.000-801.301	POLICE VEHICLE REPAIR	PARNEY'S CAR CARE	SERVICE REPAIR - R&R RIGHT SIDE BL	61348	08/10/17	18.50	77832
Total For Check 77832						154.74	
Check 77833							
101-295.000-740.000	FUEL AND LUBRICANTS	PATRIOT AVIATION	FUEL CHARGES	151	08/10/17	98.00	77833
101-295.000-801.000	CONTRACTUAL SERVICES	PATRIOT AVIATION	MONTHLY AIRPORT MANAGER FEES	149	08/10/17	3,166.66	77833
101-295.000-801.000	CONTRACTUAL SERVICES	PATRIOT AVIATION	AIRPORT GROUND MAINTENANCE	150	08/10/17	6,850.00	77833
640-444.000-740.000	FUEL AND LUBRICANTS	PATRIOT AVIATION	AV GAS	148	08/10/17	46.60	77833
Total For Check 77833						10,161.26	
Check 77834							
208-751.000-726.006	CONCESSION SUPPLIES	PEPSI BEVERAGE'S COMP	PEPSI PRODUCT - SANDY BEACH	20051554	08/10/17	189.36	77834
Total For Check 77834						189.36	
Check 77835							
101-336.000-726.000	SUPPLIES	PERFORMANCE AUTOMOTIV	HEX KEY SET	1222510	08/10/17	8.39	77835
101-336.000-726.000	SUPPLIES	PERFORMANCE AUTOMOTIV	ADJUSTABLE WRENCH	1222730	08/10/17	21.79	77835
588-588.000-730.000	VEH./EQUIP. MAINT. SUPPL	PERFORMANCE AUTOMOTIV	12V BATTERY/RTRN CORE (DART 63)	1222374	08/10/17	258.78	77835
640-444.000-726.000	SUPPLIES	PERFORMANCE AUTOMOTIV	SUPER FUNNEL	1221712	08/10/17	1.79	77835
640-444.000-726.000	SUPPLIES	PERFORMANCE AUTOMOTIV	RPL LENSE	1221393	08/10/17	18.95	77835
640-444.000-730.000	VEH./EQUIP. MAINT. SUPPL	PERFORMANCE AUTOMOTIV	PAINT (#8.6)	1222276	08/10/17	130.29	77835
640-444.000-730.000	VEH./EQUIP. MAINT. SUPPL	PERFORMANCE AUTOMOTIV	PRIMER, REDUCER (#9.6)	1222345	08/10/17	41.25	77835
640-444.000-730.000	VEH./EQUIP. MAINT. SUPPL	PERFORMANCE AUTOMOTIV	REDUCER, PRIMER (#43)	1222357	08/10/17	123.34	77835
640-444.000-730.000	VEH./EQUIP. MAINT. SUPPL	PERFORMANCE AUTOMOTIV	PAINT, CLR, HARNER (#40)	1221873	08/10/17	553.34	77835
640-444.000-730.000	VEH./EQUIP. MAINT. SUPPL	PERFORMANCE AUTOMOTIV	DOT TAPE	1222053	08/10/17	17.82	77835
640-444.000-730.000	VEH./EQUIP. MAINT. SUPPL	PERFORMANCE AUTOMOTIV	HEX NIPPLE (#40)	1221541	08/10/17	1.76	77835
640-444.000-730.000	VEH./EQUIP. MAINT. SUPPL	PERFORMANCE AUTOMOTIV	REDUCER, PRIMER (#40)	1221598	08/10/17	142.65	77835
Total For Check 77835						1,320.15	
Check 77836							
101-301.000-742.000	CLOTHING / UNIFORMS	POWERS CLOTHING, INC.	ALTERATIONS - PATCHES SEWN ON TWO	1009787 JULY 20	08/10/17	4.00	77836
Total For Check 77836						4.00	

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Check 77837							
101-301.000-742.000	CLOTHING / UNIFORMS	STEVE PRATT	2017 EQUIPMENT ALLOWANCE	2017 EQUIP	08/10/17	13.95	77837
101-301.000-742.000	CLOTHING / UNIFORMS	STEVE PRATT	2017 EQUIPMENT ALLOWANCE	2017 EQUIP	08/10/17	25.95	77837
101-301.000-742.000	CLOTHING / UNIFORMS	STEVE PRATT	2017 EQUIPMENT ALLOWANCE	2017 EQUIP	08/10/17	30.09	77837
101-301.000-742.000	CLOTHING / UNIFORMS	STEVE PRATT	2017 EQUIPMENT ALLOWANCE	2017 EQUIP	08/10/17	2.34	77837
Total For Check 77837						72.33	
Check 77838							
640-444.000-801.000	CONTRACTUAL SERVICES	PURITY CYLINDER GASES	GAS CYLINDER RENTAL	00362176	08/10/17	44.88	77838
Total For Check 77838						44.88	
Check 77839							
271-790.000-982.000	BOOKS	RANDOM HOUSE, INC.	BOOKS ON TAPE QUARTERLY ORDER	1083369825	08/10/17	30.00	77839
271-790.000-982.000	BOOKS	RANDOM HOUSE, INC.	BOOKS ON TAPE QUARTERLY ORDER	1083345823	08/10/17	436.50	77839
Total For Check 77839						466.50	
Check 77840							
101-295.000-801.000	CONTRACTUAL SERVICES	REPUBLIC SERVICES OF	MONTHLY DUMPSTER RENTAL - AIRPORT	0249-005610949	08/10/17	154.67	77840
Total For Check 77840						154.67	
Check 77841							
101-441.000-801.000	CONTRACTUAL SERVICES	REPUBLIC SERVICES OF	4 YARD DUMPSTER RENTAL	0249-005610986	08/10/17	237.31	77841
Total For Check 77841						237.31	
Check 77842							
101-336.000-930.000	REPAIRS & MAINTENANCE	RALPH SOLON RILEY	HYDRAULIC CYLINDER REPAIR - ENGINE	4080	08/10/17	380.00	77842
101-336.000-930.000	REPAIRS & MAINTENANCE	RALPH SOLON RILEY	HYDRAULIC CYLINDER REPAIR - ENGINE	4080	08/10/17	540.00	77842
101-336.000-930.000	REPAIRS & MAINTENANCE	RALPH SOLON RILEY	HYDRAULIC CYLINDER REPAIR - ENGINE	4080	08/10/17	489.23	77842
101-336.000-930.000	REPAIRS & MAINTENANCE	RALPH SOLON RILEY	HYDRAULIC CYLINDER REPAIR - ENGINE	4080	08/10/17	32.00	77842
101-336.000-930.000	REPAIRS & MAINTENANCE	RALPH SOLON RILEY	HYDRAULIC CYLINDER REPAIR - ENGINE	4080	08/10/17	25.00	77842
101-336.000-930.000	REPAIRS & MAINTENANCE	RALPH SOLON RILEY	HYDRAULIC CYLINDER REPAIR - ENGINE	4080	08/10/17	60.00	77842
Total For Check 77842						1,526.23	
Check 77843							
101-295.000-920.000	UTILITIES	SPRATT'S	LP GAS DELIVERY	41772	08/10/17	116.35	77843
101-295.000-930.000	REPAIRS & MAINTENANCE	SPRATT'S	MOWER WORK - AIRPORT	3231	08/10/17	1,669.96	77843
Total For Check 77843						1,786.31	
Check 77844							
101-209.000-861.000	TRAINING & SEMINARS	STATE OF MICHIGAN	MICHIGAN CERTIFIED ASSESSING TECHN	09/25/17	08/10/17	150.00	77844
Total For Check 77844						150.00	
Check 77845							
640-444.000-801.301	POLICE VEHICLE REPAIR	STILLWELL FORD MERCUR	SERVICE REPAIRS UNIT 2-3 (15 EXPLO	587476	08/10/17	70.00	77845
640-444.000-801.301	POLICE VEHICLE REPAIR	STILLWELL FORD MERCUR	SERVICE REPAIRS UNIT 2-3 (15 EXPLO	587476	08/10/17	11.33	77845
640-444.000-801.301	POLICE VEHICLE REPAIR	STILLWELL FORD MERCUR	UNIT 2-5 (16 EXPLORER)	588489	08/10/17	155.00	77845
640-444.000-801.301	POLICE VEHICLE REPAIR	STILLWELL FORD MERCUR	UNIT 2-5 (16 EXPLORER)	588489	08/10/17	295.50	77845
640-444.000-801.301	POLICE VEHICLE REPAIR	STILLWELL FORD MERCUR	UNIT 2-5 (16 EXPLORER)	588489	08/10/17	13.20	77845
Total For Check 77845						545.03	
Check 77846							
271-792.000-726.010	SUPPLIES-SUMMER READING	SUBWAY	LIBRARY FOOD ORDER	SUMMER READING	08/10/17	139.50	77846
Total For Check 77846						139.50	
Check 77847							
202-450.000-726.000	SUPPLIES	TACKETT AND SONS MATE	COMMERCIAL TOP HOT MIX	17-814	08/10/17	57.50	77847

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Check 77847							
202-450.000-726.000	SUPPLIES	TACKETT AND SONS MATE	COMMERCIAL TOP HOT MIX	17-808	08/10/17	57.50	77847
203-450.000-726.000	SUPPLIES	TACKETT AND SONS MATE	COMMERCIAL TOP HOT MIX	17-814	08/10/17	58.08	77847
203-450.000-726.000	SUPPLIES	TACKETT AND SONS MATE	COMMERCIAL TOP HOT MIX	17-808	08/10/17	115.00	77847
Total For Check 77847						288.08	
Check 77848							
101-301.000-801.000	CONTRACTUAL SERVICES	TRANSUNION RISK AND A	ONLINE INVESTIGATIVE SYSTEM BILLIN	807352 JULY 201	08/10/17	25.00	77848
Total For Check 77848						25.00	
Check 77849							
247-000.000-082.001	DUE FROM OTHERS - BRIDGE	TRIPLE J CONSTRUCTION	#1014 STAIRS/HANDRAIL/DOOR TRIM -	TIFA BRIDGE LOA	08/10/17	925.00	77849
Total For Check 77849						925.00	
Check 77850							
101-265.000-726.000	SUPPLIES	TSC STORES	ROUND UP, 2 CYCLE OIL, BAR OIL, KN	JULY 2017	08/10/17	57.98	77850
101-441.000-726.000	SUPPLIES	TSC STORES	ROUND UP, 2 CYCLE OIL, BAR OIL, KN	JULY 2017	08/10/17	25.47	77850
640-444.000-730.000	VEH./EQUIP. MAINT. SUPPL	TSC STORES	ROUND UP, 2 CYCLE OIL, BAR OIL, KN	JULY 2017	08/10/17	63.84	77850
Total For Check 77850						147.29	
Check 77851							
101-265.000-801.000	CONTRACTUAL SERVICES	UNIFIRST CORP	CONTRACTUAL MAT & UNIFORM SERVICE	154 0001882	08/10/17	15.00	77851
101-265.000-801.000	CONTRACTUAL SERVICES	UNIFIRST CORP	CONTRACTUAL MAT & UNIFORM SERVICE	154 0002413	08/10/17	15.00	77851
101-336.000-801.000	CONTRACTUAL SERVICES	UNIFIRST CORP	CONTRACTUAL LINEN SERVICE	154 0002414	08/10/17	19.30	77851
101-441.000-742.000	CLOTHING / UNIFORMS	UNIFIRST CORP	RUGS/UNIFORMS - DPS	154 0001324	08/10/17	22.60	77851
101-441.000-742.000	CLOTHING / UNIFORMS	UNIFIRST CORP	RUGS/UNIFORMS - DPS	154 0001881	08/10/17	95.58	77851
101-441.000-801.000	CONTRACTUAL SERVICES	UNIFIRST CORP	RUGS/UNIFORMS - DPS	154 0001324	08/10/17	32.31	77851
101-441.000-801.000	CONTRACTUAL SERVICES	UNIFIRST CORP	RUGS/UNIFORMS - DPS	154 0001881	08/10/17	32.31	77851
271-790.000-801.000	CONTRACTUAL SERVICES	UNIFIRST CORP	CONTRACTUAL MAT & UNIFORM SERVICE	154 0001548	08/10/17	31.87	77851
588-588.000-801.000	CONTRACTUAL SERVICES	UNIFIRST CORP	CONTRACTUAL MAT & UNIFORM SERVICE	154 0001547	08/10/17	32.04	77851
640-444.000-742.000	CLOTHING / UNIFORMS	UNIFIRST CORP	RUGS/UNIFORMS - DPS	154 0001324	08/10/17	10.52	77851
640-444.000-742.000	CLOTHING / UNIFORMS	UNIFIRST CORP	RUGS/UNIFORMS - DPS	154 0001881	08/10/17	10.52	77851
640-444.000-801.000	CONTRACTUAL SERVICES	UNIFIRST CORP	RUGS/UNIFORMS - DPS	154 0001324	08/10/17	16.81	77851
640-444.000-801.000	CONTRACTUAL SERVICES	UNIFIRST CORP	RUGS/UNIFORMS - DPS	154 0001881	08/10/17	16.81	77851
Total For Check 77851						350.67	
Check 77852							
101-265.000-801.000	CONTRACTUAL SERVICES	US STAFFING AGENCY, L	TEMP EMPLOYEE - STOCKMAN	4025	08/10/17	57.00	77852
101-265.000-801.000	CONTRACTUAL SERVICES	US STAFFING AGENCY, L	TEMP EMPLOYEE - STOCKMAN	4089	08/10/17	42.75	77852
101-276.000-801.000	CONTRACTUAL SERVICES	US STAFFING AGENCY, L	TEMP EMPLOYEE - STOCKMAN	4025	08/10/17	57.00	77852
101-276.000-801.000	CONTRACTUAL SERVICES	US STAFFING AGENCY, L	TEMP EMPLOYEE - STOCKMAN	4089	08/10/17	49.88	77852
101-441.000-801.000	CONTRACTUAL SERVICES	US STAFFING AGENCY, L	TEMP EMPLOYEE - STOCKMAN	4025	08/10/17	21.38	77852
101-441.000-801.000	CONTRACTUAL SERVICES	US STAFFING AGENCY, L	TEMP EMPLOYEE - STOCKMAN	4089	08/10/17	21.38	77852
101-756.000-801.000	CONTRACTUAL SERVICES	US STAFFING AGENCY, L	TEMP EMPLOYEE - STOCKMAN	4025	08/10/17	299.25	77852
101-756.000-801.000	CONTRACTUAL SERVICES	US STAFFING AGENCY, L	TEMP EMPLOYEE - STOCKMAN	4089	08/10/17	256.50	77852
202-460.000-801.000	CONTRACTUAL SERVICES	US STAFFING AGENCY, L	TEMP EMPLOYEE - STOCKMAN	4025	08/10/17	57.00	77852
202-460.000-801.000	CONTRACTUAL SERVICES	US STAFFING AGENCY, L	TEMP EMPLOYEE - STOCKMAN	4089	08/10/17	156.75	77852
202-490.000-801.000	CONTRACTUAL SERVICES	US STAFFING AGENCY, L	TEMP EMPLOYEE - STOCKMAN	4025	08/10/17	71.25	77852
588-588.000-801.000	CONTRACTUAL SERVICES	US STAFFING AGENCY, L	TEMP EMPLOYEE - STOCKMAN	4025	08/10/17	7.12	77852
588-588.000-801.000	CONTRACTUAL SERVICES	US STAFFING AGENCY, L	TEMP EMPLOYEE - STOCKMAN	4089	08/10/17	7.12	77852
633-233.000-801.000	CONTRACTUAL SERVICES	US STAFFING AGENCY, L	TEMP EMPLOYEE - STOCKMAN	4089	08/10/17	28.50	77852
Total For Check 77852						1,132.88	
Check 77853							
101-301.000-801.000	CONTRACTUAL SERVICES	VERIZON WIRELESS	NETWORK ACCESS FEE FOR IN-CAR MOBI	9790233619	08/10/17	160.04	77853

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Check 77853							
Total For Check 77853						160.04	
Check 77854							
247-900.000-801.247	CONTRACTUAL SERV-FACADE	VESTED RISK STRATEGIE	TIFA FACADE GRANT - 83 N. BROAD	FACADE	08/10/17	8,885.85	77854
Total For Check 77854						8,885.85	
Check 77855							
101-172.000-860.000	TRANSPORTATION AND MILEA	VISA	TRAVEL TO IEDC CONFERENCE	JULY 2017	08/10/17	267.09	77855
101-172.000-861.000	TRAINING & SEMINARS	VISA	IEDC EVENT REGISTRATION	JULY 2017	08/10/17	490.00	77855
101-172.000-862.000	LODGING AND MEALS	VISA	MEAL EXPENSE	JULY 2017	08/10/17	18.00	77855
101-172.000-862.000	LODGING AND MEALS	VISA	MEAL EXPENSE	JULY 2017	08/10/17	24.70	77855
101-336.000-726.000	SUPPLIES	VISA	FIRE SAFETY DECALS	JULY 2017	08/10/17	6.98	77855
208-751.000-726.006	CONCESSION SUPPLIES	VISA	GFS PURCHASES FOR SANDY BEACH	JULY 2017	08/10/17	90.96	77855
208-751.000-726.006	CONCESSION SUPPLIES	VISA	GFS PURCHASES FOR SANDY BEACH	JULY 2017	08/10/17	120.32	77855
208-751.000-726.006	CONCESSION SUPPLIES	VISA	GFS PURCHASES FOR SANDY BEACH	JULY 2017	08/10/17	61.47	77855
208-751.000-726.006	CONCESSION SUPPLIES	VISA	GFS PURCHASES FOR SANDY BEACH	JULY 2017	08/10/17	7.50	77855
244-174.000-801.000	CONTRACTUAL SERVICES	VISA	WIX WEBSITE FOR THREE MEADOWS	JULY 2017	08/10/17	120.00	77855
271-792.000-726.010	SUPPLIES-SUMMER READING	VISA	SUMMER READING PRIZES	JULY 2017	08/10/17	30.00	77855
271-792.000-726.010	SUPPLIES-SUMMER READING	VISA	SUMMER READING PRIZES	JULY 2017	08/10/17	25.00	77855
Total For Check 77855						1,262.02	
Check 77856							
101-336.000-740.000	FUEL AND LUBRICANTS	WATKINS OIL COMPANY	CITY FLEET FUEL - JULY 2017	JULY 2017	08/10/17	257.55	77856
588-588.000-740.000	FUEL AND LUBRICANTS	WATKINS OIL COMPANY	CITY FLEET FUEL - JULY 2017	JULY 2017	08/10/17	911.23	77856
640-444.000-740.000	FUEL AND LUBRICANTS	WATKINS OIL COMPANY	CITY FLEET FUEL - JULY 2017	JULY 2017	08/10/17	1,798.13	77856
640-444.000-740.301	FUEL AND LUBRICANTS-POLI	WATKINS OIL COMPANY	CITY FLEET FUEL - JULY 2017	JULY 2017	08/10/17	1,619.01	77856
Total For Check 77856						4,585.92	
Check 77857							
640-444.000-730.000	VEH./EQUIP. MAINT. SUPPL	WHITES WELDING SERVIC	ANGLE & FLAT STEEL	83125	08/10/17	31.75	77857
640-444.000-730.000	VEH./EQUIP. MAINT. SUPPL	WHITES WELDING SERVIC	FLAT STEEL	83132	08/10/17	20.00	77857
640-444.000-801.000	CONTRACTUAL SERVICES	WHITES WELDING SERVIC	FABRICATE PTO COVER	83145	08/10/17	65.00	77857
Total For Check 77857						116.75	
Check 77858							
588-588.000-955.588	MISC. - CDL LICENSING/TE	WORKHEALTH-QUINCY, PL	RANDOM DRUG TESTING	4581	08/10/17	22.00	77858
Total For Check 77858						22.00	
Check 77859							
101-336.000-955.336	LOCAL GRANT PURCHASES	APOLLO FIRE EQUIPMENT	COMBINATION TOOL PACKAGE (HURST JA	95581	08/11/17	12,950.00	77859
Total For Check 77859						12,950.00	
Check 77860							
101-336.000-970.000	CAPITAL OUTLAY	ROSENBAUER MINNESOTA,	2017 ROSENBAUER WARRIOR RESCUE PUM	66660	08/11/17	447,048.00	77860
Total For Check 77860						447,048.00	
Check 77861							
101-000.000-228.013	DUE TO ALLERUS - DC CONT	ALERUS FINANCIAL	RETIREMENT CONTRIBUTIONS DIV #1104	08-09-17	08/11/17	226.17	77861
101-301.000-716.000	RETIREMENT	ALERUS FINANCIAL	RETIREMENT CONTRIBUTIONS DIV #1104	08-09-17	08/11/17	89.23	77861
271-790.000-716.000	RETIREMENT	ALERUS FINANCIAL	RETIREMENT CONTRIBUTIONS DIV #1104	08-09-17	08/11/17	134.62	77861
699-441.000-716.000	RETIREMENT	ALERUS FINANCIAL	RETIREMENT CONTRIBUTIONS DIV #1104	08-09-17	08/11/17	92.81	77861
Total For Check 77861						542.83	
Check 99							
101-441.000-801.000	CONTRACTUAL SERVICES	SPOK, INC	PAGER RENTAL - DPS	A7385466	08/10/17	18.70	99

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Check 99			Total For Check 99			<u>18.70</u>

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			Fund Totals:				
			Fund 101 GENERAL FUND			529,278.00	
			Fund 202 MAJOR ST./TRUNKLINE FUND			907.42	
			Fund 203 LOCAL ST. FUND			1,006.87	
			Fund 208 RECREATION FUND			2,070.34	
			Fund 244 ECONOMIC DEVELOPMENT CORP F			220.00	
			Fund 247 TAX INCREMENT FINANCE ATH.			12,810.85	
			Fund 265 DRUG FORFEITURE/GRANT FUND			10.90	
			Fund 271 LIBRARY FUND			3,959.61	
			Fund 409 STOCK'S PARK			1,202.40	
			Fund 588 DIAL-A-RIDE FUND			1,920.70	
			Fund 633 PUBLIC SERVICES INV. FUND			28.50	
			Fund 640 REVOLVING MOBILE EQUIP. FUN			7,564.86	
			Fund 699 DPS LEAVE AND BENEFITS FUND			1,431.93	
			Total For All Funds:			<hr/> 562,412.38	

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Check <None>							
582-000.000-228.100	DUE TO MMERS - RETIREMEN	MERS	MONTHLY CONTRIBUTIONS	00072522-14		7,790.97	
582-543.000-716.000	RETIREMENT	MERS	MONTHLY CONTRIBUTIONS	00072522-14		7,931.50	
582-543.000-716.000	RETIREMENT	MERS	MONTHLY CONTRIBUTIONS	00072522-14		561.61	
590-175.000-716.000	RETIREMENT	MERS	MONTHLY CONTRIBUTIONS	00072522-14		4,687.38	
591-175.000-716.000	RETIREMENT	MERS	MONTHLY CONTRIBUTIONS	00072522-14		2,978.51	
Total For Check <None>						23,949.97	
Check 68158							
582-175.000-930.000	REPAIRS & MAINTENANCE	A CLEAN START	OFFICE CLEANING	816013	08/11/17	75.00	68158
590-175.000-930.000	REPAIRS & MAINTENANCE	A CLEAN START	OFFICE CLEANING	816013	08/11/17	37.50	68158
591-175.000-930.000	REPAIRS & MAINTENANCE	A CLEAN START	OFFICE CLEANING	816013	08/11/17	37.50	68158
Total For Check 68158						150.00	
Check 68159							
582-175.000-810.000	DUES AND SUBSCRIPTIONS	ACD	MONTHLY FIBER LEASE	42187-114	08/11/17	202.00	68159
Total For Check 68159						202.00	
Check 68160							
590-547.000-727.500	SUPPLIES - CHLORINE	ALEXANDER CHEMICAL CO	WWTP CHEMICALS, WTP FLOURIDE	RDM/10000327	08/11/17	700.30	68160
590-547.000-727.500	SUPPLIES - CHLORINE	ALEXANDER CHEMICAL CO	WWTP CHEMICALS, WTP FLOURIDE	RDM/10000327	08/11/17	750.00	68160
590-547.000-727.500	SUPPLIES - CHLORINE	ALEXANDER CHEMICAL CO	CREDIT	SCM 10002958	08/11/17	(1,230.00)	68160
590-547.000-727.500	SUPPLIES - CHLORINE	ALEXANDER CHEMICAL CO	CREDIT/DEPOSIT REFUNG	SCL 10017065	08/11/17	(270.00)	68160
590-547.000-727.700	SUPPLIES - DIOXIDE	ALEXANDER CHEMICAL CO	WWTP CHEMICALS, WTP FLOURIDE	RDM/10000327	08/11/17	508.50	68160
591-545.000-727.300	SUPPLIES - FLOURIDE	ALEXANDER CHEMICAL CO	WWTP CHEMICALS, WTP FLOURIDE	RDM/10000327	08/11/17	880.00	68160
591-545.000-727.300	SUPPLIES - FLOURIDE	ALEXANDER CHEMICAL CO	WWTP CHEMICALS, WTP FLOURIDE	RDM/10000327	08/11/17	180.00	68160
Total For Check 68160						1,518.80	
Check 68161							
582-543.000-930.000	REPAIRS & MAINTENANCE	AMERICAN COPPER AND B	SUPPLIES TO FIX WATER LINE	17INV025092	08/11/17	0.32	68161
582-543.000-930.000	REPAIRS & MAINTENANCE	AMERICAN COPPER AND B	SUPPLIES TO FIX WATER LINE	17INV025092	08/11/17	0.27	68161
582-543.000-930.000	REPAIRS & MAINTENANCE	AMERICAN COPPER AND B	SUPPLIES TO FIX WATER LINE	17INV025092	08/11/17	5.05	68161
582-543.000-930.000	REPAIRS & MAINTENANCE	AMERICAN COPPER AND B	SUPPLIES TO FIX WATER LINE	17INV025092	08/11/17	8.45	68161
582-543.000-930.000	REPAIRS & MAINTENANCE	AMERICAN COPPER AND B	SUPPLIES TO FIX WATER LINE	17INV025092	08/11/17	1.18	68161
582-543.000-930.000	REPAIRS & MAINTENANCE	AMERICAN COPPER AND B	SUPPLIES TO FIX WATER LINE	17INV025092	08/11/17	0.68	68161
582-543.000-930.050	REPAIRS & MAINT. - ENGIN	AMERICAN COPPER AND B	SUPPLIES TO FIX WATER LINE	17INV033453	08/11/17	12.92	68161
582-544.000-726.800	SUPPLIES - OPERATIONS	AMERICAN COPPER AND B	MISC ELECTRICAL FITTINGS/ BALLAST	17INV034080	08/11/17	30.30	68161
582-544.000-726.800	SUPPLIES - OPERATIONS	AMERICAN COPPER AND B	MISC ELECTRICAL FITTINGS/ BALLAST	17INV034721	08/11/17	16.91	68161
582-544.000-726.800	SUPPLIES - OPERATIONS	AMERICAN COPPER AND B	MISC ELECTRICAL FITTINGS/ BALLAST	17INV034720	08/11/17	3.37	68161
582-544.000-726.800	SUPPLIES - OPERATIONS	AMERICAN COPPER AND B	MISC ELECTRICAL FITTINGS/ BALLAST	17INV034719	08/11/17	15.68	68161
590-547.000-930.000	REPAIRS & MAINTENANCE	AMERICAN COPPER AND B	RELAY WELL, WWTP EQUIPMENT/ PARTS	17INV032279	08/11/17	7.73	68161
590-547.000-930.000	REPAIRS & MAINTENANCE	AMERICAN COPPER AND B	RELAY WELL, WWTP EQUIPMENT/ PARTS	17INV032279	08/11/17	3.97	68161
590-547.000-930.000	REPAIRS & MAINTENANCE	AMERICAN COPPER AND B	RELAY WELL, WWTP EQUIPMENT/ PARTS	17INV032279	08/11/17	0.48	68161
590-547.000-930.000	REPAIRS & MAINTENANCE	AMERICAN COPPER AND B	RELAY WELL, WWTP EQUIPMENT/ PARTS	17INV032279	08/11/17	3.24	68161
590-547.000-930.000	REPAIRS & MAINTENANCE	AMERICAN COPPER AND B	RELAY WELL, WWTP EQUIPMENT/ PARTS	17INV032279	08/11/17	7.97	68161
591-543.000-920.320	UTILITIES - ELECTRIC - W	AMERICAN COPPER AND B	RELAY WELL, WWTP EQUIPMENT/ PARTS	17INV032278	08/11/17	14.43	68161
Total For Check 68161						132.95	
Check 68162							
582-175.000-925.000	TELEPHONE	AT&T	TELEPHONE SERVICES/EQUIPMENT/ROUTE	2610257302	08/11/17	349.30	68162
590-175.000-925.000	TELEPHONE	AT&T	TELEPHONE SERVICES/EQUIPMENT/ROUTE	2610257302	08/11/17	174.65	68162
591-175.000-925.000	TELEPHONE	AT&T	TELEPHONE SERVICES/EQUIPMENT/ROUTE	2610257302	08/11/17	174.66	68162
Total For Check 68162						698.61	
Check 68163							

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Check 68163							
582-543.000-726.000	SUPPLIES	AUTO VALUE	SUPPLIES FOR ENGINE	222-1063915	08/11/17	4.89	68163
						<u>4.89</u>	
Total For Check 68163							
Check 68164							
582-000.000-040.000	ACCOUNTS RECEIVABLE	BAILEY, MERRY L	UB refund for account: 026107	08/11/2017	08/11/17	72.00	68164
582-000.000-040.000	ACCOUNTS RECEIVABLE	BAILEY, MERRY L	UB refund for account: 026107	08/11/2017	08/11/17	64.71	68164
582-000.000-040.000	ACCOUNTS RECEIVABLE	BAILEY, MERRY L	UB refund for account: 026107	08/11/2017	08/11/17	1.71	68164
582-000.000-040.000	ACCOUNTS RECEIVABLE	BAILEY, MERRY L	UB refund for account: 026107	08/11/2017	08/11/17	5.58	68164
582-000.000-040.000	ACCOUNTS RECEIVABLE	BAILEY, MERRY L	UB refund for account: 026107	08/11/2017	08/11/17	1.44	68164
582-000.000-040.000	ACCOUNTS RECEIVABLE	BAILEY, MERRY L	UB refund for account: 026107	08/11/2017	08/11/17	6.93	68164
582-000.000-040.000	ACCOUNTS RECEIVABLE	BAILEY, MERRY L	UB refund for account: 026107	08/11/2017	08/11/17	0.63	68164
						<u>153.00</u>	
Total For Check 68164							
Check 68165							
582-000.000-040.000	ACCOUNTS RECEIVABLE	BEARD, SUSANNE J	UB refund for account: 010928	08/11/2017	08/11/17	3.09	68165
582-000.000-040.000	ACCOUNTS RECEIVABLE	BEARD, SUSANNE J	UB refund for account: 010928	08/11/2017	08/11/17	1.36	68165
582-000.000-040.000	ACCOUNTS RECEIVABLE	BEARD, SUSANNE J	UB refund for account: 010928	08/11/2017	08/11/17	0.71	68165
582-000.000-040.000	ACCOUNTS RECEIVABLE	BEARD, SUSANNE J	UB refund for account: 010928	08/11/2017	08/11/17	0.18	68165
582-000.000-040.000	ACCOUNTS RECEIVABLE	BEARD, SUSANNE J	UB refund for account: 010928	08/11/2017	08/11/17	0.14	68165
582-000.000-040.000	ACCOUNTS RECEIVABLE	BEARD, SUSANNE J	UB refund for account: 010928	08/11/2017	08/11/17	0.07	68165
582-000.000-040.000	ACCOUNTS RECEIVABLE	BEARD, SUSANNE J	UB refund for account: 010928	08/11/2017	08/11/17	0.06	68165
582-000.000-040.000	ACCOUNTS RECEIVABLE	BEARD, SUSANNE J	UB refund for account: 010928	08/11/2017	08/11/17	0.06	68165
						<u>5.67</u>	
Total For Check 68165							
Check 68166							
582-543.000-726.000	SUPPLIES	BEAVER RESEARCH COMPA	COOLING TOWER CHEMICALS	0265470-IN	08/11/17	3,049.50	68166
582-543.000-726.000	SUPPLIES	BEAVER RESEARCH COMPA	COOLING TOWER CHEMICALS	0265470-IN	08/11/17	1,254.24	68166
						<u>4,303.74</u>	
Total For Check 68166							
Check 68167							
582-175.000-715.000	HEALTH AND LIFE INSURANC	BLUE CROSS & BLUE SHI	DENTAL & VISION INSURANCE GROUP 00	007003454/9	08/11/17	757.85	68167
582-543.000-715.000	HEALTH AND LIFE INSURANC	BLUE CROSS & BLUE SHI	DENTAL & VISION INSURANCE GROUP 00	007003454/9	08/11/17	88.25	68167
590-175.000-715.000	HEALTH AND LIFE INSURANC	BLUE CROSS & BLUE SHI	DENTAL & VISION INSURANCE GROUP 00	007003454/9	08/11/17	351.35	68167
591-175.000-715.000	HEALTH AND LIFE INSURANC	BLUE CROSS & BLUE SHI	DENTAL & VISION INSURANCE GROUP 00	007003454/9	08/11/17	363.23	68167
						<u>1,560.68</u>	
Total For Check 68167							
Check 68168							
590-547.000-861.000	TRAINING & SEMINARS	BRANCH HILLSDALE ST J	HEP A VACCINES/ DENTON KELLEY & LE	07272017	08/11/17	100.00	68168
591-543.000-861.000	TRAINING & SEMINARS	BRANCH HILLSDALE ST J	HEP A VACCINES/ DENTON KELLEY & LE	07272017	08/11/17	100.00	68168
						<u>200.00</u>	
Total For Check 68168							
Check 68169							
582-175.000-801.000	CONTRACTUAL SERVICES	BRIDGESTONE AMERICAS,	MONTHLY PROCESSING	612001	08/11/17	1,552.70	68169
590-175.000-801.000	CONTRACTUAL SERVICES	BRIDGESTONE AMERICAS,	MONTHLY PROCESSING	612001	08/11/17	776.35	68169
590-175.000-801.000	CONTRACTUAL SERVICES	BRIDGESTONE AMERICAS,	MONTHLY PROCESSING	612001	08/11/17	776.35	68169
						<u>3,105.40</u>	
Total For Check 68169							
Check 68170							
582-175.000-726.200	OFFICE SUPPLIES	BS&A SOFTWARE	LINEAR IMAGING SCANNER	114121	08/11/17	125.00	68170
590-175.000-726.200	OFFICE SUPPLIES	BS&A SOFTWARE	LINEAR IMAGING SCANNER	114121	08/11/17	62.50	68170
591-175.000-726.200	OFFICE SUPPLIES	BS&A SOFTWARE	LINEAR IMAGING SCANNER	114121	08/11/17	62.50	68170
						<u>250.00</u>	
Total For Check 68170							
Check 68171							
582-000.000-040.000	ACCOUNTS RECEIVABLE	CAMPBELL, LAURA L	UB refund for account: 025006	08/11/2017	08/11/17	49.45	68171

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Check 68171							
582-000.000-040.000	ACCOUNTS RECEIVABLE	CAMPBELL, LAURA L	UB refund for account: 025006	08/11/2017	08/11/17	10.07	68171
582-000.000-040.000	ACCOUNTS RECEIVABLE	CAMPBELL, LAURA L	UB refund for account: 025006	08/11/2017	08/11/17	1.09	68171
582-000.000-040.000	ACCOUNTS RECEIVABLE	CAMPBELL, LAURA L	UB refund for account: 025006	08/11/2017	08/11/17	2.47	68171
582-000.000-040.000	ACCOUNTS RECEIVABLE	CAMPBELL, LAURA L	UB refund for account: 025006	08/11/2017	08/11/17	1.11	68171
582-000.000-040.000	ACCOUNTS RECEIVABLE	CAMPBELL, LAURA L	UB refund for account: 025006	08/11/2017	08/11/17	0.97	68171
Total For Check 68171						65.16	
Check 68172							
582-546.000-930.000	REPAIRS & MAINTENANCE	CEM SUPPLY, INC	COOLING FAN MOTORS	85526/1	08/11/17	309.00	68172
582-546.000-930.000	REPAIRS & MAINTENANCE	CEM SUPPLY, INC	COOLING FAN MOTORS	85526/1	08/11/17	15.00	68172
Total For Check 68172						324.00	
Check 68173							
582-175.000-801.000	CONTRACTUAL SERVICES	CINTAS CORPORATION	MATS, RUGS & TOWELS	306654979	08/11/17	240.00	68173
582-175.000-801.000	CONTRACTUAL SERVICES	CINTAS CORPORATION	MATS, RUGS & TOWELS	306657934	08/11/17	245.81	68173
582-543.000-801.000	CONTRACTUAL SERVICES	CINTAS CORPORATION	RUGS - PP	306654980	08/11/17	93.27	68173
582-543.000-801.000	CONTRACTUAL SERVICES	CINTAS CORPORATION	RUGS	306657935	08/11/17	93.27	68173
590-175.000-801.000	CONTRACTUAL SERVICES	CINTAS CORPORATION	MATS, RUGS & TOWELS	306654979	08/11/17	120.00	68173
590-175.000-801.000	CONTRACTUAL SERVICES	CINTAS CORPORATION	MATS, RUGS & TOWELS	306657934	08/11/17	122.90	68173
591-175.000-801.000	CONTRACTUAL SERVICES	CINTAS CORPORATION	MATS, RUGS & TOWELS	306654979	08/11/17	120.01	68173
591-175.000-801.000	CONTRACTUAL SERVICES	CINTAS CORPORATION	MATS, RUGS & TOWELS	306657934	08/11/17	122.91	68173
Total For Check 68173						1,158.17	
Check 68174							
582-000.000-040.000	ACCOUNTS RECEIVABLE	CRALL, BRIANNA C	UB refund for account: 035282	08/11/2017	08/11/17	4.58	68174
582-000.000-040.000	ACCOUNTS RECEIVABLE	CRALL, BRIANNA C	UB refund for account: 035282	08/11/2017	08/11/17	1.47	68174
582-000.000-040.000	ACCOUNTS RECEIVABLE	CRALL, BRIANNA C	UB refund for account: 035282	08/11/2017	08/11/17	4.49	68174
582-000.000-040.000	ACCOUNTS RECEIVABLE	CRALL, BRIANNA C	UB refund for account: 035282	08/11/2017	08/11/17	30.11	68174
582-000.000-040.000	ACCOUNTS RECEIVABLE	CRALL, BRIANNA C	UB refund for account: 035282	08/11/2017	08/11/17	1.28	68174
582-000.000-040.000	ACCOUNTS RECEIVABLE	CRALL, BRIANNA C	UB refund for account: 035282	08/11/2017	08/11/17	0.69	68174
582-000.000-040.000	ACCOUNTS RECEIVABLE	CRALL, BRIANNA C	UB refund for account: 035282	08/11/2017	08/11/17	0.46	68174
590-000.000-040.000	ACCOUNTS RECEIVABLE	CRALL, BRIANNA C	UB refund for account: 035282	08/11/2017	08/11/17	6.42	68174
591-000.000-040.000	ACCOUNTS RECEIVABLE	CRALL, BRIANNA C	UB refund for account: 035282	08/11/2017	08/11/17	5.50	68174
Total For Check 68174						55.00	
Check 68175							
582-175.000-726.200	OFFICE SUPPLIES	CURRENT OFFICE SOLUTI	LEASE	288129	08/11/17	133.73	68175
590-175.000-726.200	OFFICE SUPPLIES	CURRENT OFFICE SOLUTI	FAX/ COMBINATION FOR WWTP	590148-00	08/11/17	199.99	68175
590-175.000-726.200	OFFICE SUPPLIES	CURRENT OFFICE SOLUTI	LEASE	288129	08/11/17	66.86	68175
591-175.000-726.200	OFFICE SUPPLIES	CURRENT OFFICE SOLUTI	LEASE	288129	08/11/17	66.88	68175
Total For Check 68175						467.46	
Check 68176							
582-175.000-726.200	OFFICE SUPPLIES	CURRENT OFFICE SOLUTI	OFFICE SUPPLIES	591218-00	08/11/17	7.01	68176
590-175.000-726.200	OFFICE SUPPLIES	CURRENT OFFICE SOLUTI	OFFICE SUPPLIES	591218-00	08/11/17	3.51	68176
591-175.000-726.200	OFFICE SUPPLIES	CURRENT OFFICE SOLUTI	OFFICE SUPPLIES	591218-00	08/11/17	3.51	68176
Total For Check 68176						14.03	
Check 68177							
582-175.000-801.200	COMPUTER	DOBERMAN TECHNOLOGIES	MONTHLY BILLING FOR AUGUST	CW-6391	08/11/17	2,960.00	68177
590-175.000-801.200	COMPUTER	DOBERMAN TECHNOLOGIES	MONTHLY BILLING FOR AUGUST	CW-6391	08/11/17	1,480.00	68177
591-175.000-801.200	COMPUTER	DOBERMAN TECHNOLOGIES	MONTHLY BILLING FOR AUGUST	CW-6391	08/11/17	1,480.00	68177
Total For Check 68177						5,920.00	

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Check 68178							
590-546.000-930.970	REPIARS & MINAT. - MANHO	DUBOIS TRUCKING AND E	SAND AND TOPSOIL	QB100	08/11/17	528.00	68178
590-546.000-930.970	REPIARS & MINAT. - MANHO	DUBOIS TRUCKING AND E	SAND AND TOPSOIL	QB1098	08/11/17	207.00	68178
591-544.000-930.000	REPAIRS & MAINTENANCE	DUBOIS TRUCKING AND E	SAND AND TOPSOIL	QB1108	08/11/17	44.00	68178
591-544.000-930.000	REPAIRS & MAINTENANCE	DUBOIS TRUCKING AND E	SAND AND TOPSOIL	QB1109	08/11/17	23.00	68178
591-544.000-930.000	REPAIRS & MAINTENANCE	DUBOIS TRUCKING AND E	SAND AND TOPSOIL	QB1109	08/11/17	115.00	68178
Total For Check 68178						917.00	
Check 68179							
582-000.000-040.000	ACCOUNTS RECEIVABLE	DUFFY, JOHN S	UB refund for account: 023407	08/11/2017	08/11/17	252.00	68179
Total For Check 68179						252.00	
Check 68180							
582-175.000-726.200	OFFICE SUPPLIES	EASYPERMIT POSTAGE	POSTAGE	17983198	08/11/17	2,020.00	68180
590-175.000-726.200	OFFICE SUPPLIES	EASYPERMIT POSTAGE	POSTAGE	17983198	08/11/17	1,010.00	68180
591-175.000-726.200	OFFICE SUPPLIES	EASYPERMIT POSTAGE	POSTAGE	17983198	08/11/17	1,010.00	68180
Total For Check 68180						4,040.00	
Check 68181							
591-545.000-727.400	SUPPLIES - PHOSPHATE	ENVIRONMENTAL MANAGEM	CARUS 8700 PHOSPHATE WTP	16509	08/11/17	3,902.80	68181
Total For Check 68181						3,902.80	
Check 68182							
582-543.000-726.000	SUPPLIES	FAMILY FARM & HOME	PAINTING SUPPLIES	A41153	08/11/17	57.99	68182
582-543.000-726.000	SUPPLIES	FAMILY FARM & HOME	PAINTING SUPPLIES	A41153	08/11/17	3.99	68182
582-543.000-726.000	SUPPLIES	FAMILY FARM & HOME	PAINTING SUPPLIES	A41153	08/11/17	1.99	68182
582-543.000-726.000	SUPPLIES	FAMILY FARM & HOME	PAINTING SUPPLIES	A41153	08/11/17	4.89	68182
582-543.000-726.000	SUPPLIES	FAMILY FARM & HOME	PAINTING SUPPLIES	A40948	08/11/17	2.20	68182
582-543.000-726.000	SUPPLIES	FAMILY FARM & HOME	PAINTING SUPPLIES	A40948	08/11/17	5.94	68182
582-543.000-726.000	SUPPLIES	FAMILY FARM & HOME	PAINTING SUPPLIES	A40948	08/11/17	31.99	68182
582-543.000-726.000	SUPPLIES	FAMILY FARM & HOME	PAINTING SUPPLIES	A40948	08/11/17	5.38	68182
582-543.000-726.000	SUPPLIES	FAMILY FARM & HOME	PAINTING SUPPLIES	A40948	08/11/17	3.49	68182
582-543.000-726.000	SUPPLIES	FAMILY FARM & HOME	PAINTING SUPPLIES	A40948	08/11/17	7.96	68182
582-543.000-726.000	SUPPLIES	FAMILY FARM & HOME	SUPPLIES FOR ENGINES	A39510	08/11/17	5.39	68182
582-543.000-726.000	SUPPLIES	FAMILY FARM & HOME	SUPPLIES FOR ENGINES	A39510	08/11/17	2.99	68182
582-543.000-726.000	SUPPLIES	FAMILY FARM & HOME	SUPPLIES FOR ENGINES	A39510	08/11/17	1.06	68182
591-544.000-930.000	REPAIRS & MAINTENANCE	FAMILY FARM & HOME	TOOLS BOX, SHACKLE	A39902	08/11/17	11.98	68182
591-544.000-930.000	REPAIRS & MAINTENANCE	FAMILY FARM & HOME	TOOLS BOX, SHACKLE	A39902	08/11/17	14.49	68182
Total For Check 68182						161.73	
Check 68183							
582-000.000-040.000	ACCOUNTS RECEIVABLE	FLICKINGER, CAROLINA	UB refund for account: 026774	08/11/2017	08/11/17	25.34	68183
582-000.000-040.000	ACCOUNTS RECEIVABLE	FLICKINGER, CAROLINA	UB refund for account: 026774	08/11/2017	08/11/17	6.31	68183
582-000.000-040.000	ACCOUNTS RECEIVABLE	FLICKINGER, CAROLINA	UB refund for account: 026774	08/11/2017	08/11/17	1.30	68183
582-000.000-040.000	ACCOUNTS RECEIVABLE	FLICKINGER, CAROLINA	UB refund for account: 026774	08/11/2017	08/11/17	0.52	68183
582-000.000-040.000	ACCOUNTS RECEIVABLE	FLICKINGER, CAROLINA	UB refund for account: 026774	08/11/2017	08/11/17	0.68	68183
582-000.000-040.000	ACCOUNTS RECEIVABLE	FLICKINGER, CAROLINA	UB refund for account: 026774	08/11/2017	08/11/17	0.55	68183
582-000.000-040.000	ACCOUNTS RECEIVABLE	FLICKINGER, CAROLINA	UB refund for account: 026774	08/11/2017	08/11/17	0.30	68183
Total For Check 68183						35.00	
Check 68184							
590-546.000-930.960	REPAIRS & MAINT. - SEWER	FREDRICKSON SUPPLY, L	20571-06-Z TOOL, BULLET 5/1	1971	08/11/17	24.61	68184
590-546.000-930.960	REPAIRS & MAINT. - SEWER	FREDRICKSON SUPPLY, L	20571-06-Z TOOL, BULLET 5/1	1971	08/11/17	20.61	68184
Total For Check 68184						45.22	

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Check 68185							
582-543.000-930.000	REPAIRS & MAINTENANCE	GELZER & SON INC	SUPPLIES FOR ENGINE MAINTENANCE	C250159	08/11/17	2.79	68185
582-543.000-930.000	REPAIRS & MAINTENANCE	GELZER & SON INC	SUPPLIES FOR ENGINE MAINTENANCE	C250121	08/11/17	6.29	68185
582-544.000-726.800	SUPPLIES - OPERATIONS	GELZER & SON INC	FENCE PAINT	A151397	08/11/17	48.57	68185
582-544.000-726.800	SUPPLIES - OPERATIONS	GELZER & SON INC	FENCE PAINT	A151398	08/11/17	5.16	68185
582-544.000-726.800	SUPPLIES - OPERATIONS	GELZER & SON INC	FENCE PAINT	A151482	08/11/17	38.99	68185
582-544.000-726.800	SUPPLIES - OPERATIONS	GELZER & SON INC	HARDWARE / DRILL BIT	C249973	08/11/17	4.29	68185
582-544.000-726.800	SUPPLIES - OPERATIONS	GELZER & SON INC	HARDWARE / DRILL BIT	C248359	08/11/17	22.98	68185
590-546.000-930.950	REPAIRS & MAINT. - LIFT	GELZER & SON INC	HORNET SPRAY, CONCRETE, PAINT AND	C251348	08/11/17	9.81	68185
590-547.000-930.000	REPAIRS & MAINTENANCE	GELZER & SON INC	HORNET SPRAY, CONCRETE, PAINT AND	A151205	08/11/17	9.97	68185
590-547.000-930.000	REPAIRS & MAINTENANCE	GELZER & SON INC	HORNET SPRAY, CONCRETE, PAINT AND	A151205	08/11/17	4.36	68185
590-547.000-930.000	REPAIRS & MAINTENANCE	GELZER & SON INC	HORNET SPRAY, CONCRETE, PAINT AND	C251152	08/11/17	19.62	68185
590-547.000-930.000	REPAIRS & MAINTENANCE	GELZER & SON INC	HORNET SPRAY, CONCRETE, PAINT AND	A150941	08/11/17	174.95	68185
590-547.000-930.000	REPAIRS & MAINTENANCE	GELZER & SON INC	PAINT AND SUPPLIES WWTP	A148858	08/11/17	185.96	68185
590-547.000-930.000	REPAIRS & MAINTENANCE	GELZER & SON INC	PAINT AND SUPPLIES WWTP	A148858	08/11/17	3.99	68185
590-547.000-930.000	REPAIRS & MAINTENANCE	GELZER & SON INC	PAINT AND SUPPLIES WWTP	A148858	08/11/17	4.49	68185
590-547.000-930.900	REPAIRS & MAINT - LABORA	GELZER & SON INC	INSECT REPELLENT, FAN, HARDWARE	A 149642	08/11/17	79.99	68185
590-547.000-930.900	REPAIRS & MAINT - LABORA	GELZER & SON INC	INSECT REPELLENT, FAN, HARDWARE	A 149642	08/11/17	29.97	68185
591-544.000-725.100-1	MICELLANEOUS FRINGE EXPE	GELZER & SON INC	HORNET SPRAY, CONCRETE, PAINT AND	A151265	08/11/17	21.16	68185
591-544.000-930.000	REPAIRS & MAINTENANCE	GELZER & SON INC	INSECT REPELLENT, FAN, HARDWARE	A 149642	08/11/17	7.49	68185
591-544.000-930.000	REPAIRS & MAINTENANCE	GELZER & SON INC	INSECT REPELLENT, FAN, HARDWARE	A 149642	08/11/17	20.97	68185
Total For Check 68185						701.80	
Check 68186							
590-547.000-801.000	CONTRACTUAL SERVICES	GLOBAL ENVIRONMENTAL	QUARTERLY CHRONIC TOXICITY TESTING	4104	08/11/17	300.00	68186
590-547.000-801.000	CONTRACTUAL SERVICES	GLOBAL ENVIRONMENTAL	QUARTERLY CHRONIC TOXICITY TESTING	4104	08/11/17	300.00	68186
Total For Check 68186						600.00	
Check 68187							
582-175.000-930.000	REPAIRS & MAINTENANCE	GRIFFITHS MECHANICAL	REPAIR AC UNIT AT OFFICE	49090	08/11/17	18.00	68187
582-175.000-930.000	REPAIRS & MAINTENANCE	GRIFFITHS MECHANICAL	REPAIR AC UNIT AT OFFICE	49090	08/11/17	85.00	68187
582-175.000-930.000	REPAIRS & MAINTENANCE	GRIFFITHS MECHANICAL	REPAIR AC UNIT AT OFFICE	49090	08/11/17	40.00	68187
590-547.000-930.000	REPAIRS & MAINTENANCE	GRIFFITHS MECHANICAL	EXAMINE FURNACE AT WWTP FOR REPAIR	49073	08/11/17	85.00	68187
590-547.000-930.000	REPAIRS & MAINTENANCE	GRIFFITHS MECHANICAL	EXAMINE FURNACE AT WWTP FOR REPAIR	49073	08/11/17	40.00	68187
590-547.000-930.000	REPAIRS & MAINTENANCE	GRIFFITHS MECHANICAL	PATCH HVAC WWTP	48151	08/11/17	13.00	68187
590-547.000-930.000	REPAIRS & MAINTENANCE	GRIFFITHS MECHANICAL	PATCH HVAC WWTP	48151	08/11/17	170.00	68187
590-547.000-930.000	REPAIRS & MAINTENANCE	GRIFFITHS MECHANICAL	PATCH HVAC WWTP	48151	08/11/17	40.00	68187
Total For Check 68187						491.00	
Check 68188							
582-543.000-726.000	SUPPLIES	HAVILAND PRODUCTS COM	COOLING TOWER CHEMICALS	247985	08/11/17	252.90	68188
582-543.000-726.000	SUPPLIES	HAVILAND PRODUCTS COM	COOLING TOWER CHEMICALS	247985	08/11/17	132.00	68188
582-543.000-726.000	SUPPLIES	HAVILAND PRODUCTS COM	COOLING TOWER CHEMICALS	247985	08/11/17	140.00	68188
582-543.000-726.000	SUPPLIES	HAVILAND PRODUCTS COM	COOLING TOWER CHEMICALS	247985	08/11/17	20.00	68188
582-543.000-726.000	SUPPLIES	HAVILAND PRODUCTS COM	COOLING TOWER CHEMICALS	247985	08/11/17	30.00	68188
Total For Check 68188						574.90	
Check 68189							
582-000.000-040.000	ACCOUNTS RECEIVABLE	HAWKINS, TRACY S	UB refund for account: 000906	08/11/2017	08/11/17	199.79	68189
582-000.000-040.000	ACCOUNTS RECEIVABLE	HAWKINS, TRACY S	UB refund for account: 000906	08/11/2017	08/11/17	19.76	68189
582-000.000-040.000	ACCOUNTS RECEIVABLE	HAWKINS, TRACY S	UB refund for account: 000906	08/11/2017	08/11/17	9.06	68189
582-000.000-040.000	ACCOUNTS RECEIVABLE	HAWKINS, TRACY S	UB refund for account: 000906	08/11/2017	08/11/17	4.46	68189
582-000.000-040.000	ACCOUNTS RECEIVABLE	HAWKINS, TRACY S	UB refund for account: 000906	08/11/2017	08/11/17	1.93	68189
Total For Check 68189						235.00	

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Check 68190							
582-544.000-726.800	SUPPLIES - OPERATIONS	HEFFERNAN SOFT WATER	DRINKING WATER	43456	08/11/17	10.80	68190
582-546.000-930.000	REPAIRS & MAINTENANCE	HEFFERNAN SOFT WATER	DI WATER FOR BATTERIES AT PP	43394	08/11/17	21.00	68190
590-547.000-726.900	SUPPLIES - LABORATORY	HEFFERNAN SOFT WATER	DISTILLED WATER WWTP LAB	105404/	08/11/17	37.50	68190
590-547.000-726.900	SUPPLIES - LABORATORY	HEFFERNAN SOFT WATER	DISTILLED WATER WWTP LAB	105404/	08/11/17	5.00	68190
590-547.000-726.900	SUPPLIES - LABORATORY	HEFFERNAN SOFT WATER	DISTILLED WATER WWTP LAB	105404/	08/11/17	0.10	68190
590-547.000-726.900	SUPPLIES - LABORATORY	HEFFERNAN SOFT WATER	DISTILLED WATER WWTP LAB	105404/	08/11/17	(8.00)	68190
Total For Check 68190						66.40	
Check 68191							
582-000.000-040.000	ACCOUNTS RECEIVABLE	HOLBROOK, CHELSEY E	UB refund for account: 013639	08/11/2017	08/11/17	27.69	68191
582-000.000-040.000	ACCOUNTS RECEIVABLE	HOLBROOK, CHELSEY E	UB refund for account: 013639	08/11/2017	08/11/17	7.18	68191
582-000.000-040.000	ACCOUNTS RECEIVABLE	HOLBROOK, CHELSEY E	UB refund for account: 013639	08/11/2017	08/11/17	0.57	68191
582-000.000-040.000	ACCOUNTS RECEIVABLE	HOLBROOK, CHELSEY E	UB refund for account: 013639	08/11/2017	08/11/17	1.45	68191
582-000.000-040.000	ACCOUNTS RECEIVABLE	HOLBROOK, CHELSEY E	UB refund for account: 013639	08/11/2017	08/11/17	0.62	68191
582-000.000-040.000	ACCOUNTS RECEIVABLE	HOLBROOK, CHELSEY E	UB refund for account: 013639	08/11/2017	08/11/17	0.69	68191
582-000.000-040.000	ACCOUNTS RECEIVABLE	HOLBROOK, CHELSEY E	UB refund for account: 013639	08/11/2017	08/11/17	0.95	68191
590-000.000-040.000	ACCOUNTS RECEIVABLE	HOLBROOK, CHELSEY E	UB refund for account: 013639	08/11/2017	08/11/17	10.50	68191
590-000.000-040.000	ACCOUNTS RECEIVABLE	HOLBROOK, CHELSEY E	UB refund for account: 013639	08/11/2017	08/11/17	10.05	68191
591-000.000-040.000	ACCOUNTS RECEIVABLE	HOLBROOK, CHELSEY E	UB refund for account: 013639	08/11/2017	08/11/17	5.51	68191
591-000.000-040.000	ACCOUNTS RECEIVABLE	HOLBROOK, CHELSEY E	UB refund for account: 013639	08/11/2017	08/11/17	8.59	68191
Total For Check 68191						73.80	
Check 68192							
591-544.000-801.000	CONTRACTUAL SERVICES	HYDROCORP	MONTHLY CROSS CONNECTION PAYMENT 8	0043805-IN	08/11/17	1,333.00	68192
Total For Check 68192						1,333.00	
Check 68193							
590-546.000-930.000	REPAIRS & MAINTENANCE	JONESVILLE LUMBER	MATERIALS TO REPAIR DUMP STATION D	767410	08/11/17	67.45	68193
590-546.000-930.000	REPAIRS & MAINTENANCE	JONESVILLE LUMBER	MATERIALS TO REPAIR DUMP STATION D	767410	08/11/17	17.08	68193
590-546.000-930.000	REPAIRS & MAINTENANCE	JONESVILLE LUMBER	MATERIALS TO REPAIR DUMP STATION D	767410	08/11/17	5.39	68193
590-546.000-930.000	REPAIRS & MAINTENANCE	JONESVILLE LUMBER	MATERIALS TO REPAIR DUMP STATION D	767410	08/11/17	6.59	68193
590-546.000-930.000	REPAIRS & MAINTENANCE	JONESVILLE LUMBER	STEP STRINGERS AND DECKING FOR STA	767696	08/11/17	27.88	68193
590-546.000-930.000	REPAIRS & MAINTENANCE	JONESVILLE LUMBER	STEP STRINGERS AND DECKING FOR STA	767696	08/11/17	19.39	68193
590-546.000-930.000	REPAIRS & MAINTENANCE	JONESVILLE LUMBER	STEP STRINGERS AND DECKING FOR STA	767696	08/11/17	20.49	68193
590-546.000-930.000	REPAIRS & MAINTENANCE	JONESVILLE LUMBER	STEP STRINGERS AND DECKING FOR STA	767696	08/11/17	9.70	68193
Total For Check 68193						173.97	
Check 68194							
582-544.000-801.000-1	CONTRACTUAL SERVICES	KENDALL ELECTRIC	4" PVC SWEEPS	S106077771.001	08/11/17	52.73	68194
Total For Check 68194						52.73	
Check 68195							
582-544.000-726.800	SUPPLIES - OPERATIONS	MARKET HOUSE	CLEANING SUPPLIES	106544	08/11/17	20.63	68195
590-546.000-726.800	SUPPLIES - OPERATIONS	MARKET HOUSE	HAND SOAP	106768	08/11/17	7.96	68195
Total For Check 68195						28.59	
Check 68196							
582-000.000-040.000	ACCOUNTS RECEIVABLE	MCALLISTER, BLAKE A	UB refund for account: 026247	08/11/2017	08/11/17	29.67	68196
582-000.000-040.000	ACCOUNTS RECEIVABLE	MCALLISTER, BLAKE A	UB refund for account: 026247	08/11/2017	08/11/17	14.83	68196
582-000.000-040.000	ACCOUNTS RECEIVABLE	MCALLISTER, BLAKE A	UB refund for account: 026247	08/11/2017	08/11/17	0.89	68196
582-000.000-040.000	ACCOUNTS RECEIVABLE	MCALLISTER, BLAKE A	UB refund for account: 026247	08/11/2017	08/11/17	1.83	68196
582-000.000-040.000	ACCOUNTS RECEIVABLE	MCALLISTER, BLAKE A	UB refund for account: 026247	08/11/2017	08/11/17	0.67	68196
582-000.000-040.000	ACCOUNTS RECEIVABLE	MCALLISTER, BLAKE A	UB refund for account: 026247	08/11/2017	08/11/17	1.44	68196
582-000.000-040.000	ACCOUNTS RECEIVABLE	MCALLISTER, BLAKE A	UB refund for account: 026247	08/11/2017	08/11/17	0.67	68196

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Check 68196							
Total For Check 68196						50.00	
Check 68197							
582-000.000-123.000	PREPAID EXPENSES	MERIT	NETWORK ACCESS	77191	08/11/17	1,935.00	68197
590-000.000-123.000	PREPAID EXPENSES	MERIT	NETWORK ACCESS	77191	08/11/17	967.50	68197
590-000.000-123.000	PREPAID EXPENSES	MERIT	NETWORK ACCESS	77191	08/11/17	967.50	68197
Total For Check 68197						3,870.00	
Check 68198							
590-547.000-801.000	CONTRACTUAL SERVICES	MERIT LABORATORIES	BEF COMPLIANCE TESTING, IPP MONTHL	82414	08/11/17	166.25	68198
590-547.000-801.000	CONTRACTUAL SERVICES	MERIT LABORATORIES	BEF COMPLIANCE TESTING, IPP MONTHL	82544	08/11/17	166.25	68198
590-547.000-801.000	CONTRACTUAL SERVICES	MERIT LABORATORIES	BEF COMPLIANCE TESTING, IPP MONTHL	82568	08/11/17	166.25	68198
590-547.000-801.000	CONTRACTUAL SERVICES	MERIT LABORATORIES	BEF COMPLIANCE TESTING, IPP MONTHL	82329	08/11/17	282.50	68198
590-547.000-801.000	CONTRACTUAL SERVICES	MERIT LABORATORIES	BEF COMPLIANCE TESTING, IPP MONTHL	82389	08/11/17	282.50	68198
590-547.000-801.000	CONTRACTUAL SERVICES	MERIT LABORATORIES	BEF COMPLIANCE TESTING, IPP MONTHL	82466	08/11/17	282.50	68198
590-547.000-801.000	CONTRACTUAL SERVICES	MERIT LABORATORIES	BEF COMPLIANCE TESTING, IPP MONTHL	82625	08/11/17	282.50	68198
590-547.000-801.000	CONTRACTUAL SERVICES	MERIT LABORATORIES	BEF COMPLIANCE TESTING, IPP MONTHL	82267	08/11/17	401.25	68198
Total For Check 68198						2,030.00	
Check 68199							
582-175.000-920.400	UTILITIES - GAS	MICH GAS UTILITIES	WAREHOUSE	0503214966-0000	08/11/17	25.49	68199
582-175.000-920.400	UTILITIES - GAS	MICH GAS UTILITIES	NATURAL GAS UTILITY - 37 GEN	0504504154-0000	08/11/17	48.81	68199
590-175.000-920.400	UTILITIES - GAS	MICH GAS UTILITIES	WAREHOUSE	0503214966-0000	08/11/17	12.74	68199
590-175.000-920.400	UTILITIES - GAS	MICH GAS UTILITIES	NATURAL GAS UTILITY - 37 GEN	0504504154-0000	08/11/17	24.40	68199
590-547.000-920.400	UTILITIES - GAS	MICH GAS UTILITIES	NATURAL GAS UTILITY	0504904602-0000	08/11/17	38.91	68199
590-547.000-920.400	UTILITIES - GAS	MICH GAS UTILITIES	NATURAL GAS UTILITY - WWTP	0505161747-0000	08/11/17	282.14	68199
590-547.000-920.400	UTILITIES - GAS	MICH GAS UTILITIES	WWTP	0504756735-0000	08/11/17	51.94	68199
591-175.000-920.400	UTILITIES - GAS	MICH GAS UTILITIES	WAREHOUSE	0503214966-0000	08/11/17	12.75	68199
591-175.000-920.400	UTILITIES - GAS	MICH GAS UTILITIES	NATURAL GAS UTILITY - 37 GEN	0504504154-0000	08/11/17	24.41	68199
Total For Check 68199						521.59	
Check 68200							
582-544.000-920.500	UTILITIES - REFUSE	MODERN WASTE SYSTEMS		55361	08/11/17	82.00	68200
590-175.000-801.000	CONTRACTUAL SERVICES	MODERN WASTE SYSTEMS	MONTHLY SERVICE 101 GALLOWAY	55404	08/11/17	85.00	68200
590-546.000-920.500	UTILITIES - REFUSE	MODERN WASTE SYSTEMS		55361	08/11/17	41.00	68200
591-544.000-920.500	UTILITIES - REFUSE	MODERN WASTE SYSTEMS		55361	08/11/17	41.00	68200
Total For Check 68200						249.00	
Check 68201							
591-543.000-930.100	MAINTENANCE - WELL #1	NORTHERN PUMP & WELL	ANNUAL INSPECTION OF WELLS AND HIG	17-J1092	08/11/17	200.00	68201
591-543.000-930.200	MAINTENANCE - WELL #2	NORTHERN PUMP & WELL	ANNUAL INSPECTION OF WELLS AND HIG	17-J1092	08/11/17	200.00	68201
591-543.000-930.300	MAINTENANCE - WELL #3	NORTHERN PUMP & WELL	ANNUAL INSPECTION OF WELLS AND HIG	17-J1092	08/11/17	200.00	68201
591-543.000-930.400	MAINTENANCE - WELL #4	NORTHERN PUMP & WELL	ANNUAL INSPECTION OF WELLS AND HIG	17-J1092	08/11/17	200.00	68201
591-543.000-930.500	MAINTENANCE - WELL #5	NORTHERN PUMP & WELL	ANNUAL INSPECTION OF WELLS AND HIG	17-J1092	08/11/17	200.00	68201
591-543.000-930.800	MAINTENANCE - WELL #8	NORTHERN PUMP & WELL	ANNUAL INSPECTION OF WELLS AND HIG	17-J1092	08/11/17	200.00	68201
591-545.000-930.000	REPAIRS & MAINTENANCE	NORTHERN PUMP & WELL	ANNUAL INSPECTION OF WELLS AND HIG	17-J1092	08/11/17	800.00	68201
Total For Check 68201						2,000.00	
Check 68202							
582-175.000-801.000	CONTRACTUAL SERVICES	ONLINE INFORMATION SE	MONTHLY PROCESSING	801626	08/11/17	78.82	68202
590-175.000-801.000	CONTRACTUAL SERVICES	ONLINE INFORMATION SE	MONTHLY PROCESSING	801626	08/11/17	39.41	68202
591-175.000-801.000	CONTRACTUAL SERVICES	ONLINE INFORMATION SE	MONTHLY PROCESSING	801626	08/11/17	39.42	68202
Total For Check 68202						157.65	
Check 68203							

GL Number	GL Desc	Vendor	Invoice Desc.	Invoice	Chk Date	Amount	Check
Check 68203							
582-000.000-040.000	ACCOUNTS RECEIVABLE	PATRICK, HENRY R	UB refund for account: 014446	08/11/2017	08/11/17	32.87	68203
582-000.000-040.000	ACCOUNTS RECEIVABLE	PATRICK, HENRY R	UB refund for account: 014446	08/11/2017	08/11/17	5.61	68203
582-000.000-040.000	ACCOUNTS RECEIVABLE	PATRICK, HENRY R	UB refund for account: 014446	08/11/2017	08/11/17	1.59	68203
582-000.000-040.000	ACCOUNTS RECEIVABLE	PATRICK, HENRY R	UB refund for account: 014446	08/11/2017	08/11/17	0.75	68203
582-000.000-040.000	ACCOUNTS RECEIVABLE	PATRICK, HENRY R	UB refund for account: 014446	08/11/2017	08/11/17	0.52	68203
Total For Check 68203						41.34	
Check 68204							
582-544.000-730.000	VEH./EQUIP. MAINT. SUPPL	PERFORMANCE AUTOMOTIV	HYD HOSE	10284-1220880	08/11/17	17.97	68204
Total For Check 68204						17.97	
Check 68205							
590-000.000-040.000	ACCOUNTS RECEIVABLE	PICHEA, DANIEL A	UB refund for account: 012476	08/11/2017	08/11/17	54.26	68205
Total For Check 68205						54.26	
Check 68206							
582-175.000-801.000	CONTRACTUAL SERVICES	PLANT MORAN, PLLC	PROFESSIONAL SERVICES RENDERED	1456717	08/11/17	3,872.32	68206
590-175.000-801.000	CONTRACTUAL SERVICES	PLANT MORAN, PLLC	PROFESSIONAL SERVICES RENDERED	1456717	08/11/17	1,936.16	68206
591-175.000-801.000	CONTRACTUAL SERVICES	PLANT MORAN, PLLC	PROFESSIONAL SERVICES RENDERED	1456717	08/11/17	1,936.17	68206
Total For Check 68206						7,744.65	
Check 68207							
582-544.000-726.800	SUPPLIES - OPERATIONS	POINT RENTAL & SALES	EDGER FOR OFFICE LAWN MAINTENANCE	65483	08/11/17	30.00	68207
590-546.000-930.960	REPAIRS & MAINT. - SEWER	POINT RENTAL & SALES	EXCAVATOR, HAMMER, STARTER ASSEMBL	65167	08/11/17	240.00	68207
590-546.000-930.960	REPAIRS & MAINT. - SEWER	POINT RENTAL & SALES	EXCAVATOR, HAMMER, STARTER ASSEMBL	65166	08/11/17	64.11	68207
590-546.000-930.960	REPAIRS & MAINT. - SEWER	POINT RENTAL & SALES	EXCAVATOR, HAMMER, STARTER ASSEMBL	65094	08/11/17	240.00	68207
590-546.000-930.960	REPAIRS & MAINT. - SEWER	POINT RENTAL & SALES	EXCAVATOR, HAMMER, STARTER ASSEMBL	65094	08/11/17	160.00	68207
Total For Check 68207						734.11	
Check 68208							
582-000.000-110.000	INVENTORY	POWERLINE SUPPLY	INVENTORY	56167355	08/11/17	664.50	68208
582-000.000-110.000	INVENTORY	POWERLINE SUPPLY	INVENTORY	56167355	08/11/17	192.00	68208
582-000.000-110.000	INVENTORY	POWERLINE SUPPLY	INVENTORY	56167355	08/11/17	26.50	68208
582-000.000-110.000	INVENTORY	POWERLINE SUPPLY	INVENTORY	56167355	08/11/17	87.00	68208
Total For Check 68208						970.00	
Check 68209							
582-000.000-110.000	INVENTORY	RESCO ELECTRIC UTILIT	INVENTORY	687936-00	08/11/17	45.08	68209
582-000.000-110.000	INVENTORY	RESCO ELECTRIC UTILIT	INVENTORY	687936-00	08/11/17	297.50	68209
Total For Check 68209						342.58	
Check 68210							
590-175.000-801.000	CONTRACTUAL SERVICES	SAFETY SYSTEMS, INC	QUARTERLY LEASE MAINT AND MONITORI	470952	08/11/17	180.00	68210
Total For Check 68210						180.00	
Check 68211							
590-000.000-110.000	INVENTORY	SLC METER LLC	INVENTROY	248815	08/11/17	148.33	68211
590-000.000-110.000	INVENTORY	SLC METER LLC	INVENTORY	248693	08/11/17	856.08	68211
Total For Check 68211						1,004.41	
Check 68212							
590-546.000-930.950	REPAIRS & MAINT. - LIFT	SMITH & LOVELESS	QUAD RING	117972	08/11/17	55.20	68212
Total For Check 68212						55.20	
Check 68213							

GL Number	GL Desc	Vendor	Invoice Desc.	Invoice	Chk Date	Amount	Check
Check 68213							
582-000.000-040.000	ACCOUNTS RECEIVABLE	SMITH, CHRISTOPHER H	UB refund for account: 021410	08/11/2017	08/11/17	36.58	68213
582-000.000-040.000	ACCOUNTS RECEIVABLE	SMITH, CHRISTOPHER H	UB refund for account: 021410	08/11/2017	08/11/17	21.76	68213
582-000.000-040.000	ACCOUNTS RECEIVABLE	SMITH, CHRISTOPHER H	UB refund for account: 021410	08/11/2017	08/11/17	0.74	68213
582-000.000-040.000	ACCOUNTS RECEIVABLE	SMITH, CHRISTOPHER H	UB refund for account: 021410	08/11/2017	08/11/17	2.39	68213
582-000.000-040.000	ACCOUNTS RECEIVABLE	SMITH, CHRISTOPHER H	UB refund for account: 021410	08/11/2017	08/11/17	0.78	68213
582-000.000-040.000	ACCOUNTS RECEIVABLE	SMITH, CHRISTOPHER H	UB refund for account: 021410	08/11/2017	08/11/17	0.73	68213
582-000.000-040.000	ACCOUNTS RECEIVABLE	SMITH, CHRISTOPHER H	UB refund for account: 021410	08/11/2017	08/11/17	0.02	68213
Total For Check 68213						<u>63.00</u>	
Check 68214							
582-000.000-040.000	ACCOUNTS RECEIVABLE	SMITH, NATASHA S	UB refund for account: 026831	08/11/2017	08/11/17	0.37	68214
582-000.000-040.000	ACCOUNTS RECEIVABLE	SMITH, NATASHA S	UB refund for account: 026831	08/11/2017	08/11/17	0.04	68214
582-000.000-040.000	ACCOUNTS RECEIVABLE	SMITH, NATASHA S	UB refund for account: 026831	08/11/2017	08/11/17	0.11	68214
582-000.000-040.000	ACCOUNTS RECEIVABLE	SMITH, NATASHA S	UB refund for account: 026831	08/11/2017	08/11/17	0.05	68214
582-000.000-040.000	ACCOUNTS RECEIVABLE	SMITH, NATASHA S	UB refund for account: 026831	08/11/2017	08/11/17	0.04	68214
582-000.000-040.000	ACCOUNTS RECEIVABLE	SMITH, NATASHA S	UB refund for account: 026831	08/11/2017	08/11/17	0.01	68214
582-000.000-040.000	ACCOUNTS RECEIVABLE	SMITH, NATASHA S	UB refund for account: 026831	08/11/2017	08/11/17	2.53	68214
582-000.000-040.000	ACCOUNTS RECEIVABLE	SMITH, NATASHA S	UB refund for account: 026831	08/11/2017	08/11/17	2.26	68214
590-000.000-040.000	ACCOUNTS RECEIVABLE	SMITH, NATASHA S	UB refund for account: 026831	08/11/2017	08/11/17	0.59	68214
590-000.000-040.000	ACCOUNTS RECEIVABLE	SMITH, NATASHA S	UB refund for account: 026831	08/11/2017	08/11/17	0.41	68214
590-000.000-040.000	ACCOUNTS RECEIVABLE	SMITH, NATASHA S	UB refund for account: 026831	08/11/2017	08/11/17	0.95	68214
591-000.000-040.000	ACCOUNTS RECEIVABLE	SMITH, NATASHA S	UB refund for account: 026831	08/11/2017	08/11/17	0.25	68214
591-000.000-040.000	ACCOUNTS RECEIVABLE	SMITH, NATASHA S	UB refund for account: 026831	08/11/2017	08/11/17	0.45	68214
591-000.000-040.000	ACCOUNTS RECEIVABLE	SMITH, NATASHA S	UB refund for account: 026831	08/11/2017	08/11/17	0.60	68214
Total For Check 68214						<u>8.66</u>	
Check 68215							
582-544.000-726.800	SUPPLIES - OPERATIONS	SPRATT'S	CHAINSAW CHAINS AND FILES	157880	08/11/17	46.98	68215
582-544.000-726.800	SUPPLIES - OPERATIONS	SPRATT'S	CHAINSAW CHAINS AND FILES	157877	08/11/17	38.29	68215
591-175.000-730.039	BPU VEHICLE MAINT/SUPPLI	SPRATT'S	PINS FOR BACKHOE TEETH	157870	08/11/17	25.00	68215
591-175.000-730.039	BPU VEHICLE MAINT/SUPPLI	SPRATT'S	PINS FOR BACKHOE TEETH	157870	08/11/17	15.15	68215
Total For Check 68215						<u>125.42</u>	
Check 68216							
582-544.000-730.000	VEH./EQUIP. MAINT. SUPPL	STILLWELL FORD MERCUR	TIERS,BRAKES AND ALIGNMENT	588586	08/11/17	1,948.59	68216
Total For Check 68216						<u>1,948.59</u>	
Check 68217							
582-543.000-726.000	SUPPLIES	STOLL METAL SALES, LL	SHEET METAL FOR STAIRS AT POWER PL 797		08/11/17	40.32	68217
Total For Check 68217						<u>40.32</u>	
Check 68218							
591-545.000-801.000	CONTRACTUAL SERVICES	SUPERIOR INDUSTRIAL S	GENERATOR SERVICE	426425	08/11/17	542.25	68218
591-545.000-801.000	CONTRACTUAL SERVICES	SUPERIOR INDUSTRIAL S	GENERATOR SERVICE	426426	08/11/17	430.00	68218
Total For Check 68218						<u>972.25</u>	
Check 68219							
591-000.000-110.000	INVENTORY	USABBLUEBOOK	WATER REPAIR CLAMPS	318298	08/11/17	0.00	68219
591-000.000-110.000	INVENTORY	USABBLUEBOOK	WATER REPAIR CLAMPS	318298	08/11/17	382.08	68219
591-000.000-110.000	INVENTORY	USABBLUEBOOK	WATER REPAIR CLAMPS	318298	08/11/17	0.00	68219
591-000.000-110.000	INVENTORY	USABBLUEBOOK	WATER REPAIR CLAMPS	318298	08/11/17	278.34	68219
591-000.000-110.000	INVENTORY	USABBLUEBOOK	WATER REPAIR CLAMPS	318298	08/11/17	0.00	68219
591-000.000-110.000	INVENTORY	USABBLUEBOOK	WATER REPAIR CLAMPS	318298	08/11/17	0.00	68219
591-000.000-110.000	INVENTORY	USABBLUEBOOK	INVENTORY	297982	08/11/17	1,261.98	68219

GL Number	GL Desc	Vendor	Invoice Desc.	Invoice	Chk Date	Amount	Check
Check 68219							
591-000.000-110.000	INVENTORY	USABLUEBOOK	INVENTORY	297519	08/11/17	564.39	68219
						<u>2,486.79</u>	
Total For Check 68219							
Check 68220							
582-546.000-930.000	REPAIRS & MAINTENANCE	UTILITIES INSTRUMENTA	PREVENTATIVE MAINT ON 13.2KV BREAK	530351371	08/11/17	2,048.00	68220
						<u>2,048.00</u>	
Total For Check 68220							
Check 68221							
582-543.000-740.000	FUEL AND LUBRICANTS	WATKINS OIL COMPANY	FUEL PURCHASES	000090-1721201	08/11/17	49.38	68221
582-544.000-740.000	FUEL AND LUBRICANTS	WATKINS OIL COMPANY	FUEL PURCHASES	000090-1721201	08/11/17	978.51	68221
590-175.000-730.039	BPU VEHICLE MAINT/SUPPLI	WATKINS OIL COMPANY	FUEL PURCHASES	000090-1721201	08/11/17	43.60	68221
591-544.000-740.000	FUEL AND LUBRICANTS	WATKINS OIL COMPANY	FUEL PURCHASES	000090-1721201	08/11/17	470.83	68221
						<u>1,542.32</u>	
Total For Check 68221							
Check 68222							
591-000.000-040.000	ACCOUNTS RECEIVABLE	WATSON, LINDA S	UB refund for account: 023477	08/11/2017	08/11/17	198.20	68222
						<u>198.20</u>	
Total For Check 68222							
Check 68223							
582-175.000-905.000	PUBLISHING / NOTICES	WCSR	ADS	131-00045-0006	08/11/17	80.00	68223
590-175.000-905.000	PUBLISHING / NOTICES	WCSR	ADS	131-00045-0006	08/11/17	40.00	68223
591-175.000-905.000	PUBLISHING / NOTICES	WCSR	ADS	131-00045-0006	08/11/17	40.00	68223
						<u>160.00</u>	
Total For Check 68223							
Check 68224							
582-543.000-801.050-1	CONTRACTUAL SERV. - ENGI	WHEELER WORLD INC	ENGINE 5&6 UPGRADE PROJECT	12583	08/11/17	48,608.18	68224
582-543.000-801.060-1	CONTRACTUAL SERV. - ENGI	WHEELER WORLD INC	ENGINE 5&6 UPGRADE PROJECT	12583	08/11/17	48,608.19	68224
						<u>97,216.37</u>	
Total For Check 68224							
Check 68225							
582-544.000-801.300	TREE TRIMMING	WRIGHT TREE SERVICE	TREE TRIMMING WEEK ENDING 7/22 AND	081731395	08/11/17	3,341.18	68225
582-544.000-801.300	TREE TRIMMING	WRIGHT TREE SERVICE	TREE TRIMMING WEEK ENDING 7/22 AND	081731396	08/11/17	3,697.56	68225
						<u>7,038.74</u>	
Total For Check 68225							

GL Number	GL Desc	Vendor	Invoice Desc.	Invoice	Chk Date	Amount	Check
			Fund Totals:				
			Fund 582 ELECTRIC FUND			148,918.40	
			Fund 590 SEWER FUND			21,506.59	
			Fund 591 WATER FUND			21,370.90	
			Total For All Funds:			<hr/>	191,795.89

CITY COUNCIL MINUTES

City of Hillsdale

August 7, 2017

7:00 P.M.

Regular Meeting

Call to Order and Pledge of Allegiance

Mayor Scott Sessions opened the meeting with the Pledge of Allegiance.

Roll Call

Mayor Scott Sessions called the meeting to order.

Council Members present: Scott M. Sessions, Mayor
 Adam Stockford, Ward 1
 Brian Watkins, Ward 1
 William Zeiser, Ward 3
 Matthew Bell, Ward 4
 Patrick Flannery, Ward 4

Council Members absent: Timothy Dixon, Ward 2
 William Morrissey, Ward 2
 Bruce Sharp, Ward 3

Also present were: City Manager David Mackie, Deputy City Clerk Katy Price, City Attorney John Lovinger, City Attorney Tom Thompson, Bonnie Tew (Finance), Kay Freese (HR), Scott Hephner (HCPD & HCFD), Jake Hammel (DPS), Chris McArthur (BPU), Alan Beeker (Zoning), Corey Murray (Hillsdale Daily News), Aaron Lawrence (Michigan Gas Utilities), Joseph Hendee, Dennis Wainscott, Penny Swan, Ray Briner, Robert Socha, Ted Jansen, and Noah Weinrich.

Council Member Excused

Mayor Sessions reported Council Member Dixon, Council Member Morrissey, and Council Member Sharp would not be at the meeting and had asked to be excused.

Council Member Zeiser, seconded by Council Member Watkins, moved to excuse the absence of Council Member Dixon, Council Member Morrissey, and Council Member Sharp from the meeting. By a voice vote, the motion passed unanimously.

Approval of Agenda

City Manager Mackie requested “Consent Agenda Item N – Street Use Agreement” be removed from the Consent Agenda. City Manager Mackie reported the applicant had requested the item be removed from consideration, as the event had been relocated from the street right-of-way.

Council Member Bell, seconded by Council Member Flannery, moved to amend the August 7, 2017 agenda, as requested by City Manager Mackie. By a voice vote, the motion carried unanimously.

Council Member Watkins, seconded by Council Member Bell, moved to approve the August 7, 2017 agenda as amended. By a voice vote, the motion carried unanimously.

Public Comment

Mr. Jack McLain, 1445 South Bunn, noted the website contained errors on the membership lists to the various boards and commissions. Mr. McLain also voiced concern at the nomination process for persons to be re-appointed to boards and commissions.

Ms. Penny Swan, 192 S. West Street, thanked DPS Director Hammel for his leadership on the proposed goose hunt near Baw Beese Lake.

Consent Agenda

- A. Approval of Bills
 - 1. City Claims of July 13, 2017: \$93,398.67
City Claims of July 27, 2017: \$108,334.39
 - 2. BPU Claims of July 13, 2017: \$98,279.50
BPU Claims of July 27, 2017: \$233,502.99
 - 3. Payroll of July 27, 2017: \$161,236.81
- B. City Council Meeting Minutes of July 17, 2017
- C. Board of Review Meeting Minutes of July 18, 2017
- D. TIFA Façade Grant Committee Meeting Minutes of July 17, 2017
- E. Tax Increment Finance Authority (TIFA) of May 16, 2017
- F. TIFA Targeted Development Meeting Minutes of June 27, 2017
- G. Local Development Finance Authority (LDFA) Meeting Minutes of June 15, 2017
- H. Approval of March 13, 2017 F.A.I.R. Committee Minutes
- I. Planning Commission Minutes of June 20, 2017
- J. Brownfield Redevelopment Authority Minutes of July 20, 2017
- K. Economic Development Corporation (EDC) Minutes of July 24, 2017
- L. Noise Variance Request – Mr. Noah Weinrich
- M. Park Use Agreement - 2017 Molly’s Glitter Run
- N. Hillsdale College Street Closure and Noise Variance Requests
- O. July 2017 Code Enforcement Report
- P. Hillsdale Policy Group (HPG) Monthly Update

Council Member Watkins questioned if the minutes from the city’s boards and commissions could be included on the Consent Agenda on a timelier basis. City Manager Mackie stated he would work with city staff in regards to this issue.

Council Member Bell, seconded by Council Member Watkins, moved to approve the Consent Agenda as presented.

Roll call:	Council Member Bell	Aye
	Council Member Flannery	Aye
	Council Member Stockford	Aye
	Council Member Watkins	Aye
	Council Member Zeiser	Aye
	Mayor Sessions	Aye

Motion passed 6-0.

Communications/Petitions

- A. Correspondence from Hillsdale County re: Foreclosed Real Property

Introduction and Adoption of Ordinance/Public Hearing

There were no ordinances or public hearings on the agenda.

Unfinished Business

There were no “Unfinished Business” items on the agenda.

Old Business

There were no “Old Business” items on the agenda.

New Business

- A. Lot Division Approval: Lot Division Approval – Parcel Boundary adjustment between 8 Armstrong and 142 S West

City Manager Mackie reported the lot division application involved adjoining property owners and had been recommended for approval by the Planning Commission.

Council Member Watkins, seconded by Council Member Flannery, moved to approve the parcel boundary adjustment between 8 Armstrong and 142 S West, as presented.

Roll call:	Council Member Bell	Aye
	Council Member Flannery	Aye
	Council Member Stockford	Aye
	Council Member Watkins	Aye
	Council Member Zeiser	Aye
	Mayor Sessions	Aye

Motion passed 6-0.

B. Establish Public Hearing Date - Application for Industrial Facilities Tax Exemption Certificate (Plant Rehabilitation) – 221 Industrial Drive – Corecoyle Composites LLC

City Manager Mackie reported the City Clerk’s Office had received an IFT application for a new project at 221 Industrial Park Drive totaling \$1,308,638.00 of real and personal property improvements. City Manager Mackie stated a public hearing in regards to the application was required and staff recommended it be held on Tuesday, September 5, 2017.

Council Member Bell voiced support for the project that would assist a new business that would reutilize an existing building to bring jobs and industry back into the Industrial Park.

City Manager Mackie noted the company had already begun renovations and clean-up of the building that had been vacant for over ten years.

Council Member Watkins, seconded by Council Member Flannery, moved to schedule a public hearing on September 5, 2017 in regards to an application for Industrial Facilities Tax Exemption Certificate (Plant Rehabilitation) at 221 Industrial Drive submitted by Corecoyle Composites LLC.

Roll call:	Council Member Bell	Aye
	Council Member Flannery	Aye
	Council Member Stockford	Aye
	Council Member Watkins	Aye
	Council Member Zeiser	Aye
	Mayor Sessions	Aye

Motion passed 6-0.

C. Formation of “Fiber to the Premise Committee”

City Manager Mackie stated the program to install high-speed fiber cable to homes and businesses in the city had been a high priority for Council and citizens for a number of years. City Manager Mackie stated himself and BPU Director Mike Barber had visited the City of Marshall, which had implemented a similar project using their utility platform. City Manager Mackie recommended City Council create a committee to explore similar project options and to review financing options for

the project. City Manager Mackie stated the size of the committee should be between 6-8 people and be a combination of Council Members and private citizens.

Responding to a question from Council Member Bell, City Manager Mackie stated there was not an economic advantage for ACD to install fiber throughout the city and to connect homes and businesses to the network. City Manager Mackie stated city staff continued to work with ACD to create a small, test area to demonstrate high-speed fiber network capabilities in the city.

Council Member Bell encouraged the city to review the previous contract with ACD to ensure all of the obligations had been fulfilled by that company. Council Member Bell also voiced concern with the BPU becoming an Internet service provider, in addition to the water, wastewater, and electric services already provided.

Council Member Watkins stated the availability of high-speed Internet could be used as an economic development tool to bring business and residents into the city.

City Manager Mackie reported the test neighborhood for fiber installation had been already selected, as the BPU had other utility upgrades to make in the same area.

Council Member Watkins, seconded by Council Member Flannery, moved to establish a “Fiber-to-Premise” Committee to review the parameters for the construction of a fiber network throughout the City of Hillsdale.

Roll call:	Council Member Bell	Aye
	Council Member Flannery	Aye
	Council Member Stockford	Aye
	Council Member Watkins	Aye
	Council Member Zeiser	Aye
	Mayor Sessions	Aye

Motion passed 6-0.

D. Annual bow hunt within the city limits

Chief Hephner noted the city had permitted a bow hunt for deer since 2010, and both hunters and property owners had requested this program occur again in 2017. Chief Hephner reported the available hunting properties had been reduced due to new construction and developments, but many private property owners had offered their land for the deer hunt. Chief Hephner stated there were 15 hunters in 2016 that took a total of 33 deer. Chief Hephner recommended approval of the 2017 Archery Deer Hunt within the City of Hillsdale.

Council Member Bell, seconded by Council Member Watkins, moved to approve the 2017 Archery Deer Hunt within the City of Hillsdale.

Roll call:	Council Member Bell	Aye
	Council Member Flannery	Aye
	Council Member Stockford	Aye
	Council Member Watkins	Aye
	Council Member Zeiser	Aye
	Mayor Sessions	Aye

Motion passed 6-0.

E. Easement with Michigan Gas Utilities Corporation

DPS Director Hammel noted the proposed easement would allow the Michigan Gas Utilities to replace an existing pressure regulator from the city parks onto existing DPS property near the compost site.

Council Member Bell, seconded by Council Member Flannery, moved to approve an easement with Michigan Gas Utilities Corporation for the relocation of a gas pressure regulator.

Roll call:	Council Member Bell	Aye
	Council Member Flannery	Aye
	Council Member Stockford	Aye
	Council Member Watkins	Aye
	Council Member Zeiser	Aye
	Mayor Sessions	Aye

Motion passed 6-0.

F. 2017 City of Hillsdale Goose Hunt

DPS Director Hammel reported the city had attempted various methods to control the geese population at Baw Beese Lake due to maintenance, cleanliness, and usage issues. Mr. Hammel stated city staff is recommending City Council approve a goose hunt within the Baw Beese Park system during the 2017 statewide goose hunting season. Mr. Hammel noted the hunters would be required to follow all State of Michigan rules & regulations pertaining to goose hunting during these times.

City Manager Mackie stated that if the hunt was approved by Council, more specific information would be developed by city staff and communicated to Council and to the general public prior to the hunt.

Council Member Bell, seconded by Council Member Flannery, moved to approve the 2017 City of Hillsdale Goose Hunt as presented by city staff.

Roll call:	Council Member Bell	Aye
	Council Member Flannery	Aye
	Council Member Stockford	Aye
	Council Member Watkins	Aye
	Council Member Zeiser	Aye
	Mayor Sessions	Aye

Motion passed 6-0.

XI. Miscellaneous Reports

City Manager's Report

City Manager Mackie:

1. Reported the informational meeting regarding the medical marijuana initiative would be held on August 16, 2017 at 6:00 p.m. at the Hillsdale Municipal Library.
2. Announced the annual Downtown Sidewalk Sales would be held on Friday & Saturday, August 11-12, 2017.
3. Congratulated the Hillsdale Garden Club on their 1st Place Award from the Michigan Garden Club.
4. Announced a vacancy existed on the Hillsdale Housing Commission and encouraged interested citizens to submit their application to the City Manager's Office.
5. Stated the City had submitted a safety grant for total reconstruction of the Hallett Street railroad bridge.

General Public Comment

Ms. Penny Swan objected to the allegations made by city representatives towards Jeff King in regards to a trespassing complaint at the city's airport. Ms. Swan requested the city offer a public apology to Mr. King in regards to this issue.

Mr. Dennis Wainscott, 34 Garden Street, invited everyone to attend the "Meet & Greet" with the City Council candidates on August 19, 2017 at 10:00 a.m. at the Rough Draft Coffee House. Mr. Wainscott also encouraged City Council candidates to place their election signs in proper locations and not in public rights-of-way.

Mr. Joseph Hendee, 188 Rea Street, read a letter voicing concern with regards to a trespassing complaint at the city's airport. Mr. Hendee questioned if the street lights on the Hillsdale College campus were metered. Mr. Hendee also asked why the resignation letter from a Housing Commissioner was not included in the meeting packet. A copy of Mr. Hendee's letter was filed with the City Council papers for the meeting.

Mr. Jack McLain discussed the high costs of installing fiber to bring high-speed Internet to city residents and businesses. Mr. McLain also discussed the outdated information on the city's website and requested that information be updated.

Mr. Hendee opined it was a conflict of interest for the Marcoux Allen law firm to represent both Hillsdale College and the City of Hillsdale.

Council Comments

Mayor Sessions recognized the outstanding efforts of Recreation Director Michelle Loren for her leadership during the summer months.

Council Member Bell thanked Mr. Scott Pienta and City Clerk Stephen French for working to improve the audio system in the Council Chambers. Council Member Bell also thanked Deputy City Clerk Katy Price for attending the meeting in place of Clerk French who was on vacation.

Adjournment

Council Member Bell, seconded by Council Member Watkins, moved to adjourn the meeting. By a voice vote, the motion passed unanimously.

The meeting adjourned at 8:07 p.m.

Scott M. Sessions, Mayor

Stephen M. French, City Clerk

CITY OF HILLSDALE



Economic Development Corporation

97 North Broad Street
Hillsdale, Michigan 49242-1695
(517) 437-6449

Economic Development Corporation (EDC) MINUTES **REGULAR MEETING** **CITY HALL, 97 N. BROAD ST., 2ND FLOOR** **June 15, 2017 at 7:30 am**

Members Present: Matt Granata, Dean Affholter, Gary Wolfram, David Loader, Victoria Bergen, Jeremiah Hodshire, Ed Sumnar, John Condon

Non-Members: Brad Heffner, Michigan Economic Development Corporation, Ralph Hansen, AIS Construction Equipment Corporation, Shawn Vondra, Hillsdale Community Schools Superintendent, Nick Tucker – Hillsdale Robotics Team Advisor, Jake Hammel, Hillsdale Robotics Team Advisor, Hillsdale Robotics Team to include: Max Hayes, Jacob McGowan, Brandon Torres, Bradley Herring, Adrian Potok, Minju Kim, Emma Hammel

Excused: Barry Hill, Amanda Janes

Others Present: David Mackie, City Manager, Alan Beeker, Zoning & Planning Administrator, Kelly LoPresto, Administrative Assistant, Sue Smith, Economic Development Partnership of Hillsdale County

Meeting called to order at 7:30 a.m.

A. CONSENT AGENDA:

1. Approval of Minutes: Regular EDC Meeting April 20, 2017
2. Financial Statements as of May 31, 2017

Ed Sumnar moved to accept the consent agenda as presented with a few changes in the minutes (see below). David Loader seconded.

Motion passed.

A few changes in the minutes to include spelling of Marijuana, delete an extra A, and include Jake's last name and who he is representing (Jake Hammel, Hillsdale High School Robotics Team Advisor).

B. PUBLIC COMMENT ON AGENDA ITEMS -

No Public Comment

C. WELCOME NEW EDC MEMBER – JOHN CONDON

The board welcomed new member John Condon owner of Hillsdale Terminal Tool to serve through May 2023.

D. HILLSDALE HIGH SCHOOL ROBOTICS TEAM PRESENTATION

Hillsdale High School Robotics Team did a presentation along with a demonstration of the robot they built.

- E. **AIS PRESENTATION** – Ralph Hansen presented a check to Hillsdale High School Robotics Team. He also did a presentation on AIS Construction Equipment Corporation. Ralph talked about the full-time, fully-staffed, heavy equipment training facility located in Lansing, Michigan. They train year-round on utility and construction equipment operation and repair. Though AIS is an equipment distributor, they offer operator training on all makes and models. The technician training offers generalized programs that include: hydraulics, electrical, engine, and power trains that have universal application across all manufacturer's models.

In addition to manufacturer, operator, and technician training, AIS offers a wide variety of customized heavy equipment training courses. Training can begin with students as early on as high school. Because courses offer so much hands-on training, they conduct programs at branches around the state of Michigan. Currently, AIS is educating as many as 180 students a day in their heavy equipment repair and operations program. These emerging technicians have become a valuable resource of talent for AIS as well as to our industry as a whole.

The Training Center also offers heavy equipment repair classes through Lansing Community College. At this point students can earn a certificate from AIS or an Associate's degree from LCC.

F. NEW BUSINESS

1. **Michigan Economic Development Corporation (MEDC) Interlocal Agreement**

Brad Heffner, Associate General Counsel, Director of Risk Management Services, and Legislative Liaison from Michigan Economic Development Corporation discussed the Interlocal agreement which is an agreement creating the Michigan Economic Development Corporation, a Michigan public body corporate, between the Michigan Strategic Fund, a public body corporate and politic within the Michigan Department of Talent and Economic Development (the "Fund"), and the participating Public Agencies that are signatories to the interlocal agreement.

Ed Sumnar moved to adopt the second amendment, but also ratifying the original agreement and first amendment and passed the resolution as presented. Jeremiah Hodshire seconded. Motion Passed.

Ed Sumnar moved to authorize the EDC Chair to sign the MEDC Interlocal agreement as well as the resolution. John Condon seconded. Motion passed.

2. **Revised Three Meadows Rights & Restrictions**

Alan Beeker, Zoning and Planning Administrator presented the amended Three Meadows Rights and Restrictions with the following amendment:

1.2 a. Residences designed for construction on Lots 1 thru 22 in Three Meadows Subdivision will be required to have the following minimum square footage; to wit:

- (1) One-story residences: 1,800 square feet of finished living area will be required on ground level. (Main floor)
- (2) One and one-half story residences: 2,300 square feet of finished living area will be required with at least 1,500 square feet of finished living area required on the first floor.
- (3) Two-story and multi-story residences: 2,400 square feet of finished living area will be required above grade level, with at least 1,200 square feet of finished living area required on the first floor.

- b. The phrase “finished living area” as used in this Section shall include in all cases areas on the first and second floor of the residence enclosed and finished for all-year occupancy computed on outside measurement of the residence. The term shall not include any garage, porch or attic finished or unfinished. No residence erected on any lot shall be more than thirty-five (35’) in height.
- c. Each Residence shall include at least an attached two-car garage.

David Loader moved to approve the Third Amendment and Restatement to the Declaration of Rights and Restrictions Three Meadows No. 1 (Lots 1 through 22). Rev 10 (5/17/17) to include the above language and approved to allow Alan Beeker, Zoning and Planning Administrator to move forward with having homeowners sign the amended version and record the amended document with the County. Jeremiah Hodshire seconded. Motion passed.

Economic Development Corporation (EDC) still owns six lots in Three Meadows Subdivision and there should be discussion at the next meeting regarding creation of the Homeowners Association.

3. Letter of Appreciation – David Foulke

Barry Hill, Chair wrote a letter of appreciation to David Foulke for his service on the Economic Development Corporation board. The letter was passed around and all board members signed. The letter will be mailed to David Foulke.

4. EDC Support – Hillsdale High School Robotics Team

Jeremiah Hodshire made a motion to support Hillsdale High School Robotics Team in the amount of \$500.00. Ed Sumnar seconded. Motion passed.

G. OLD BUSINESS

1. Officers Elections/Committee Assignments

Chair - Dean Affholter, Vice Chair – Matt Granata

Matt Granata advised he is willing to serve another term on EDC.

Ed Sumnar made a motion to nominate Dean Affholter as EDC Chair. Gary Wolfram seconded. Motion passed.

David Loader made a motion to nominate Matt Granata as EDC Vice-Chair. Gary Wolfram seconded. Motion passed.

John Condon made a motion to appoint EDC members to serve on EDC committees as presented below:

Architectural Control Committee: David Loader- Chair, Amanda Janes, and Ed Sumnar with terms expiring June 2018.

Business Review Committee: Jeremiah Hodshire- Chair, Amanda Janes, Gary Wolfram, and Victoria Bergen with terms expiring June 2018.

Manufacturing and Technology Park: Dean Affholter – Chair, David Loader, Matt Granata, and John Condon with terms expiring June 2018.

Victoria Bergen seconded. Motion passed.

2. Economic Development (Hillsdale Policy Group Reports)

May 2017 Progress Report was included in the packet.

3. Economic Development Partnership Reports

Sue Smith, EDP Director presented her report that was included in the packet.

4. 221 Industrial Drive – Phase (1), BEA and Declaration of Due Care Compliance Reimbursement

- a. Alan Beeker, Zoning Administrator advised TWO2ONE LLC dropped off a DVD of the BEA environmental reports and approvals for 221 Industrial Drive and picked up the \$10,000.00 reimbursement contribution towards the Baseline Environmental Assessment (BEA) related expenses.

H. COMMITTEE REPORTS

1. Three Meadows/ Architectural Control Committee

- a. List Lots with Realtor/Active Marketing –

There was no time to discuss listing lots with Realtor and other marking. Discussion will take place at next meeting.

David Mackie, City Manager advised EDC members about a Three Meadows website to promote lots still available created by Lon & Susan King for a cost of \$120.00. A few changes need to be made and will share with EDC members.

Jeremiah Hodshire made a motion to approve \$120.00 for the Three Meadows website. John Condon seconded. Motion passed.

2. Manufacturing & Technology Park

- a. Active Marketing – A draft flyer to market Hillsdale Manufacturing and Technology Park was handed out. More discussion at next meeting.
- b. Hillsdale County Early/Middle College

Amanda Janes, Jackson College included an update and Shawn Vondra, Hillsdale Community Schools Superintendent gave a short update as well.

The Michigan Department of Education approved the Hillsdale County Early Middle College (HCEMC). The following schools are participating in the HCEMC (Camden, Hillsdale, Jonesville, Litchfield, North Adams, Pittsford, Reading, Waldron and Will Carleton). Approximately 26 student applications have been received to date. Career focus areas include: IT, Health and Manufacturing. However, there is a 4th option that allows students to enter the HCEMC for other career areas (examples: education, engineering, agriculture, culinary, automotive, etc.). Students could complete skill sets (15 credits), concentrations (16-29 credits), certificates (30+ credits) associate degrees (60+) or complete classes to transfer to a college/university. Most students are slated to complete on average, 23 credit hours during their time in the HCEMC.

3. **Business Review Committee/Other Projects** – Nothing at this time.

I. BOARD ROUND-TABLE/ECONOMIC DEVELOPMENT UPDATE

1. Rising Tide Project – No update at this time will give update at next meeting as ran out of time.
2. Dawn Theatre Grant – Liquor License was approved waiting on signature from Marci Horton to send back to state.
3. Keeper Update – No update at this time will give update at next meeting as ran out of time.

4. Board Round Table – Dean Affholter, EDC Chair discussed would like to have a clear vision of where EDC is going and what the City and EDC members would like to accomplish. Also, Dean Affholter, EDC Chair thanked Barry Hill for his years of service and for serving as EDC Chair and a job well done.

J. ADJOURNMENT: Dean Affholter made a motion to adjourn at 9:10 a.m. David Loader seconded. Motion passed.

K. Next Meeting: August 17, 2017



Economic Development Corporation (EDC) MINUTES
SPECIAL MEETING
CITY HALL, 97 N. BROAD ST., 2ND FLOOR
July 24, 2017 at 7:30 am

Members Present: Matt Granata, Dean Affholter, Gary Wolfram, David Loader, Ed Sumnar, John Condon

Members Absent: Jeremiah Hodshire

Excused: Barry Hill, Amanda Janes, Victoria Bergen

Others Present: David Mackie, City Manager, Kelly LoPresto, Administrative Assistant

Meeting called to order at 7:30 a.m.

A. PUBLIC COMMENT ON AGENDA ITEMS -
No Public Comment

B. NEW BUSINESS

1. EDC New Signing Agent – Dean Affholter – Action

Ed Sumnar made a motion to authorize Dean Affholter, Economic Development Corporation (EDC) Chair to be signing agent for EDC and sign all contracts, documents, etc. Matt Granata Seconded.

2. Three Meadows

a. List Lots with Realtor – Action

Gary Wolfram made a motion to move forward with listing Three Meadows vacant properties in Phase 1 (six lots) with Cathy Galloway from Remax Preferred Realty and to include in the listing agreement the following transactions will be excluded from commission: any property EDC gives away (Business Attraction Program) and sale of property for \$1.00 to Hillsdale County Intermediate School for building program. John Condon seconded. Motion passed.

3. Manufacturing & Technology Park

a. List Lots with Realtor – Action

EDC Board decided not to list vacant property in Manufacturing and Technology Park at this time with Remax. Staff members were instructed to gather three quotes from Commercial Realtors (Thomas Duke and two others) and present at August 17th meeting.

C. ADJOURNMENT: Ed Sumnar made a motion to adjourn at 7:55 a.m. John Condon seconded. Motion passed.

D. Next Meeting: August 17, 2017



City of Hillsdale Agenda Item Summary

MEETING: August 21, 2017
AGENDA ITEM: Correspondence
SUBJECT: Certificate of Appreciation
BACKGROUND: Scott A. Hephner, Chief of Police

Present to Ms. Melaney Wells of Hillsdale, a Certificate of Appreciation for her quick thinking by contacting 911 on Wednesday, July 19, 2017 around 6:00 am concerning a structure fire at 82 N. West St. Her quick actions undoubtedly saved lives.

AGREEMENT FOR USE OF PARK

This Agreement is made and entered between the City of Hillsdale, a Michigan municipal corporation, of Hillsdale, Michigan (City) and Kyle Hart, of 1240 E. Hastings Lake Rd., Jonesville, MI 49250 (Renter) this ____ day of August, 2017.

Preamble

The City owns, regulates and is responsible for the use, care and maintenance of parks within its corporate boundaries and otherwise under its jurisdiction. Renter is desirous of utilizing Mrs. Stock's Park for and in connection with a wedding ceremony and reception. Approximately 250 people are expected to attend or participate. The event is to take place on August 26, 2017 and Renter shall have nonexclusive access to the park commencing at 7:00 a.m. and ending at 11:59 p.m. on that date. Renter shall be solely responsible for the provision of a tent, tables and chairs for the use of attendees and participants at their sole expense. To that end, Renter will be solely responsible for contracting or otherwise providing any tent, tables and chairs that they intend to use. Renter shall also be solely responsible for the provision of any food and drink for his guests' consumption. Renter shall be solely responsible for the quality and safety of each of the foregoing at his sole expense and on the terms and conditions hereinafter set forth:

Agreement

1. In consideration of the payment of a Park Usage Fee of \$400.00 and the posting of a \$150.00 damage deposit, receipt of which is hereby acknowledged, City agrees to allow Renter to use Mrs. Stock's Park on a nonexclusive basis on August 26, 2017 commencing at 7:00 a.m. and ending at 11:59 p.m. on that date solely for the purposes and on the terms and conditions stated in the Preamble and herein, all of which the Renter acknowledges, accepts and agrees are binding on him..
2. Renter hereby assumes, agrees to be and shall be solely responsible for the control and supervision of the proposed event and all associated activities within Mrs. Stock's Park during the term of the usage agreement.
3. Renter acknowledges the pristine nature of the park, and the fragility, delicateness, and vulnerability to damage of many of the features within the park, including but not limited to the structures, flowerbeds, flowers and other plantings within it; Renter assumes responsibility for the protection of such improvements from damage during its presence in the park under the agreement.
4. Renter acknowledges that that there are no restroom facilities at Mrs. Stock's Park other than a single portable unit, and that the City does not and will not provide tents, tables, chairs or other equipment for use by Renter, his agents, servants, employees, guests, invitees, event attendees or participants during the time of the scheduled event. Renter further acknowledges that he, at his sole expense, shall provide additional portable restroom facilities as are necessary to meet the needs of those in attendance, as well as any a tents, tables, chairs and related equipment as she may require for use during the scheduled event;

provided that no attachments of any facilities, tents or other equipment will be made to any paved surfaces within the park.

5. Renter agrees that he shall, at his sole expense, remove or cause the removal all portable restroom facilities, tents, tables, chairs and other items that she places or causes to be placed in Mrs. Stock's Park as soon as possible following the event but, in no case later than 12:00 p.m. on August 27, 2017. Renter further agrees that he, at his sole expense, is and shall be solely responsible and liable for the repair and restoration of any damage caused by him and/or his agents, servants, employees, guests, invitees and event attendees and participants to private or public property, including the park or any part thereof, as well as all costs associated therewith.
6. Renter agrees to and shall, at the conclusion of his event and at his sole expense, clean up and remove or cause the clean up and removal of all garbage, trash, litter and other items that are placed or left in the park by him, his agents, servants, employees, guests, invitees and event attendees and participants.
 - A. Renter shall complete or cause the completion of the cleanup and restoration no later than 12:00 p.m. on August 27, 2017 and leave the park in a condition equal to or better than existed immediately prior to his event; provided, that should Renter fail to complete or cause the completion of all such cleanup and restoration as provided herein, the City may, if it so elects, complete the cleanup and restoration at Renter's expense.
 - B. In the event the City completes the cleanup and restoration by reason of Renter's failure to do so, Renter agrees and acknowledges his responsibility and liability for the payment of an amount equal to the labor and equipment costs that the City incurs in completing or contracting for the cleanup and restoration of the property to a condition that is equal to that which existed immediately prior to the event, plus an administrative charge of 10%. All such costs and expenses shall be charged against and deducted from the \$150.00 damage deposit that Renter has posted, and in the event such damage deposit is not sufficient to cover all such costs and expenses, Renter hereby agrees to promptly pay any deficiency.
7. Renter represents that the name, address and telephone number of Renter's authorized representatives are as follows:

Kyle Hart

Address: 1240 E. Hasting Lake Rd., Jonesville, MI 49250

Telephone Number: 517-677-5506

8. At the time of execution of this Agreement and as a condition precedent to its effectiveness, Renter shall provide City with proof of public liability and property

damage insurance with a single limit of liability for bodily injury and property damage of not less than Five Hundred Thousand and 00/100 (\$500,000.00 each), with City designated therein as a named insured.

9. Renter agrees to and shall defend, indemnify and hold City harmless from any and all damages, claims, demands, causes of action, lawsuits, attorney fees and related expenses resulting from actual or claimed personal injury, including death, property damage or other damage or loss of any kind or nature that are or are claimed to be a proximate result of the Renter's negligence, gross negligence or intentional acts or omissions and/or the negligence, gross negligence or intentional acts or omissions of his agents, servants, employees, guests, invitees, event attendees or participants that occur because of, during, or that otherwise arise or are claimed to have arisen as a result of Renter's use of such reserved area and/or the use of any portable restroom facilities, tents, tables, chairs, other equipment, food or drink placed or provided by Renter or any of his agents, servants, employees, guests, invitees, event attendees or participants, whether or not such damages or injuries, including death, are claimed or proven to have been caused in part by the alleged or actual negligence, gross negligence or intentional acts or omissions of Hillsdale, its employees, agents, servants, or representatives; provided, however, that Renter shall not be obligated to indemnify the City of Hillsdale for any damages or injuries, including death, caused by or resulting from the sole negligence, gross negligence or intentional acts or omissions of the City of Hillsdale, its employees, agents, servants, or representatives.
10. Renter further represents and covenants that he does not discriminate against any employee or applicant for employment, and shall not discriminate against any member of the general public that will participate in the event it is staging under the agreement or any other member of the public because of race, color, religion, national origin, age, height, weight, marital status or other legally protected class. It is understood and agreed by and between the parties that breach of the covenant may be regarded as a material breach of the agreement.
11. Renter acknowledges and agrees that all documents he has provided or hereafter provides to City of Hillsdale in connection with or regarding the contract, its performance and compensation are subject to disclosure under the Freedom of Information Act and Renter hereby expressly consents to the City's reproduction and release of such documents, in whole or in part, in response to a Freedom of Information Act request, a court or administrative order, or as the City, in its sole discretion, elects.
12. The parties agree that there are no other representations, inducements, promises or agreements between him, whether oral or written.
13. This Agreement shall be governed and construed in accordance with the laws of the State of Michigan. City and Renter further agrees that in the event of legal action arising from or as a result of the Agreement, venue and jurisdiction for such action shall be in the Hillsdale County Circuit Court or in the District Court located within the County of Hillsdale, Michigan, whichever has subject matter jurisdiction over any such dispute.

CITY OF HILLSDALE

RENTER

Scott Sessions, Mayor
August ____, 2017

Kyle Hart
August ____, 2017

Stephen French, City Clerk
August ____, 2017

AGREEMENT FOR USE OF PARK

This Agreement is made and entered between the City of Hillsdale, a Michigan municipal corporation, of Hillsdale, Michigan (Hillsdale) and Indiana Outboard Association, 231 Lincliff Dr., Grandville, OH 43023.

Preamble

Hillsdale owns and operates a series of parks for the use and benefit of its citizens and members of the general public. Among other things, Hillsdale seeks to promote the use of its parks by providing for and encouraging activities within them that increase their usage by its citizens, as well as bring members of the public from other areas into Hillsdale for the potential economic benefit of the community at large. In doing so, Hillsdale is concerned with regulating the use of its parks so as to reasonably assure that they are not used in a manner that either exposes persons attending activities or who are otherwise present within its parks to unreasonable risks of harm or causes damage to the parks and park facilities.

The Association is an Indiana corporation that promotes and sponsors outboard boat races for its members and authorized participants. The Association has represented that it is a responsible organization and that it has created appropriate regulations and policies by which it regulates participants in the events it promotes and sponsors. The Association also represents that participation in its events is open to all on a nondiscriminatory basis.

Hillsdale has determined that it is in its best interests and the interests of the general public to allow the Association to use Owen Memorial Park as the site from which it may conduct outboard boat races on Baw Beese Lake and the Association has agreed to do so, all in accordance with the following terms and conditions.

Agreement

1. In consideration of the Association's following promises and agreements, Hillsdale agrees to allow the Association to use Owen Memorial Park as a staging site from which it may conduct outboard boat races for its members and other authorized participants on September 8, 9 and 10, 2017, subject to the Association's full compliance with the following terms and conditions.

2. Hillsdale and the Association agree that:
 - a. the September 2017 event shall commence not earlier than 8:00 a.m. and end at or before 8:00 p.m. on September 8, 9 and 10, 2017; and

3. The Association agrees to abide by all applicable rules and regulations pertaining to use of parks, inclusive of park closing times, as described in Chapter 24 of the Code of the City of Hillsdale, all restrictions contained in the deed from the Baw Beese Memorial Association and the Last Will and Testament of R. L. Owen, as well as the legal opinion of Lewis I. Loren, attorney at law, dated January 13, 2003, copies of which are attached hereto and incorporated herein by reference.

4. It is further agreed, pursuant to the action of the Hillsdale City Council on Sept. 6, 2017, that on the date of the permitted event, but not otherwise:

- a. The Association may erect and use an officials' tent for the purpose of staging, regulating and directing the races and associated activities such as registration of participants, the making of announcements and awards, provided that no attachments of

any facilities, tents or other equipment will be made to any paved surfaces within the park; and

b. Parking shall be permitted on the grass during the event times.

c. The Association may occupy ten (10) campsites during the event pursuant to the terms of a Permit for Temporary Campsite issued by the State of Michigan Department of Environmental Quality and those occupying the campsites are prohibited from disposing or dumping any waste water or sewage. All recreation vehicles must be completely self-contained. Campfires of any type whether on ground or in portable fire pits or other structures are strictly forbidden. All campsites shall be completely vacated and cleaned of all trash and debris no later than 12:00 noon on September 12, 2017.

5. The Association acknowledges that there are no available restroom facilities at Owens Park during the time of the scheduled events. Accordingly, the Association represents and agrees that, at its sole expense and as a condition precedent to the commencement of either event, it will provide and have in place portable restroom facilities that comply with all applicable health and sanitation codes for each scheduled event in full working order and sufficient quantity to accommodate the needs of its participants and the general public.

6. The Association agrees that it shall remove or cause the removal of any tent or restroom facilities placed by it or on its behalf within the reserved area as soon as possible following the event but in no case later than 12:00 noon on September 12, 2017. The Association further agrees that no attachments for tents or any other facilities will be made to any paved surfaces within the park.

7. The Association agrees that it shall not permit any street or road within Hillsdale's park system at or adjacent to Baw Beese Lake to be blocked or obstructed, nor shall it undertake or permit the obstruction of or interference with members of the general public from the lawful use of any park facilities with the exception of those that the Association specifically and directly occupies under this agreement. Further, the Association agrees to and shall confine its activities solely to Owen Memorial Park.

8. The Association agrees and understands that it, at its sole expense, is and shall be solely responsible for the repair and restoration of any damage caused by it and/or its employees, servants or agents to private or public property, whether real or personal, and to leave the premises in a condition equal to or better than existed prior to its use, free from all garbage, trash or other items which are placed or left in the park in conjunction with or as a result of the Association's event.

9. The Association represents that it is a valid Michigan corporation, which is and has been actively engaged in the field of outboard boat racing and the staging of racing events and further represents that it possesses the skill, experience, competence and financial ability to carry out and fulfill all of its duties and obligations under this contract in a timely and professional manner.

10. The Association further represents and covenants that it shall not discriminate against any employee, applicant for employment, any participant in the events it is staging under this agreement or any member of the public because of race, color, religion, national origin, age,

height, weight, marital status or other legally protected class. It is understood and agreed by and between the parties that breach of this covenant may be regarded as a material breach of this agreement.

11. The Association shall provide Hillsdale with proof of public liability and property damage insurance with coverage that is satisfactory to Hillsdale and limits of liability of not less than a single limit of Five Hundred Thousand and 00/100 (\$500,000.00) Dollars, with Hillsdale, its elected officials, officers, employees designated therein as a named insured, which coverage shall be primary coverage rather than any policies and insurance or self-insurance retention that Hillsdale owns or maintains to be and remain in force for the duration of the Associations' presence on and use of Hillsdale's park, such proof to be provided at the time of execution of this Agreement.

12. The Association shall carry and provide all workers' compensation insurance coverage at its sole expense for its employees as is required by the laws of the State of Michigan and provide proof thereof to Hillsdale prior to the commencement of any activities under this Agreement.

13. The Association further agrees to and shall defend, indemnify and hold Hillsdale, its elected officials, officers, employees harmless from any and all damages, claims, demands, causes of action, lawsuits, attorney fees and related expenses, as a result of actual or claimed personal injury, including death, property damage or other damage or loss of any kind or nature which are or are claimed to be a proximate result of the negligence, gross negligence or intentional acts or omissions of the Association, its agents, servants, employees, guests, invitees and event attendees which otherwise arise or are claimed to have arisen as a result of the use by the Association of such reserved area or any other area of Hillsdale's parks or roads within them (inclusive of tents or portable bathroom facilities placed by the Association), whether or not such damages or injuries, including death, are caused in part by the negligence of Hillsdale, its elected officials, officers, employees; provided, however, that the Association shall not be obligated to indemnify Hillsdale for any damages or injuries, including death, caused by or resulting from the sole negligence of Hillsdale.

14. The Association agrees that any and all documents provided to Hillsdale under this agreement are subject to disclosure and hereby expressly consents to Hillsdale's reproduction and release of such documents in response to a request under the Freedom of Information Act.

15. The Association agrees that Hillsdale may immediately terminate this contract without further obligation or liability to the Association at its option and without prejudice to any other remedies to which it might be entitled, whether in law, in equity or under this contract, by giving written notice of termination to the Association if the latter should:

- (a) be adjudged bankrupt;
- (b) become insolvent or have a receiver of its assets appointed;
- (c) make a general assignment for the benefit of creditors;
- (d) default in the performance of any obligation under this contract;
- (e) breach any covenant under this contract;
- (f) institute or suffer to be instituted any procedures for reorganization of its affairs;
- (g) fail to perform any of its obligations to Hillsdale under this contract to Hillsdale's

satisfaction.

Provided, however, that the Association's indemnification, defense, hold harmless and insurance coverage agreements shall survive any such termination.

16. Notice of termination pursuant to the forgoing provisions shall be provided to the Association in writing and shall be delivered by ordinary first class mail or personal service to the following person at the following address: Duke Johnson, Indiana Outboard Association, 231 Lincliff Dr., Grandville, OH 43023. All notices from the Association to Hillsdale shall be in writing and shall be delivered by ordinary first class mail or personal service to the following person at the following address: David Mackie, Hillsdale City Manager, 97 N. Howell Street, Hillsdale, Michigan 49242.

17. The parties agree that there are no other representations, inducements, promises or agreements between them, whether oral or written, except as provided in the attached Exhibit A.

18. This Agreement shall be governed and construed in accordance with the laws of the State of Michigan. Hillsdale and the Association further agree that in the event of legal action arising from or as a result of this Agreement or its breach, venue and jurisdiction for such action shall be in the Hillsdale County Circuit Court or in the District Court located within the County of Hillsdale, Michigan, whichever has subject matter jurisdiction over any such dispute.

City of Hillsdale

Indiana Outboard Association

Scott Sessions, Mayor
Dated: September _____, 2017

Duke Johnson, Board Member
Dated: September_____, 2017

Stephen French, Clerk
Dated: September _____, 2017



City of Hillsdale

Agenda Item Summary

MEETING DATE: August 21, 2017

AGENDA ITEM: Correspondence

FROM: Mike Barber, BPU Director

SUBJECT: Michigan South Central Power Agency Integrated Resource Plan

BACKGROUND

MSCPA General Manager Glenn White and MSCPA Incoming General Manager Paul Beckhusen will present the MSCPA Integrated Resource Plan and the results of the Power Supply Study.

RECOMMENDATION

The report will be presented for informational purposes only and will not require action from Council at this meeting.

MSCPA

Integrated Resource Plan

Hillsdale City Council

August 21, 2017

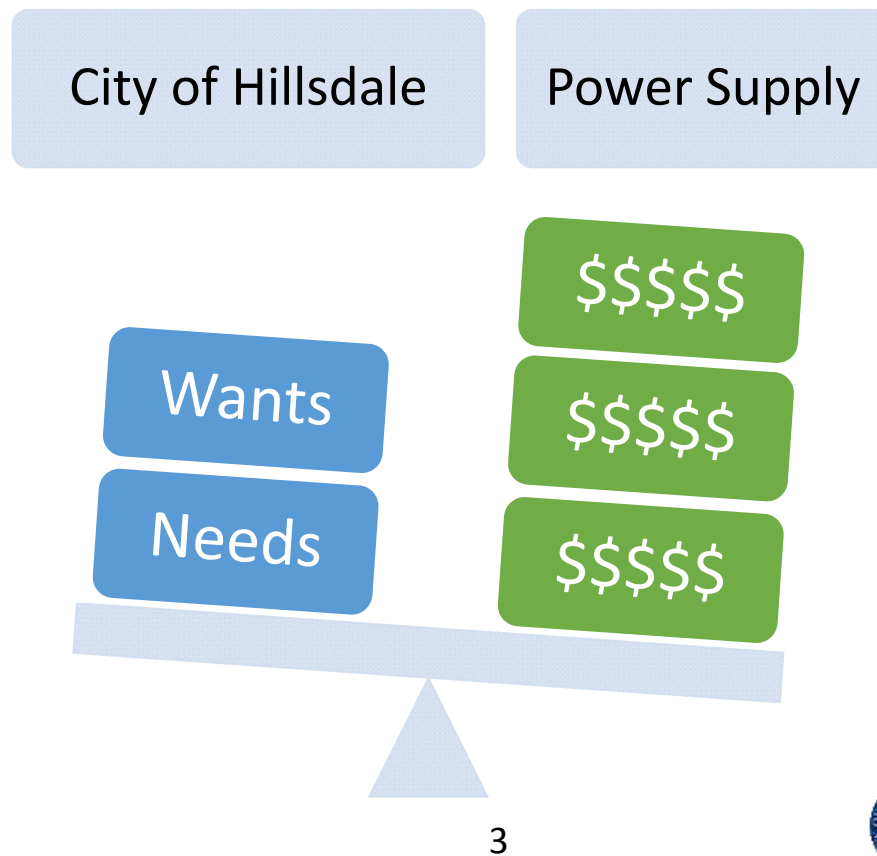


Topics of Discussion

- What is Integrated Resource Planning (IRP)?
- The IRP Process.
- Factors influencing the need to update the MSCPA IRP.
- MSCPA and Hillsdale's Energy and Capacity Resources.
- Present MSCPA 2017 Power Supply Study (PSS).
- Discuss MSCPA PSS results and what they mean for Hillsdale.
- Questions, Answers and Next Steps.



The goal of Integrated Resource Planning (IRP) is to find the balance between “Wants”, “Needs” and “Costs”



What is Integrated Resource Planning?

- The “Needs” and “Costs” can be primarily be determined through statistical analysis and modeling.
 - *MSCPA 2017 Power Supply Study* completed by nFront Consulting
- The “Wants” requires input from each Member community.
 - What does the City of Hillsdale want their power supply to be in the future?
 - What is the goal in terms of time?
 - Short-term: 5 years or less
 - Mid-term: 5-10 years
 - Long-term: 10-30 years



The Need to Update the MSCPA IRP

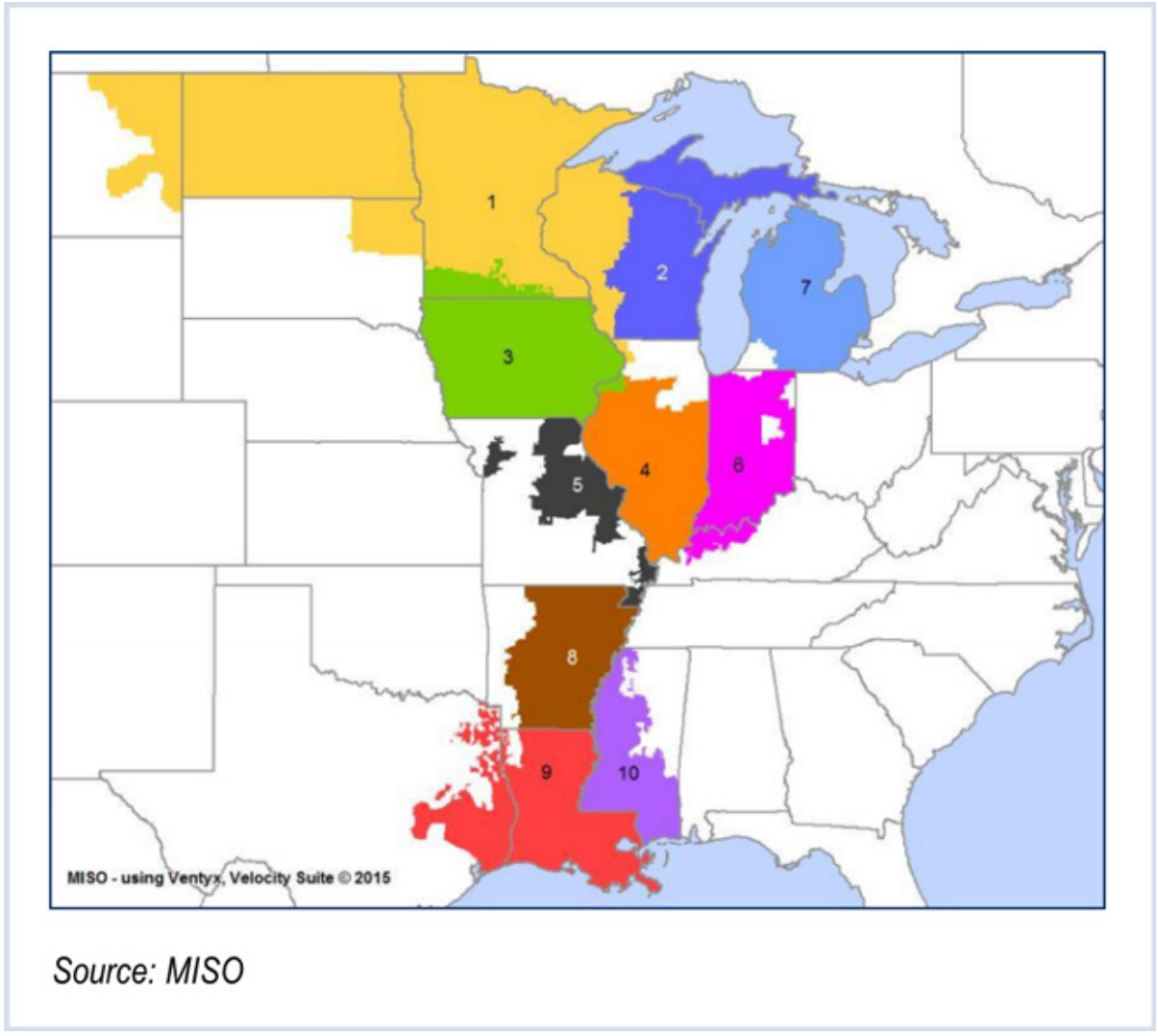
- The generation resource mix for MSCPA has changed:
 - Retirement of the MSCPA Endicott Generating Station
 - Completion of American Municipal Power (AMP) hydro electric plants
- Load Growth:
 - New loads
 - Expansions of existing customers
- State of Michigan Legislation:
 - Public Acts 341



The Need to Update the MSCPA IRP..... continued

- Michigan Public Act (PA) 341
 - New Energy Legislation effective April 20, 2017
 - Municipal electric providers are impacted under Section 6w (8) (b)
 - Must have capacity located in, or deliverable to, serve load - **MISO Zone 7** (lower peninsula)
 - Municipal Utilities must file four (4) year forward capacity plan by the 7th business day of February each year
 - The initial filing date is **February 9, 2018**
 - **Required to demonstrate capacity compliance through May 31, 2021**





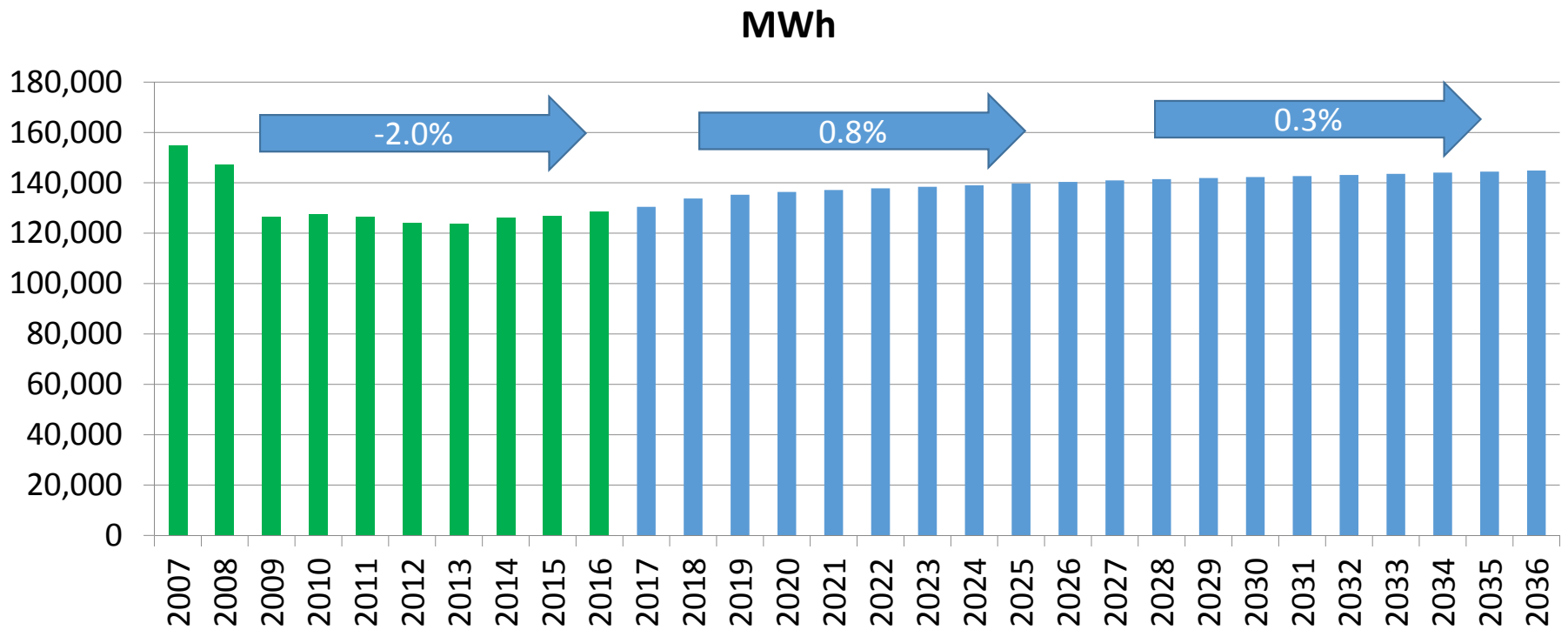
Source: MISO



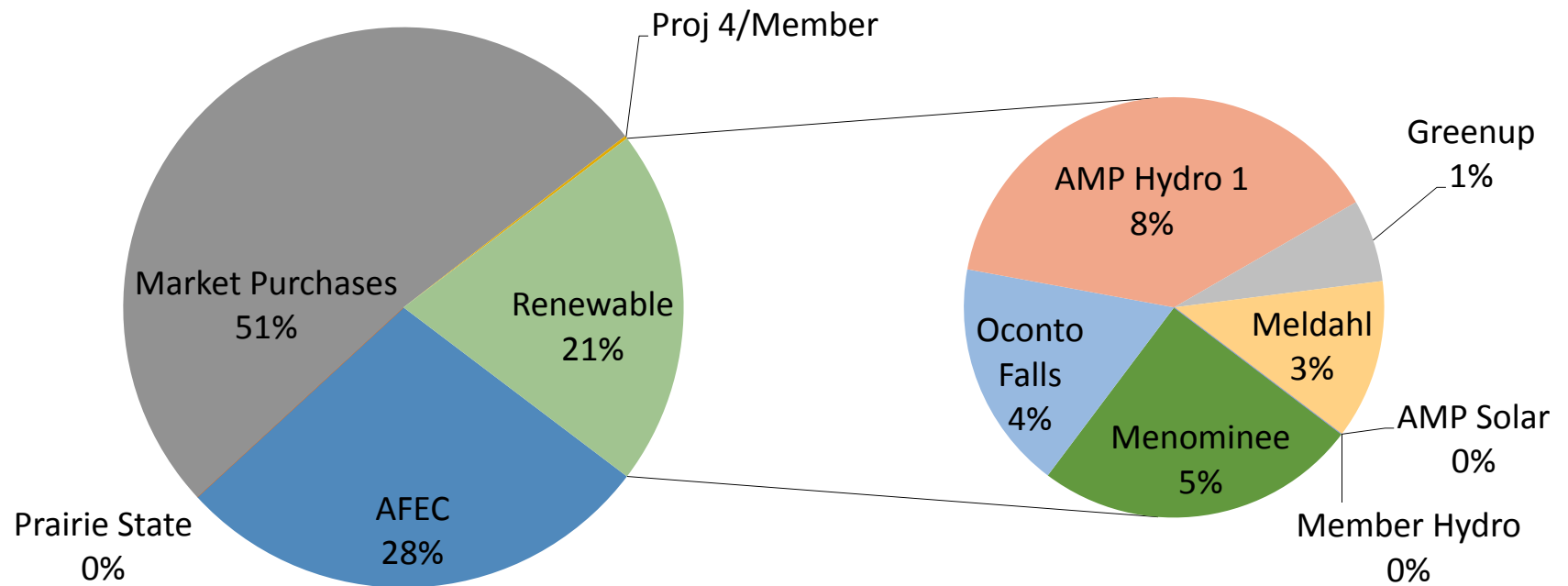
Energy and Capacity Resources



Hillsdale – Historical and Projected Energy



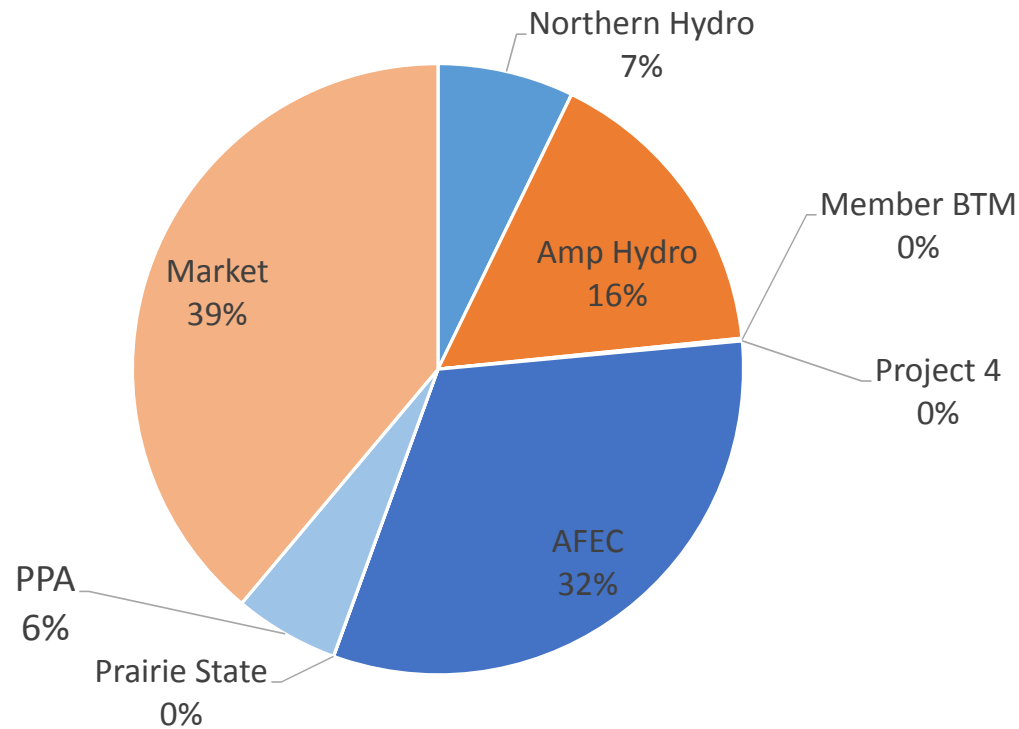
Hillsdale – 2017 FY Energy Resources



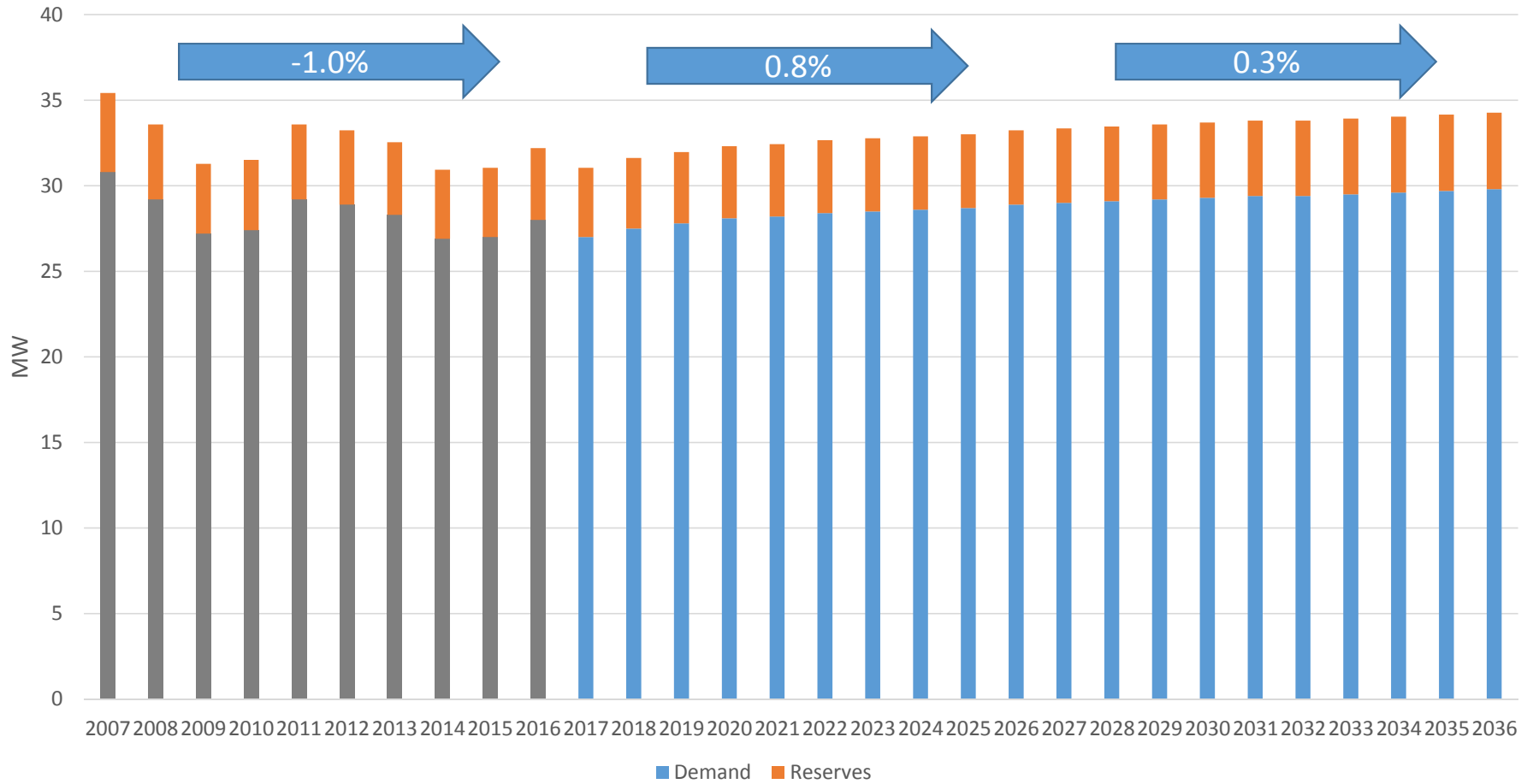
Hillsdale – Projected Energy Resources 2021

Total Projected Energy for **2021**:

137,168 MWh



Hillsdale Non-Coincident Demand



MSCPA 2017 Power Supply Study

Prepared by: nFront Consulting LLC

June 2017



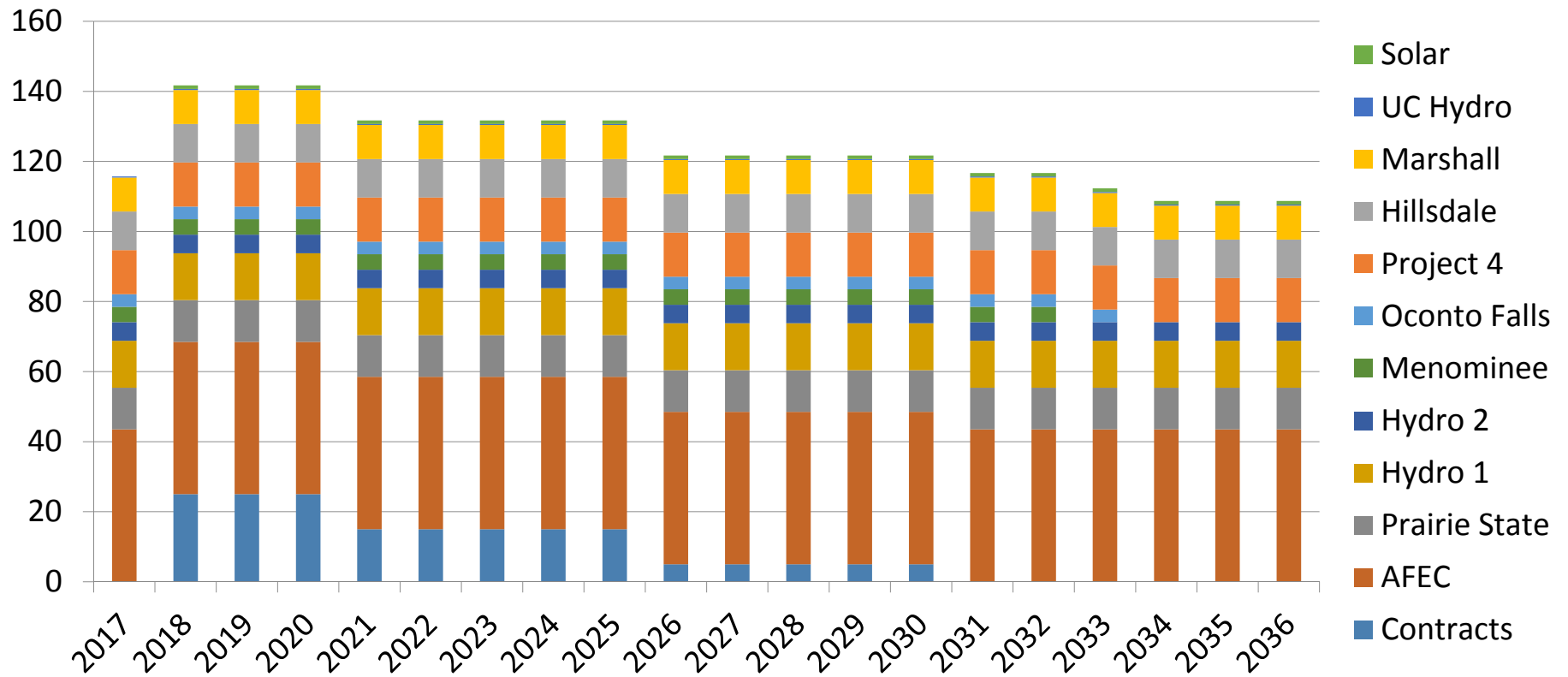
MSCPA Power Supply Study

Report Outline

- Existing Generating Resources – *Section 2.0*
- Load Forecast – *Section 3.0*
- Projected Capacity Need – *Section 4.0*
- Fuel and Market Power Price Projections – *Section 5.0*
- MSCPA Members' Energy Optimization Programs – *Section 6.0*
- Supply Side Options – *Section 7.0*
- Evaluations of Resource Plans – *Section 8.0*



Existing Generating Resources – Section 2.0



Load Forecast – Section 3.0

- Forecast based on 20-year period: 2017-2036
 - Member Economic Development/Load Additions
 - Historical Energy and Capacity data
 - Economic and Demographic Data – Woods and Poole
 - Retail Electricity Prices – EIA and State of Michigan
 - Weather Data – National Oceanic and Atmospheric Administration (NOAA)
 - Extraordinary effects of 2008 recession

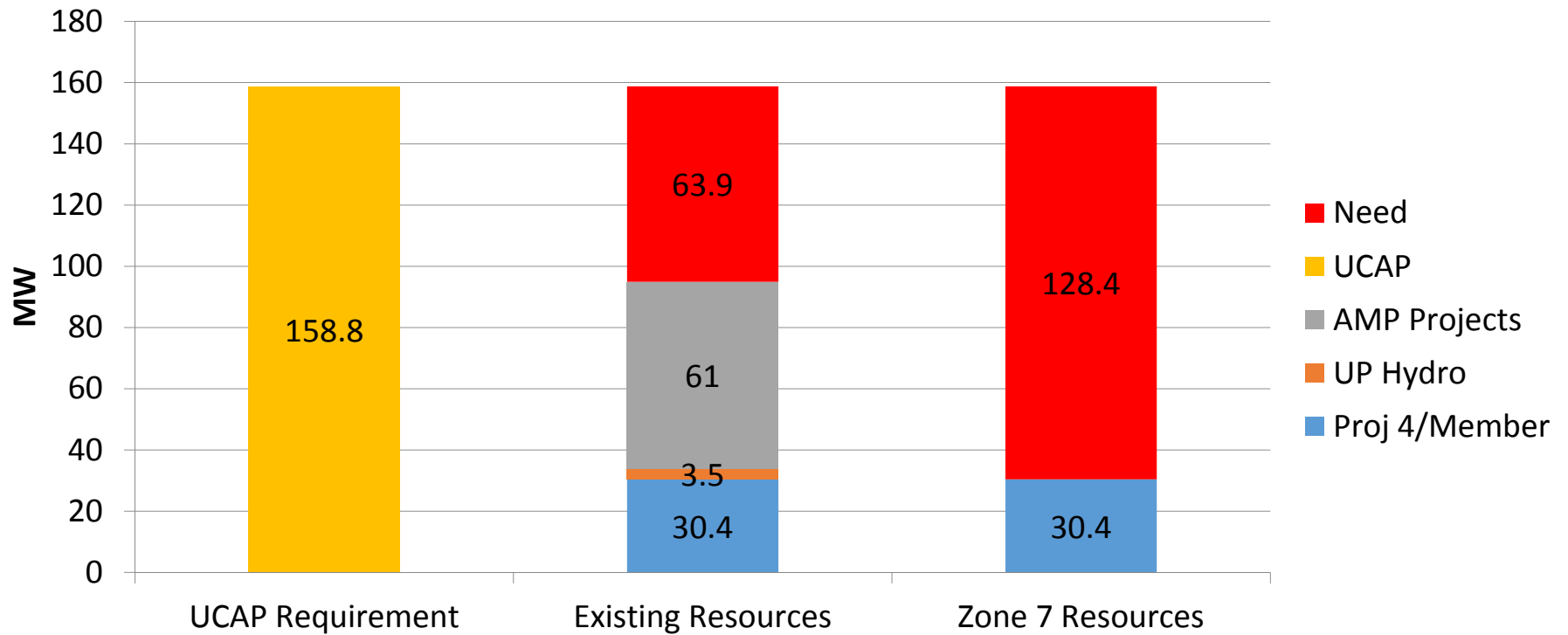


Projected Capacity Need – Section 4.0

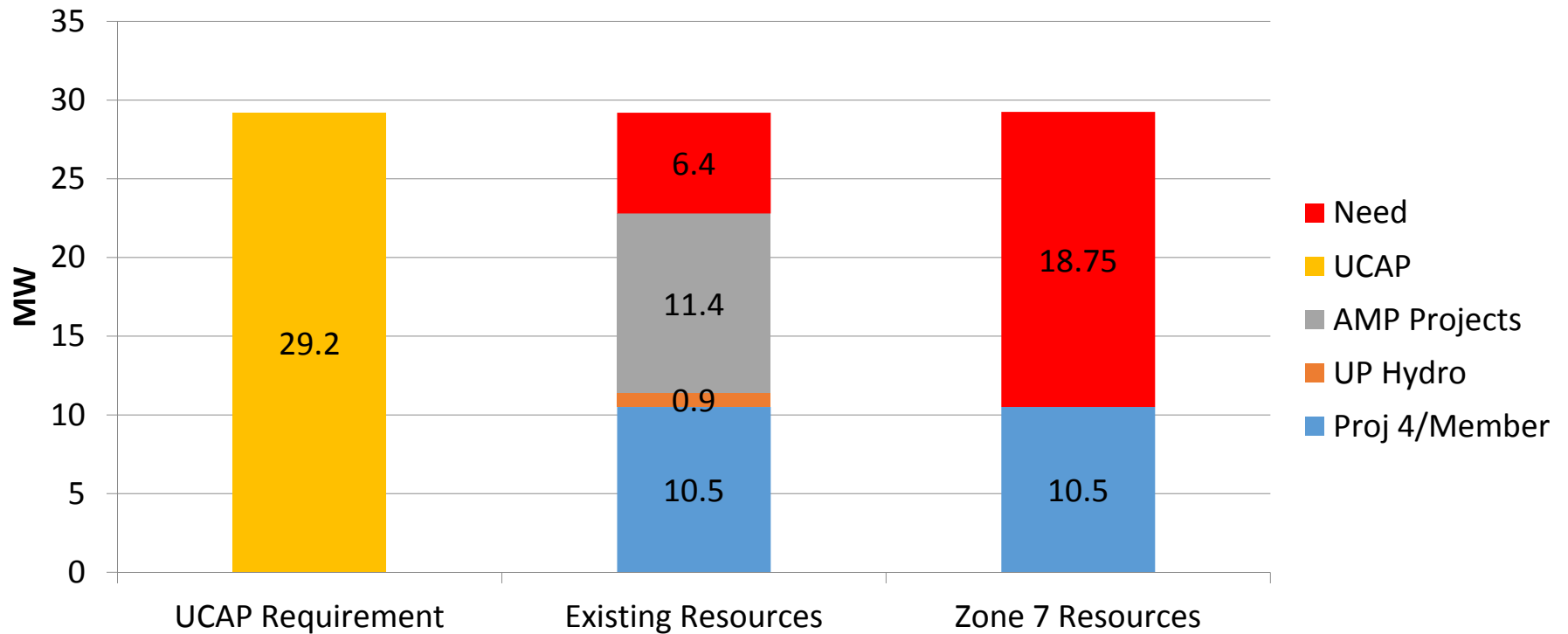
- Future capacity needs based on Public Act 341
 - Generating units located outside of MISO Zone 7 were **excluded** as a resource



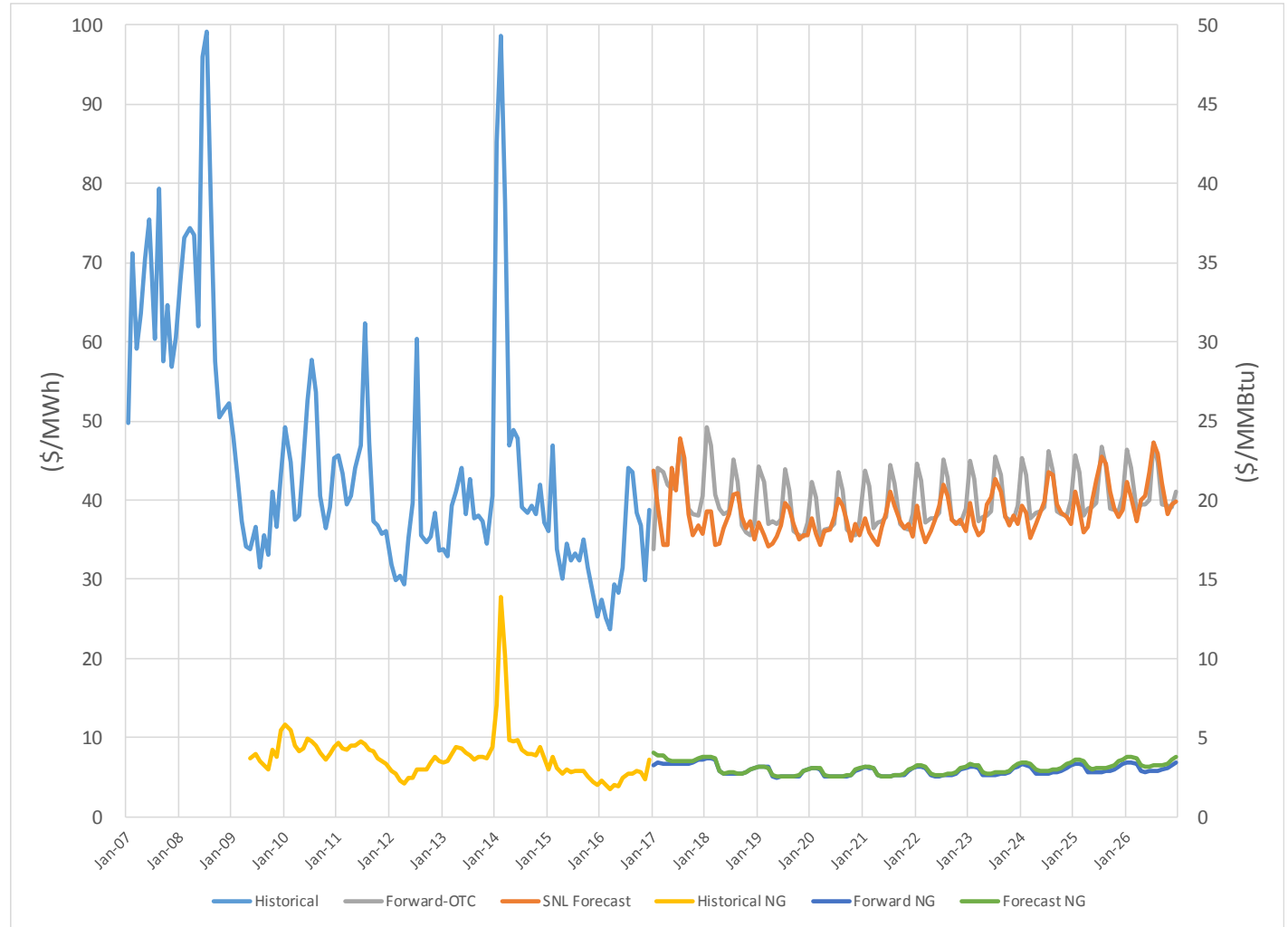
MSCPA Capacity Resources – Plan Year 2021



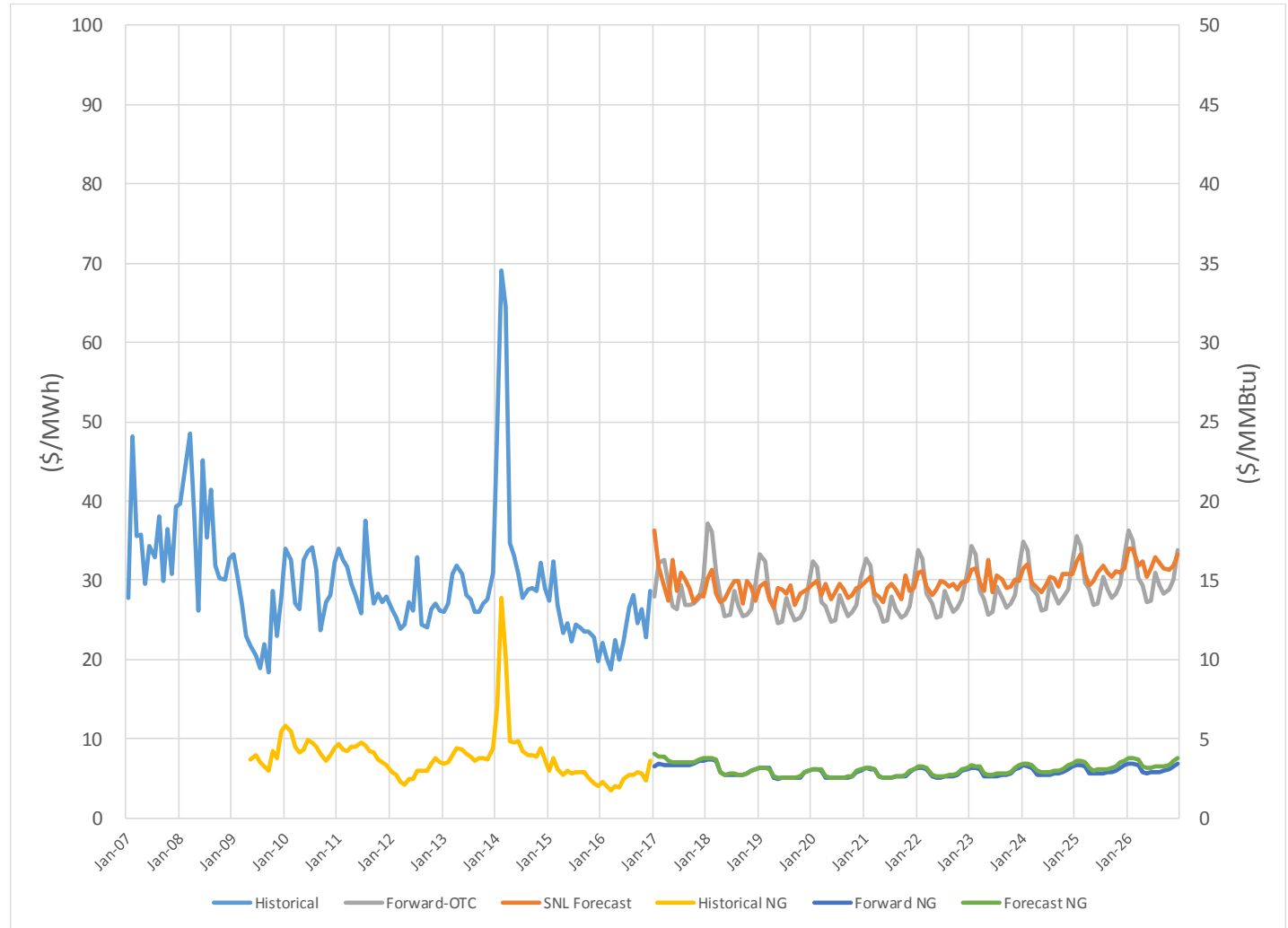
Hillsdale Capacity Resources – Plan Year 2021



Historical and Projected On-Peak Power Prices and Natural Gas Prices



Historical and Projected Off-Peak Power Prices and Natural Gas Prices



Energy Optimization Program – Section 6.0

- MSCPA Members’ energy efficiency programs were assumed to continue during planning period
- “The most economical energy resource is the one that you do not have to generate”

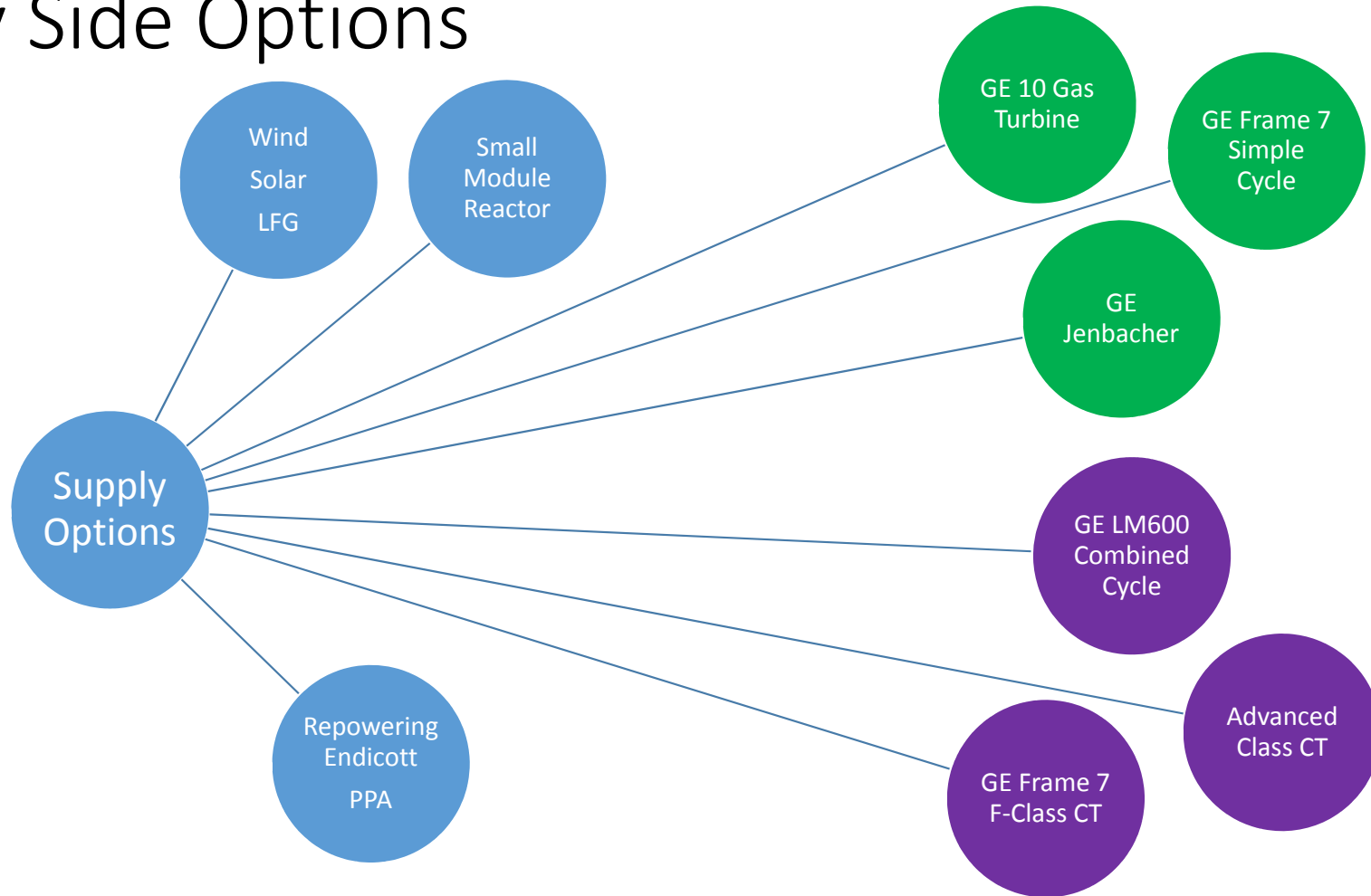


Supply Side Options – Section 7.0

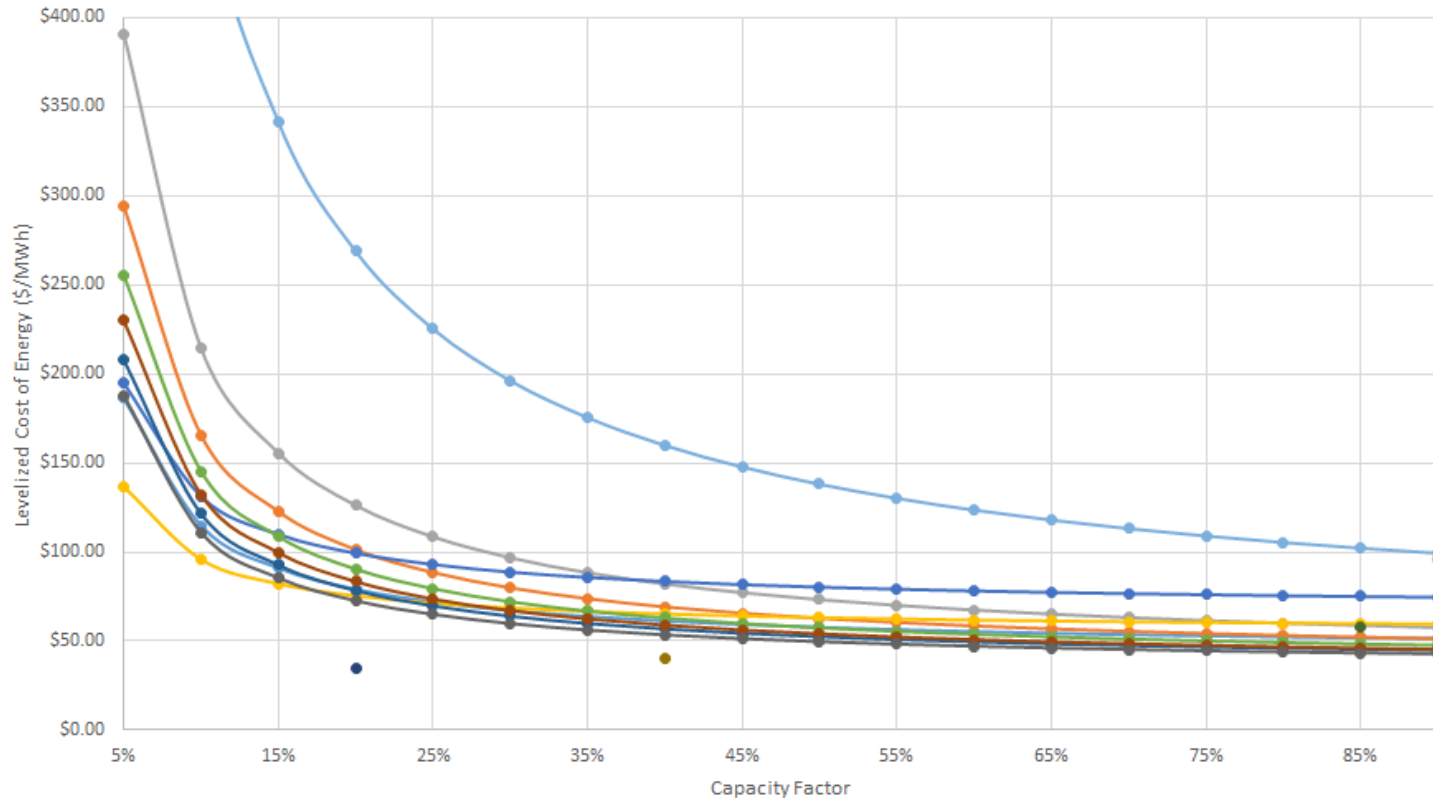
- Numerous supply side options considered
- Cost and performance estimates used to evaluate options
 - Ownership
 - Purchase Power Agreement (PPA)
- Levelized cost of energy (LCOE) analysis used to compare and screen options
 - LCOE compares each option on a \$/MWh based on all-in life cycle cost for a range of possible capacity factors



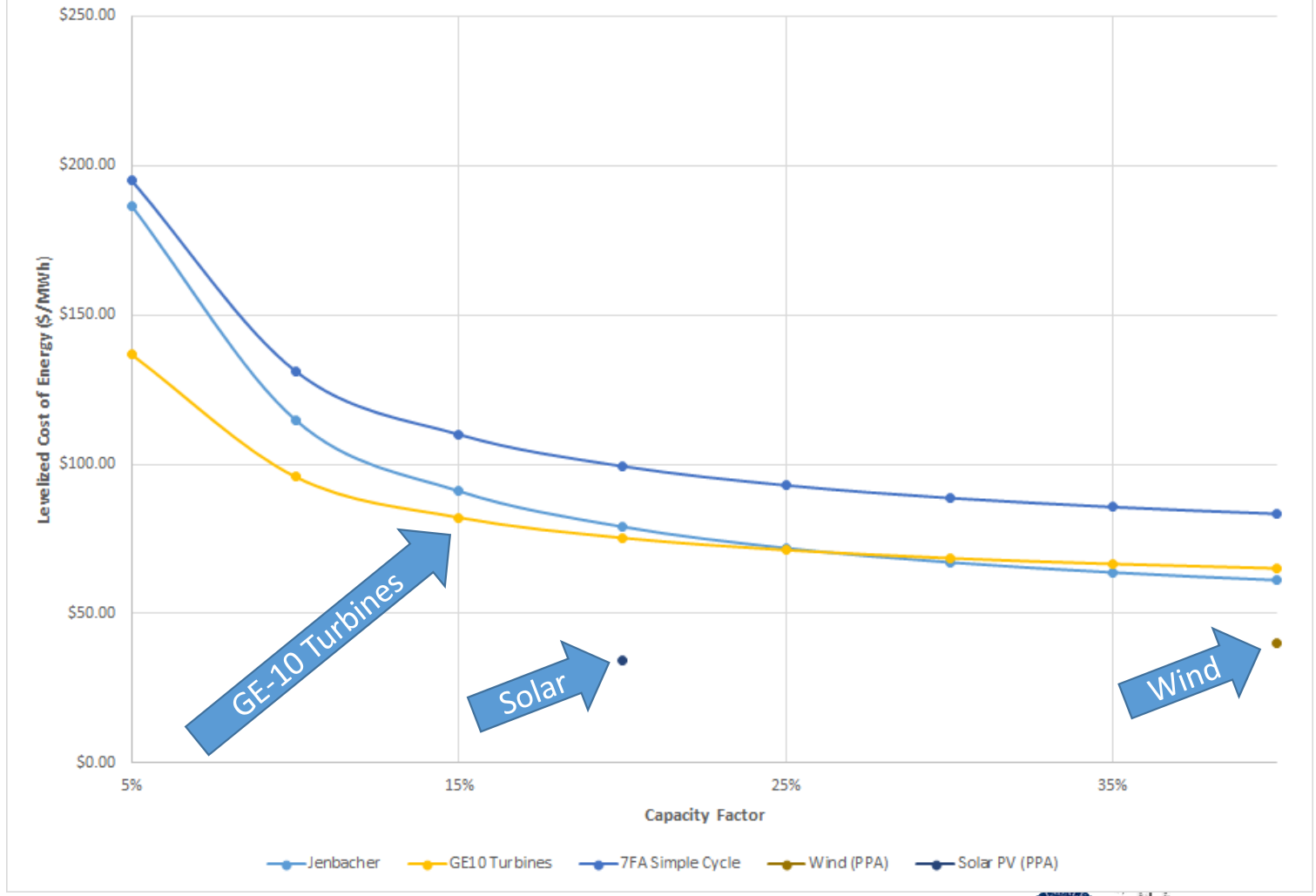
Supply Side Options



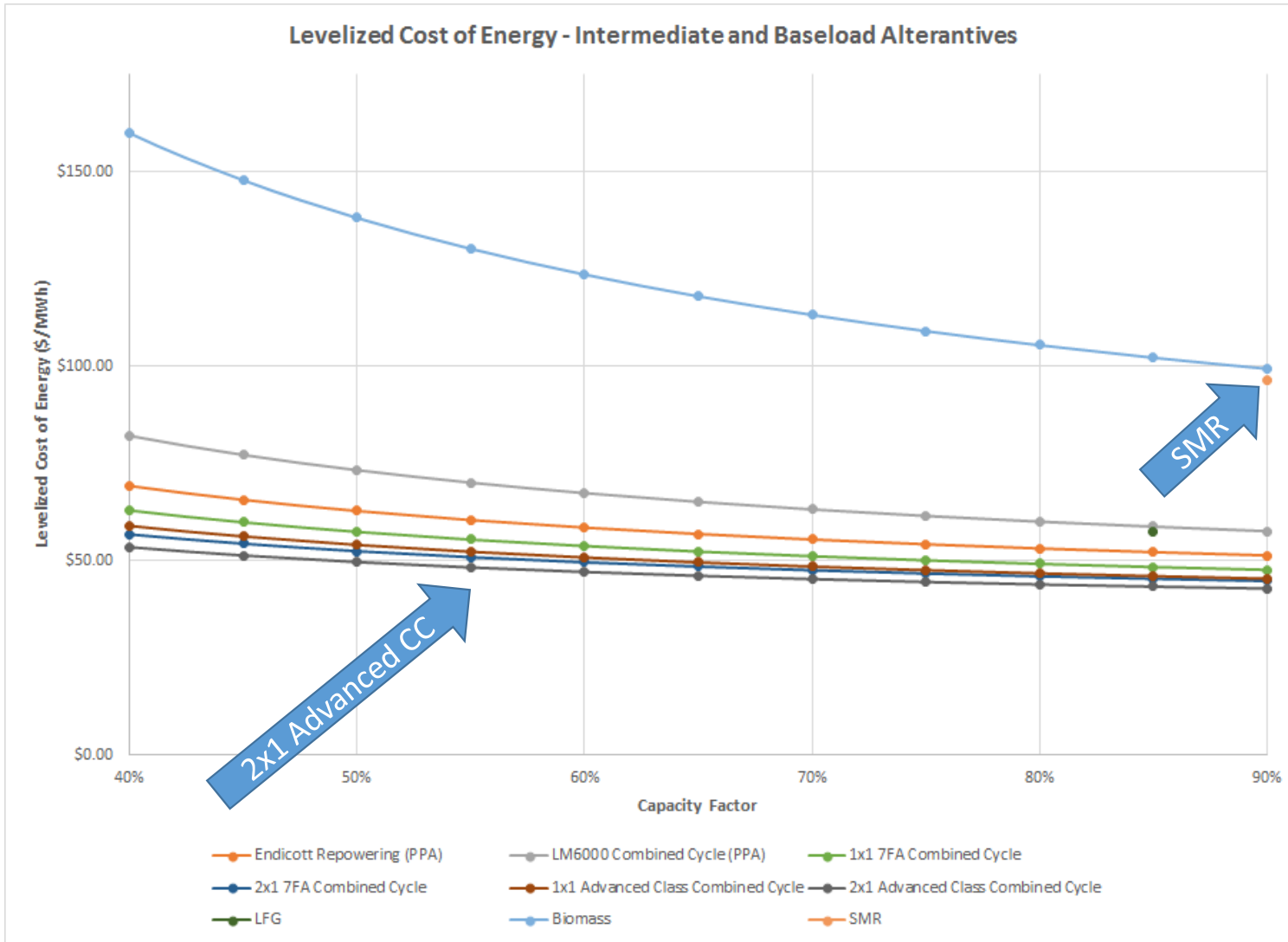
Levelized Cost of Energy - All Alternatives Evaluated



Levelized Cost of Energy - Peaking, Solar, and Wind Alternatives



Levelized Cost of Energy - Intermediate and Baseload Alternatives



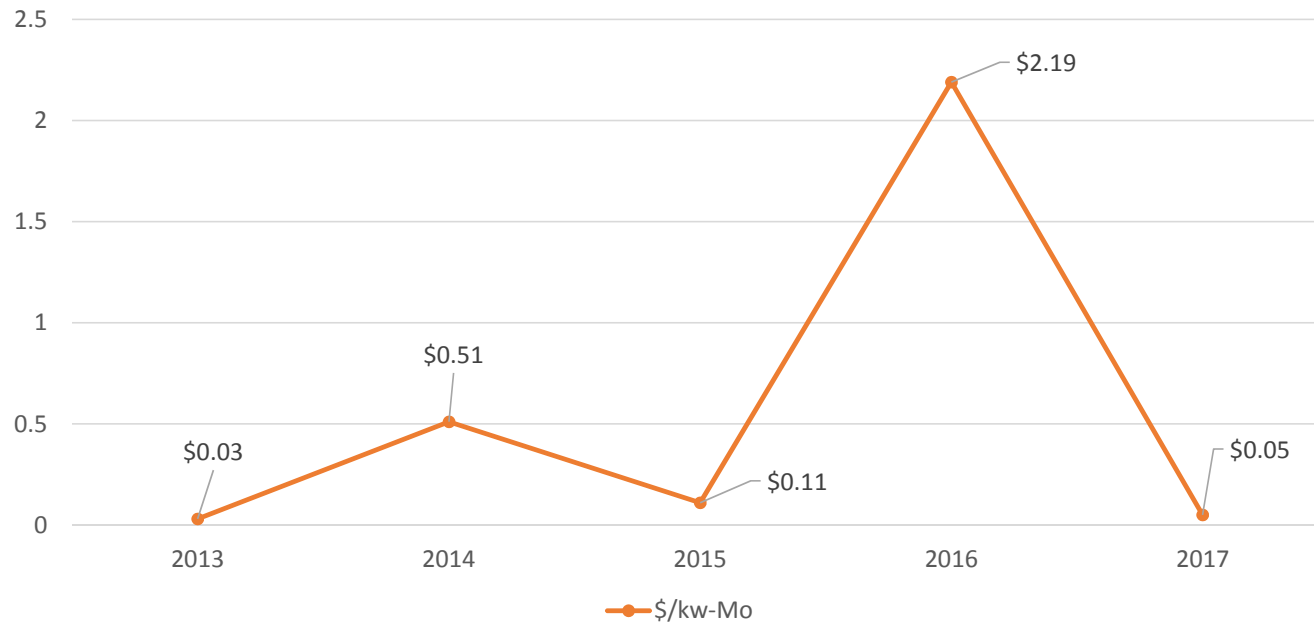
CPWC Analysis Assumptions

- Sunk costs of existing debt service and fixed operating and maintenance (O&M) for existing MSCPA resources included
 - Done to evaluate potential divesting of certain existing units (**Table 8-1**)
- Transmission Service Costs (Table 8-2)
- Natural Gas Reservation Charges
 - Interruptible (non-firm) delivery: \$0.70/MMBTU (escalate 1% annually)
 - Firm delivery: \$1.00/MMBTU (escalate 3% annually)
- Capital Cost Escalation and Interest During Construction (IDC)
 - Capital Cost – 4%
 - IDC – 2.75% (less than \$20M) / 4.25% (more than \$20M)



CPWC Analysis Assumptions (continued)

MISO Capacity Action Price (Table 8-3)



CPWC Analysis Assumptions (continued)

- Due to the significant variations in the historical MISO capacity prices the following three (3) scenarios were evaluated in the CPWC:
 1. \$4 / kW-Month with 3% annual escalation (higher than 2016)
 2. \$2 / kW-Month with 3% annual escalation (consistent with 2016)
 3. \$0.05 / kW-Month with 3% annual escalation (2017 actual)



Resource Plan Cases

Case	Description
Reference Case	Existing energy portfolio with no new additions Capacity market purchases
Case 1	44 MW GE-10 Turbines (2019) 50 MW share of Advanced Class 2x1 combined cycle (2021) Remaining capacity purchased from market
Case 2	44 MW GE-10 Turbines (2019) Remaining capacity purchased from market
Case 2A	66 MW GE-10 Turbines (2019) AFEC ownership shares sold Remaining capacity purchased from market
Case 3	44 MW GE-10 Turbines (2019) 100 MW share of Advanced Class 2x1 combined cycle (2021) Remaining capacity purchased from market
Case 4	Endicott Repowering PPA (2019) Remaining capacity purchased from market @ \$4/kW-Month



Resource Case Scenarios

Each resource case was run under different scenarios:

- Variations in MISO capacity auction prices (3 scenarios)
- MSCPA selling ownership shares in AFEC
- MSCPA selling ownership shares in Prairie State
- Variations to natural gas transportation costs
- Inability to sell excess energy into the market when economic



Summary of CPWC Scenarios (Table 8-4)

Scenario Number	Market Sales	Market Purchases	Changes to Existing Units	Initial MISO Capacity Auction Price (2017\$, 3% escalation)	Natural Gas Transportation for New Combined Cycle
1	Y	Y	None	\$4/kW-Mo	Interruptible (\$0.70/MMBtu in 2017\$, escalating at 1%)
2	Y	Y	None	\$0.05/kW-Mo	Interruptible (\$0.70/MMBtu in 2017\$, escalating at 1%)
3	Y	Y	AFEC Sold	\$4/kW-Mo	Interruptible (\$0.70/MMBtu in 2017\$, escalating at 1%)
4	Y	Y	Prairie State Sold	\$4/kW-Mo	Interruptible (\$0.70/MMBtu in 2017\$, escalating at 1%)
5	Y	Y	None	\$4/kW-Mo	Firm (\$1/MMBtu in 2017\$, escalating at 3%, 90% capacity factor)
6	N	Y	None	\$4/kW-Mo	Interruptible (\$0.70/MMBtu in 2017\$, escalating at 1%)
7	Y	Y	None	\$2/kW-Mo	Interruptible (\$0.70/MMBtu in 2017\$, escalating at 1%)



CPWC Comparison Results (Table 8-6)

Scenario	Case	Description	CPWC (\$000)
2	Reference	No Capacity Additions – Capacity Market at \$0.05/kW-Month	\$755,771
3	3	44 MW GE-10 (2019) / 100 MW share of Advanced Class 2x1 CC (2021)	\$767,403
4	3	44 MW GE-10 (2019) / 100 MW share of Advanced Class 2x1 CC (2021)	\$773,189
7	3	44 MW GE-10 (2019) / 100 MW share of Advanced Class 2x1 CC (2021)	\$808,555
1	3	44 MW GE-10 (2019) / 100 MW share of Advanced Class 2x1 CC (2021)	\$819,304
6	1	44 MW GE-10 (2019) / 50 MW share of Advanced Class 2x1 CC (2021)	\$845,901
5	3	44 MW GE-10 (2019) / 100 MW share of Advanced Class 2x1 CC (2021)	\$850,130



Study Results

- Addition of GE-10 CT and ownership shares in a new advanced class 2x1 CC is the lowest CPWC in six (6) of seven (7) scenarios
- The economics are favorable as shares of advanced class 2x1 CC increase from 50 MW to 100 MW
 - 50 MW share is more economical **if not** able to sell into market economically
- Study shows that a MISO capacity market price at \$2/kW-Month reflects the break-even price for the addition of the GE-10 CT's
- Near-term energy contracts should be evaluated to hedge risk of market volatility



Recommendations and Next Steps

- Pursue due diligence on GE-10 peaking option
 - Install resources to hedge capacity market risk and PA 341 requirements
- Develop strategic plan for energy supply to meet members wants/needs
 - Implement and execute when opportunity becomes available
 - Long-term Price Stability
 - Market Exposure
 - Resource Diversity
 - Local Reliability
 - Public/Political Perception
 - Plans for Growth



Thank you for the opportunity to
present to the City of Hillsdale

Questions and Answers



Michigan South Central Power Agency

2017 Power Supply Study

Prepared by:
nFront Consulting LLC
June 2017



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1.0 EXECUTIVE SUMMARY

Michigan South Central Power Agency (MSCPA) retained nFront Consulting LLC (nFront) to develop this Power Supply Study (Study) to evaluate MSCPA's options to meet future power supply requirements over the 2017 through 2036 study period.

1.1 Approach and Methodology

MSCPA provided information related to its existing generation units, including dependable capacity ratings for capacity planning purposes. MSCPA also provided historical load information, which was used by nFront to develop Member- and system-level load forecasts (peak demand and annual energy requirements). nFront developed projected fuel and market power prices. Several supply-side options were characterized and evaluated in this Study, with MSCPA providing relevant information related to recently completed projects as well as information received from developers and other contacts.

Following a screening analysis to narrow down the number of supply-side options, nFront used PROMOD™ to perform production cost modeling for a number of cases (expansion plans) and scenarios. The production cost modeling considered MSCPA's existing generating resources, the load forecast and associated projected capacity requirements, fuel and market power price projections, and cost and performance characteristics of supply-side options. The annual system costs generated by the production cost analysis were combined with existing system debt service and other fixed costs, as well as transmission costs, to estimate total annual system costs. Annual system costs were then discounted and aggregated to develop a cumulative present worth cost (CPWC) for each case.

1.2 Results

Section 8.0 provides a discussion of the economic analysis of the alternative expansion plans, including a description of each case and scenario. Table 1-1, which is based on the information presented in Section 8.0, presents the CPWCs for the cases and scenarios. The yellow highlighting in Table 1-1 indicates the case with the lowest CPWC in a given scenario. As described in more detail in Section 8.0, the analysis indicates the following:

- Installation of GE-10 turbines (MSCPA has indicated that used equipment may be available to transport and install within MSCPA's service territory) may be economic.
- Participation in a new advanced class combined cycle may offer benefits to MSCPA. In order to capitalize on the economies of scale and performance of such a unit, MSCPA would need to be pursue an arrangement that allows for them to receive a relatively small portion of the unit (50 MW and 100 MW ownership shares were evaluated).

**MICHIGAN SOUTH CENTRAL POWER AGENCY
2017 POWER SUPPLY STUDY**

Table 1-1: CPWC Summary

Scenario	Market Sales	Market Purchases	Changes to Existing Units	Initial MISO Capacity Auction Price (2017\$, 3% escalation)	Natural Gas Transportation for New Combined Cycle	Case No.	Case Description	CPWC (\$000)	CPWC Difference vs. Least Cost	
									(\$000)	%
1	Y	Y	None	\$4/kW-Mo	Interruptible	Reference	No Capacity Additions	\$870,780	\$51,476	6.3%
1	Y	Y	None	\$4/kW-Mo	Interruptible	1	GE10 Turbines (44 MW) in 2019, followed by 50 MW share of 2x1 Advanced CC in 2021	\$837,762	\$18,458	2.3%
1	Y	Y	None	\$4/kW-Mo	Interruptible	2	GE10 Turbines (44 MW) in 2019, no other unit additions	\$857,643	\$38,339	4.7%
1	Y	Y	None	\$4/kW-Mo	Interruptible	3	GE10 Turbines (44 MW) in 2019, followed by 100 MW share of 2x1 Advanced CC in 2021	\$819,304	N/A	N/A
1	Y	Y	None	\$4/kW-Mo	Interruptible	4	Innerpoint (100 MW) in 2019, no other capacity additions	\$885,869	\$66,565	8.1%
2	Y	Y	None	\$0.05/kW-Mo	Interruptible	Reference	No Capacity Additions	\$755,771	N/A	N/A
2	Y	Y	None	\$0.05/kW-Mo	Interruptible	1	GE10 Turbines (44 MW) in 2019, followed by 50 MW share of 2x1 Advanced CC in 2021	\$786,324	\$30,552	4.0%
2	Y	Y	None	\$0.05/kW-Mo	Interruptible	2	GE10 Turbines (44 MW) in 2019, no other unit additions	\$774,458	\$18,687	2.5%
2	Y	Y	None	\$0.05/kW-Mo	Interruptible	3	GE10 Turbines (44 MW) in 2019, followed by 100 MW share of 2x1 Advanced CC in 2021	\$798,051	\$42,279	5.6%
3	Y	Y	AFEC Sold	\$4/kW-Mo	Interruptible	Reference	No Capacity Additions	\$818,879	\$51,476	6.7%
3	Y	Y	AFEC Sold	\$4/kW-Mo	Interruptible	1	GE10 Turbines (44 MW) in 2019, followed by 50 MW share of 2x1 Advanced CC in 2021	\$785,861	\$18,458	2.4%
3	Y	Y	AFEC Sold	\$4/kW-Mo	Interruptible	2	GE10 Turbines (44 MW) in 2019, no other unit additions	\$805,743	\$38,339	5.0%
3	Y	Y	AFEC Sold	\$4/kW-Mo	Interruptible	2A	GE10 Turbines (66 MW) in 2019, no other unit additions	\$799,174	\$31,771	4.1%
3	Y	Y	AFEC Sold	\$4/kW-Mo	Interruptible	3	GE10 Turbines (44 MW) in 2019, followed by 100 MW share of 2x1 Advanced CC in 2021	\$767,403	N/A	N/A
4	Y	Y	Prairie State Sold	\$4/kW-Mo	Interruptible	Reference	No Capacity Additions	\$824,666	\$51,476	6.7%
4	Y	Y	Prairie State Sold	\$4/kW-Mo	Interruptible	1	GE10 Turbines (44 MW) in 2019, followed by 50 MW share of 2x1 Advanced CC in 2021	\$791,648	\$18,458	2.4%
4	Y	Y	Prairie State Sold	\$4/kW-Mo	Interruptible	2	GE10 Turbines (44 MW) in 2019, no other unit additions	\$811,529	\$38,339	5.0%
4	Y	Y	Prairie State Sold	\$4/kW-Mo	Interruptible	3	GE10 Turbines (44 MW) in 2019, followed by 100 MW share of 2x1 Advanced CC in 2021	\$773,189	N/A	N/A
5	Y	Y	None	\$4/kW-Mo	Firm	Reference	No Capacity Additions	\$870,780	\$20,650	2.4%
5	Y	Y	None	\$4/kW-Mo	Firm	1	GE10 Turbines (44 MW) in 2019, followed by 50 MW share of 2x1 Advanced CC in 2021	\$853,139	\$3,008	0.4%
5	Y	Y	None	\$4/kW-Mo	Firm	2	GE10 Turbines (44 MW) in 2019, no other unit additions	\$857,643	\$7,513	0.9%
5	Y	Y	None	\$4/kW-Mo	Firm	3	GE10 Turbines (44 MW) in 2019, followed by 100 MW share of 2x1 Advanced CC in 2021	\$850,130	N/A	N/A
6	N	Y	None	\$4/kW-Mo	Interruptible	Reference	No Capacity Additions	\$871,311	\$25,410	3.0%
6	N	Y	None	\$4/kW-Mo	Interruptible	1	GE10 Turbines (44 MW) in 2019, followed by 50 MW share of 2x1 Advanced CC in 2021	\$845,901	N/A	N/A
6	N	Y	None	\$4/kW-Mo	Interruptible	2	GE10 Turbines (44 MW) in 2019, no other unit additions	\$858,174	\$12,273	1.4%
6	N	Y	None	\$4/kW-Mo	Interruptible	3	GE10 Turbines (44 MW) in 2019, followed by 100 MW share of 2x1 Advanced CC in 2021	\$863,657	\$17,756	2.1%
7	Y	Y	None	\$2/kW-Mo	Interruptible	Reference	No Capacity Additions	\$812,612	\$4,058	0.5%
7	Y	Y	None	\$2/kW-Mo	Interruptible	1	GE10 Turbines (44 MW) in 2019, followed by 50 MW share of 2x1 Advanced CC in 2021	\$811,746	\$3,191	0.4%
7	Y	Y	None	\$2/kW-Mo	Interruptible	2	GE10 Turbines (44 MW) in 2019, no other unit additions	\$815,571	\$7,016	0.9%
7	Y	Y	None	\$2/kW-Mo	Interruptible	3	GE10 Turbines (44 MW) in 2019, followed by 100 MW share of 2x1 Advanced CC in 2021	\$808,555	N/A	N/A

1.3 Outline of Report

Subsequent sections of this report are organized as follows:

- Section 2.0 summarizes MSCPA's existing generating resources.
- Section 3.0 presents the load forecast used in this Study.
- Section 4.0 presents the projected need for capacity considered in this Study.
- Section 5.0 presents the fuel and market power price projections.
- Section 6.0 discusses the MSCPA Members' energy optimization program achievements.
- Section 7.0 presents the supply-side options considered in this Study, and discusses the levelized cost of energy (LCOE) screening analysis performed to compare the options.
- Section 8.0 presents the evaluations of the various resource plans (cases and scenarios), including discussion of the CPWC analysis.

2.0 MSCPA'S EXISTING GENERATING RESOURCES

MSCPA's existing generating resources include units fueled by coal (through an ownership arrangement with AMP), natural gas (joint ownership and Member-owned units), hydroelectric facilities (both purchase power agreements and Member-owned), solar photovoltaic (PV), and other PPAs. These generating resource are summarized below, and Table 2-1 presents a tabular summary of MSCPA's existing generation resources on an annual basis (indicating when existing purchase power agreements are scheduled to expire). Capacity values listed are based on information provided by MSCPA. It should be noted that this Study only considers generating resources located in the State of Michigan as counting towards firm available capacity for purposes of meeting peak demand; this is discussed in more detail in Section 4.0.

- Coal
 - Prairie State – 11.9 MW PPA with American Municipal Power (AMP)
- Natural Gas
 - AMP Freemont Energy Center (AFEC) – 43.5 MW ownership share of a 2x1 combined cycle
 - Member Owned Generation –20.7 MW (Hillsdale Units 5 and 6, and Marshall Units 3, 5, and 6)¹
 - Project 4 – 12.6 MW from three GE Jenbacher units located in Coldwater
- Hydroelectric
 - Menominee Hydro – 4.4 MW PPA (expires June 30, 2033)
 - Oconto Falls Hydro – 3.6 MW PPA (expires August 31, 2033)
 - AMP Hydro 1 PPA – 13.4 MW
 - AMP Hydro 2 PPA (Greenup and Meldahl) – 5.3 MW
 - Member Hydro –0.3 MW of Member-owned hydro
- Solar PV
 - Coldwater Solar – 1 MW PV
- Other PPAs (Contracts)
 - EDF – 10 MW PPA (expires December 31, 2025)
 - Citi – 5 MW PPA (expires December 31, 2030)
 - BP – 10 MW PPA (expires December 31, 2018)
 - BP – 5 MW PPA (January 1, 2019 through December 31, 2020)
 - Option for additional 5 MW assumed to be exercised

¹ Per discussions with MSCPA, these generating units are assumed to remain operational throughout the term of this Power Supply Study.

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Table 2-1: Existing MSCPA Generating Resources

Year	Contracts (MW)	AFEC (MW)	Prairie State (MW)	AMP Hydro 1 (MW)	AMP Hydro 2 (MW)	Menominee Hydro (MW)	Oconto Falls Hydro (MW)	Project 4 (MW)	Hillsdale (MW)	Marshall Peakers (MW)	Union City Hydro (MW)	Total (MW)
2017	0.0	43.5	11.9	13.4	5.3	4.4	3.6	12.6	11	9.7	0.3	115.9
2018	25.0	43.5	11.9	13.4	5.3	4.4	3.6	12.6	11	9.7	0.3	140.9
2019	25.0	43.5	11.9	13.4	5.3	4.4	3.6	12.6	11	9.7	0.3	140.9
2020	25.0	43.5	11.9	13.4	5.3	4.4	3.6	12.6	11	9.7	0.3	140.9
2021	15.0	43.5	11.9	13.4	5.3	4.4	3.6	12.6	11	9.7	0.3	130.9
2022	15.0	43.5	11.9	13.4	5.3	4.4	3.6	12.6	11	9.7	0.3	130.9
2023	15.0	43.5	11.9	13.4	5.3	4.4	3.6	12.6	11	9.7	0.3	130.9
2024	15.0	43.5	11.9	13.4	5.3	4.4	3.6	12.6	11	9.7	0.3	130.9
2025	15.0	43.5	11.9	13.4	5.3	4.4	3.6	12.6	11	9.7	0.3	130.9
2026	5.0	43.5	11.9	13.4	5.3	4.4	3.6	12.6	11	9.7	0.3	120.9
2027	5.0	43.5	11.9	13.4	5.3	4.4	3.6	12.6	11	9.7	0.3	120.9
2028	5.0	43.5	11.9	13.4	5.3	4.4	3.6	12.6	11	9.7	0.3	120.9
2029	5.0	43.5	11.9	13.4	5.3	4.4	3.6	12.6	11	9.7	0.3	120.9
2030	5.0	43.5	11.9	13.4	5.3	4.4	3.6	12.6	11	9.7	0.3	120.9
2031	0.0	43.5	11.9	13.4	5.3	4.4	3.6	12.6	11	9.7	0.3	115.9
2032	0.0	43.5	11.9	13.4	5.3	4.4	3.6	12.6	11	9.7	0.3	115.9
2033	0.0	43.5	11.9	13.4	5.3	0.0	3.6	12.6	11	9.7	0.3	111.4
2034	0.0	43.5	11.9	13.4	5.3	0.0	0	12.6	11	9.7	0.3	107.8
2035	0.0	43.5	11.9	13.4	5.3	0.0	0	12.6	11	9.7	0.3	107.8
2036	0.0	43.5	11.9	13.4	5.3	0.0	0	12.6	11	9.7	0.3	107.8

3.0 LOAD FORECAST

As a major input into the Power Supply Study, nFront developed energy and peak demand forecasts for each Member and for MSCPA in aggregate. The forecasts have been prepared for a 20-year period, beginning 2017 through 2036.

The forecast relies on an econometric forecast of each Member's energy, combined with various assumptions regarding load and coincidence factors, generally based on the historical values of such factors over 1996 through 2016. nFront also relied on information and projections, provided by the Members, regarding the impact of recent and expected future significant load additions (as discussed further below). Historical and projected economic and demographic data were provided by Woods & Poole (W&P), a nationally recognized provider of such data. Data regarding retail electricity prices were developed from data produced by the Energy Information Administration (EIA) for the State of Michigan. Weather data was provided by the National Oceanic and Atmospheric Administration (NOAA) for a targeted list of weather stations in close proximity to the Members.

Econometric forecasting makes use of regression analysis to establish historical relationships between energy and various explanatory factors, which are generally assumed to continue into the future. The forecast of monthly energy by Member was driven by a combination of: (i) economic and demographic data, such as personal income, gross-regional product, population, and employment, for the surrounding county; (ii) retail electricity prices; (iii) weather variables, including monthly heating degree days and cooling degree days; and (iv) other seasonal factors. In certain instances, additional variables were used to account for historical behavior that is unexplained by available data, such as loss of load or extraordinary effects of the 2008 recession.

A forecast of monthly energy requirements was generated by simulating the forecast equations with assumed future values of the explanatory factors. A forecast of monthly peak demand by Member was developed by applying projected load factors to the forecasted energy. The individual Member peak demands were then summed and monthly coincidence factors applied to compute an aggregate MSCPA peak demand. The projected load factors are based on the average relationship between energy and peak demand over the most recent 10 years (i.e., 2007-2016). The projected coincidence factors are based on the average relationship between coincident and non-coincident peak demands, again over the ten-year period. Annual energy and summer peak demand were derived from the monthly values. The summer period is assumed to comprise the months of June through September.

Two large loads, Maroa Farms and the Clemens pork processing facility, were identified by the Members during the load forecasting process, both of which are located within the Coldwater service territory. It was determined that these large loads would be separately forecasted and added back to the remaining Coldwater load. For the Maroa load, which came online in 2012, the energy projection was based on the monthly energy levels of 2016 and the peak demand projection was derived in the manner as mentioned above for the Members. For the Clemens load, which is expected to be online in early 2017 and fully operational in 2020, the energy and peak demand projections were supplied by Clemens. Further inspection of hourly load data of a similar facility was conducted to determine a reasonable assumption for the level of coincidence with the typical Coldwater and MSCPA peak demand.

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The results of the forecast reflect that MSCPA energy is expected to grow at an average annual rate of 1.8 percent over 2017-2026 and 0.7 percent over 2027-2036. The MSCPA aggregate peak demand is expected to grow at an average annual rate of 1.7 percent over 2017-2026 and 0.8 percent over 2027-2036. It is important to recognize that the expected addition of a large load at Coldwater, which is anticipated to be online in early 2017 and fully operational by 2020, is a significant driver of the near-term growth rates for energy and peak demand.

Several tables and figure follow in the remainder of this section, as summarized below:

- Table 3-1 through Table 3-3 present the historical and projected energy and peak demand by Member, including contributions from the large Coldwater loads discussed previously.
- Table 3-4 presents the historical and projected energy and peak demand data for MSCPA in aggregate, including the contributions of the large loads at Coldwater.
- Figures 3-1 and 3-2 illustrate the aggregate MSCPA energy and coincident peak demand forecasts.

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Table 3-1: Historical and Projected Energy (MWh) by Member

	Year	Clinton	Coldwater	Hillsdale	Marshall	Union City	MSCPA Total
Historical ^[1]	2007	25,911	304,265	154,951	125,945	16,988	628,059
	2008	24,266	320,586	147,230	120,509	16,163	628,754
	2009	23,021	269,120	126,448	110,296	15,514	544,399
	2010	24,983	296,406	127,719	116,254	16,502	581,864
	2011	24,179	291,524	126,438	114,083	17,018	573,242
	2012	25,039	327,406	124,201	116,259	17,360	610,266
	2013	25,457	365,392	123,723	112,398	16,923	643,893
	2014	25,533	371,910	126,267	113,066	17,211	653,987
	2015	25,057	405,343	126,688	113,188	16,815	687,091
	2016	25,619	424,526	128,747	115,635	16,888	711,415
Projected	2017	25,547	461,201	130,463	113,888	17,139	748,239
	2018	25,939	499,197	133,776	115,107	17,273	791,291
	2019	26,223	504,031	135,291	115,677	17,396	798,617
	2020	26,481	516,954	136,395	116,027	17,510	813,367
	2021	26,711	540,998	137,168	116,176	17,614	838,668
	2022	26,928	547,392	137,792	116,234	17,714	846,060
	2023	27,145	554,018	138,411	116,324	17,814	853,712
	2024	27,367	560,697	139,047	116,494	17,916	861,521
	2025	27,593	567,495	139,725	116,729	18,021	869,563
	2026	27,817	574,336	140,373	116,971	18,124	877,621
	2027	28,027	580,992	140,932	117,191	18,223	885,365
	2028	28,225	587,473	141,434	117,379	18,316	892,827
	2029	28,414	593,854	141,892	117,558	18,407	900,126
	2030	28,594	600,028	142,276	117,730	18,494	907,122
	2031	28,756	605,748	142,700	117,893	18,574	913,671
	2032	28,906	611,046	143,136	118,081	18,650	919,820
	2033	29,053	616,156	143,549	118,303	18,725	925,787
2034	29,204	621,224	144,027	118,574	18,801	931,830	
2035	29,364	626,473	144,463	118,901	18,882	938,083	
2036	29,524	631,751	144,873	119,232	18,963	944,344	
AAGR	2007-2016	-0.1%	3.8%	-2.0%	-0.9%	-0.1%	1.4%
	2017-2026	1.0%	2.5%	0.8%	0.3%	0.6%	1.8%
	2027-2036	0.6%	0.9%	0.3%	0.2%	0.4%	0.7%

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Table 3-2: Historical and Projected Non-Coincident Peak (MW) by Member

	Year	Clinton	Coldwater	Hillsdale	Marshall	Union City
Historical ^[1]	2007	5.5	54.2	30.8	25.4	4.0
	2008	5.2	57.8	29.2	23.5	3.5
	2009	5.2	55.5	27.2	23.1	3.3
	2010	5.6	56.6	27.4	23.6	4.1
	2011	5.9	57.7	29.2	25.6	4.6
	2012	6.0	59.7	28.9	25.1	5.0
	2013	5.8	63.0	28.3	23.8	4.3
	2014	5.7	59.5	26.9	22.8	4.0
	2015	5.2	75.0	27.0	22.3	3.8
	2016	5.9	76.9	28.0	24.9	4.2
Projected	2017	5.7	74.3	27.0	23.3	4.1
	2018	5.7	78.1	27.5	23.5	4.1
	2019	5.8	79.0	27.8	23.6	4.1
	2020	5.8	80.1	28.1	23.7	4.2
	2021	5.9	84.4	28.2	23.7	4.2
	2022	5.9	85.6	28.4	23.7	4.2
	2023	6.0	86.8	28.5	23.8	4.2
	2024	6.0	88.1	28.6	23.8	4.2
	2025	6.1	89.4	28.7	23.9	4.3
	2026	6.1	90.6	28.9	23.9	4.3
	2027	6.2	91.9	29.0	23.9	4.3
	2028	6.2	93.1	29.1	24.0	4.3
	2029	6.3	94.3	29.2	24.0	4.4
	2030	6.3	95.4	29.3	24.1	4.4
	2031	6.3	96.5	29.4	24.1	4.4
	2032	6.4	97.5	29.4	24.1	4.4
	2033	6.4	98.4	29.5	24.2	4.4
	2034	6.4	99.4	29.6	24.2	4.5
	2035	6.5	100.3	29.7	24.3	4.5
	2036	6.5	101.3	29.8	24.4	4.5
AAGR	2007-2016	0.7%	4.0%	-1.0%	-0.2%	0.6%
	2017-2026	0.9%	2.2%	0.8%	0.3%	0.6%
	2027-2036	0.6%	1.1%	0.3%	0.2%	0.4%

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Table 3-3: Historical and Projected Load Factor by Member

	Year	Clinton	Coldwater	Hillsdale	Marshall	Union City
Historical ^[1]	2007	53%	64%	57%	57%	48%
	2008	53%	63%	57%	58%	52%
	2009	51%	55%	53%	55%	53%
	2010	51%	60%	53%	56%	46%
	2011	46%	58%	49%	51%	42%
	2012	47%	62%	49%	53%	39%
	2013	50%	66%	50%	54%	45%
	2014	51%	71%	54%	57%	49%
	2015	55%	62%	54%	58%	50%
	2016	50%	63%	52%	53%	46%
Projected	2017	52%	71%	55%	56%	48%
	2018	52%	73%	55%	56%	48%
	2019	52%	73%	55%	56%	48%
	2020	52%	73%	55%	56%	48%
	2021	52%	73%	55%	56%	48%
	2022	52%	73%	55%	56%	48%
	2023	52%	73%	55%	56%	48%
	2024	52%	72%	55%	56%	48%
	2025	52%	72%	55%	56%	48%
	2026	52%	72%	55%	56%	48%
	2027	52%	72%	55%	56%	48%
	2028	52%	72%	55%	56%	48%
	2029	52%	72%	55%	56%	48%
	2030	52%	72%	55%	56%	48%
	2031	52%	72%	55%	56%	48%
	2032	52%	71%	55%	56%	48%
	2033	52%	71%	55%	56%	48%
	2034	52%	71%	55%	56%	48%
	2035	52%	71%	55%	56%	48%
	2036	52%	71%	55%	56%	48%
AAGR	2007-2016	51%	62%	53%	55%	47%
	2017-2026	52%	73%	55%	56%	48%
	2027-2036	52%	72%	55%	56%	48%

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Table 3-4: Historical and Projected Energy and Peak Demand for MSCPA in Aggregate

	Year	Energy (MWh)	Non-coincident Peak Demand (MW)	Coincident Peak Demand (MW)	Load Factor	Coincidence Factor
Historical ⁽¹⁾	2007	628,059	119.9	118.6	60%	99%
	2008	628,754	119.2	116.5	62%	98%
	2009	544,399	114.3	114.1	54%	100%
	2010	581,864	117.2	115.3	58%	98%
	2011	573,242	123.0	121.4	54%	99%
	2012	610,266	124.8	124.3	56%	100%
	2013	643,893	125.2	120.6	61%	96%
	2014	653,987	118.9	116.5	64%	98%
	2015	687,091	133.4	118.7	66%	89%
	2016	711,415	139.9	125.0	65%	89%
Projected	2017	748,239	134.2	130.9	65%	98%
	2018	791,291	139.0	137.8	66%	99%
	2019	798,617	140.4	139.2	65%	99%
	2020	813,367	141.9	140.6	66%	99%
	2021	838,668	146.5	145.2	66%	99%
	2022	846,060	147.9	146.6	66%	99%
	2023	853,712	149.3	148.0	66%	99%
	2024	861,521	150.8	149.5	66%	99%
	2025	869,563	152.3	151.0	66%	99%
	2026	877,621	153.9	152.5	66%	99%
	2027	885,365	155.3	154.0	66%	99%
	2028	892,827	156.7	155.4	66%	99%
	2029	900,126	158.1	156.7	66%	99%
	2030	907,122	159.4	158.0	66%	99%
	2031	913,671	160.7	159.3	65%	99%
	2032	919,820	161.8	160.4	65%	99%
	2033	925,787	163.0	161.5	65%	99%
	2034	931,830	164.1	162.7	65%	99%
	2035	938,083	165.3	163.9	65%	99%
	2036	944,344	166.5	165.0	65%	99%
AAGR	2007-2016	1.4%	1.7%	0.6%	60%	97%
	2017-2026	1.8%	1.5%	1.7%	66%	99%
	2027-2036	0.7%	0.8%	0.8%	65%	99%

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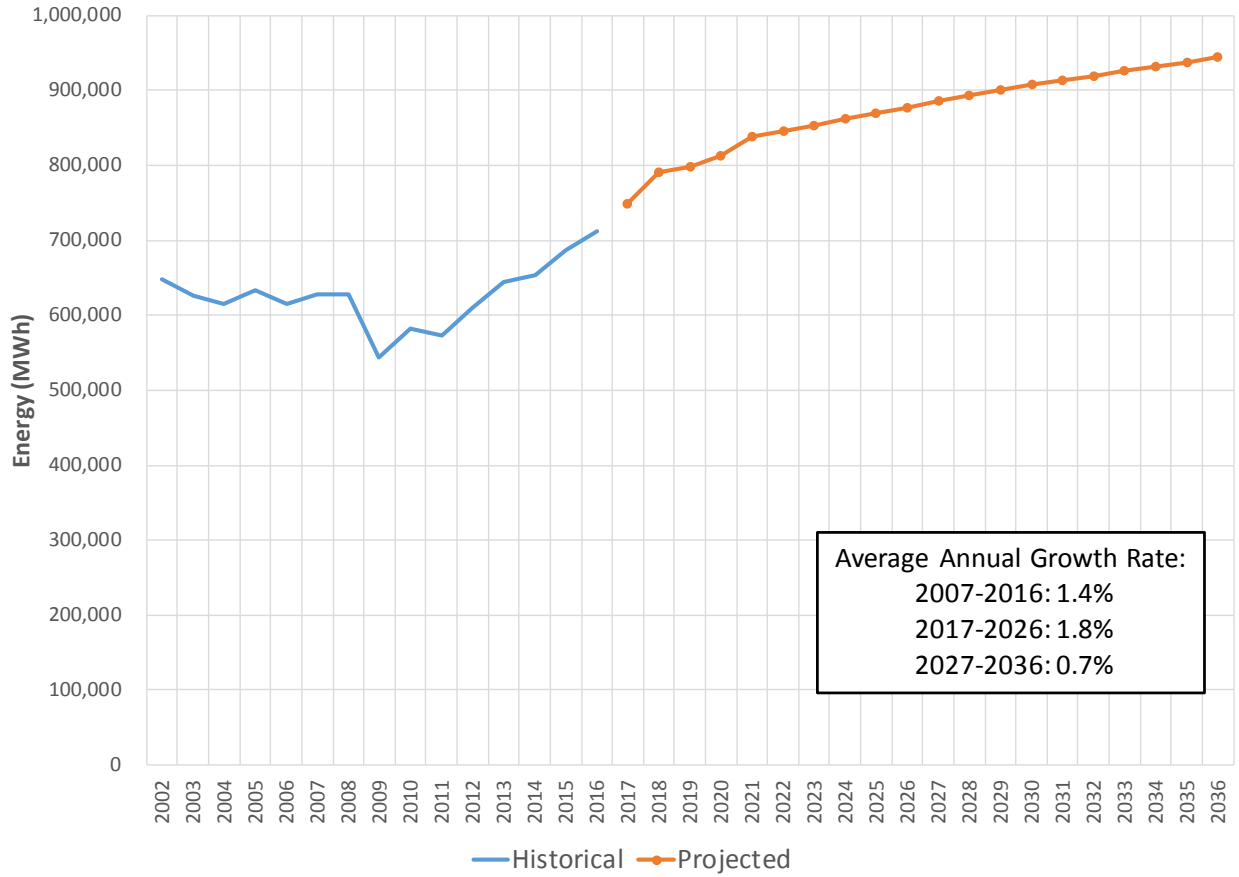


Figure 3-1: Historical and Projected MSCP Aggregate Energy

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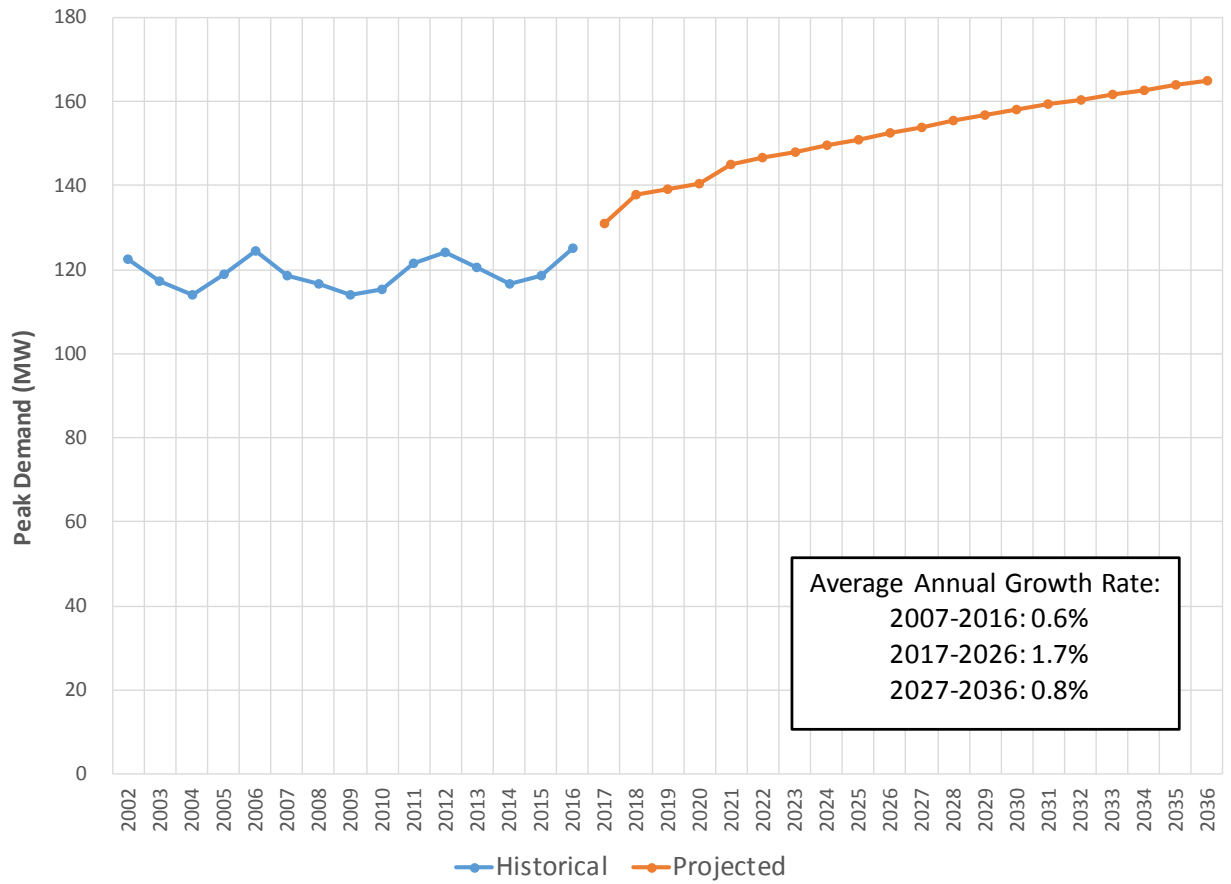


Figure 3-2: Historical and Projected MSCPA Aggregate Coincident Peak Demand

4.0 PROJECTED CAPACITY REQUIREMENTS

For purposes of this Study, it has been assumed that MSCPA will maintain minimum reserve margin requirements consistent with MISO's Planning Reserve Margin (PRM) criteria for 2017, based on the MISO Planning Year 2017-2018 Loss of Load Expectation Report (LOLE Report), which outlines the process used to determine PRM and the resulting PRM². The LOLE Report both ICAP and UCAP PRMs; ICAP unit ratings (and corresponding PRM) are based on installed capacity ratings, while UCAP unit ratings (and corresponding PRM) take into consideration forced outages to determine an unforced capacity value. As such, the ICAP PRM (15.8 percent) is higher than the UCAP PRM (7.8 percent). Through discussion with MSCPA, it was determined that the ICAP RPM would be used as the basis for capacity requirements reflected in this Study.

Table 4-1 presents projected capacity required to maintain the 15.8 percent PRM criteria for the 2017 through 2036 period reflected in this Study, based on MSCPA's annual coincident peak demands discussed in Section 3.0 of this Study and existing capacity resources. The existing MSCPA capacity resources shown in Table 4-1 reflect the dependable summer capacity values provided by MSCPA for resources located in MISO Zone 7. Several of the units identified in Section 2.0 of this Study are not included in Table 4-1 as they are not physically located in MISO Zone 7; the economic evaluations discussed in Section 8.0 of this Study consider all the units shown in Section 2.0 as available to provide energy to meet MSCPA's projected energy requirements.

As shown in Table 4-1, MSCPA capacity requirements are expected to increase from approximately 117 MW in 2017 to 160 MW in 2036. These capacity requirements may be satisfied by a combination of adding new generating capacity (through either equity or other arrangements). The economic evaluations discussed in Section 8.0 of this Study consider various combinations of new capacity additions and purchasing capacity credits.

² (<https://www.misoenergy.org/Library/Repository/Study/LOLE/2017%20LOLE%20Study%20Report.pdf>)

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Table 4-1: Projected Capacity Requirements

Year	Menominee Hydro (MW)	Oconto Falls Hydro (MW)	Project 4 (MW)	Hillsdale (MW)	Marshall Peakers (MW)	Union City Hydro (MW)	Total (MW)	Coincident Peak Demand (MW)	Required Reserves for 15.8% Reserve Margin (MW)	Total Capacity Requirements to Maintain 15.8% Reserve Margin (MW)	Need for Capacity to Maintain 15.8% Reserve Margin (MW)
2017	2.0	1.5	11.5	10.7	8.5	0.1	34.3	130.9	20.7	151.6	117.3
2018	2.0	1.5	11.5	10.7	8.5	0.1	34.3	137.8	21.8	159.5	125.2
2019	2.0	1.5	11.5	10.7	8.5	0.1	34.3	139.2	22.0	161.2	126.9
2020	2.0	1.5	11.5	10.7	8.5	0.1	34.3	140.6	22.2	162.8	128.5
2021	2.0	1.5	11.5	10.7	8.5	0.1	34.3	145.2	22.9	168.1	133.8
2022	2.0	1.5	11.5	10.7	8.5	0.1	34.3	146.6	23.2	169.7	135.4
2023	2.0	1.5	11.5	10.7	8.5	0.1	34.3	148.0	23.4	171.4	137.1
2024	2.0	1.5	11.5	10.7	8.5	0.1	34.3	149.5	23.6	173.1	138.8
2025	2.0	1.5	11.5	10.7	8.5	0.1	34.3	151.0	23.9	174.9	140.6
2026	2.0	1.5	11.5	10.7	8.5	0.1	34.3	152.5	24.1	176.6	142.3
2027	2.0	1.5	11.5	10.7	8.5	0.1	34.3	154.0	24.3	178.3	144.0
2028	2.0	1.5	11.5	10.7	8.5	0.1	34.3	155.4	24.5	179.9	145.6
2029	2.0	1.5	11.5	10.7	8.5	0.1	34.3	156.7	24.8	181.5	147.2
2030	2.0	1.5	11.5	10.7	8.5	0.1	34.3	158.0	25.0	183.0	148.7
2031	2.0	1.5	11.5	10.7	8.5	0.1	34.3	159.3	25.2	184.4	150.1
2032	2.0	1.5	11.5	10.7	8.5	0.1	34.3	160.4	25.3	185.8	151.5
2033	0.0	1.5	11.5	10.7	8.5	0.1	32.3	161.5	25.5	187.1	154.8
2034	0.0	0	11.5	10.7	8.5	0.1	30.8	162.7	25.7	188.4	157.6
2035	0.0	0	11.5	10.7	8.5	0.1	30.8	163.9	25.9	189.8	159.0
2036	0.0	0	11.5	10.7	8.5	0.1	30.8	165.0	26.1	191.1	160.3

5.0 FUEL AND MARKET POWER PRICE PROJECTIONS

5.1 Methodology

nFront utilized the S&P Global Market Intelligence, SNL Energy (SNL) data platform as the basis for projections of natural gas and energy prices for the MISO region, using information available in January 2017. SNL is a leading provider of energy industry data and intelligence and offers historical data and projections across a wide range of energy industry market concepts. The following discussions have been extracted from SNL Energy and outline SNL's approach to natural gas and power price forecasting.

Natural Gas Prices - *Forward curves for natural gas are based upon the following inputs: 1) futures prices for the Henry Hub; 2) the Energy Information Administration's (EIA) most recent Annual Energy Outlook (AEO) forecast for real price growth for the Henry Hub; and, 3) OTC Global Holdings' (OTCGH) forward financial basis settlement prices.*

Each regional gas curve is constructed as Henry Hub plus basis, with the Henry Hub made up of the CME settlement price as of the last business day of the quarter, and the CME's last full calendar year extended to the end of the required term by the EIA AEO real growth rate plus our inflation assumption. OTCGH financial basis is applied for the 84 months provided and then extrapolated forward using the last full calendar year's settlement value and adding this to the Henry Hub curve to arrive at a regional gas price.

Power Prices - *SNL Energy's approach to power forecasting is data-centered and data-verified with every attempt made to tie model inputs and outputs to reliable reported and indicative market data. SNL Energy's power forecasting benefits from access to reliable and timely information provided by the databases maintained by the content teams supporting the SNL Energy Unlimited platform. This information is supplemented by information collected by SNL Energy's forecasting team specifically for forecasting efforts. While use of reported information is a strong starting place, SNL Energy follows a trust but verify approach which attempts to validate model outputs against reported data to assess both the validity of forecast results but also the reasonableness of the model inputs used.*

5.2 Analysis

For purposes of this study, the SNL Forecast for the Michigan Power Hub was used as the basis of the power price forecast, while the SNL Forecast for the MichCon Citygate Hub was used for the natural gas price forecast.

To confirm the reasonableness of the SNL Forecast, the SNL Forecast was benchmarked against the OTCGH Forwards. Figures 5-1 and 5-2 illustrate the historical and projected prices of natural gas and on- and off-peak market energy for MichCon Citygate and the Michigan Power Hub.

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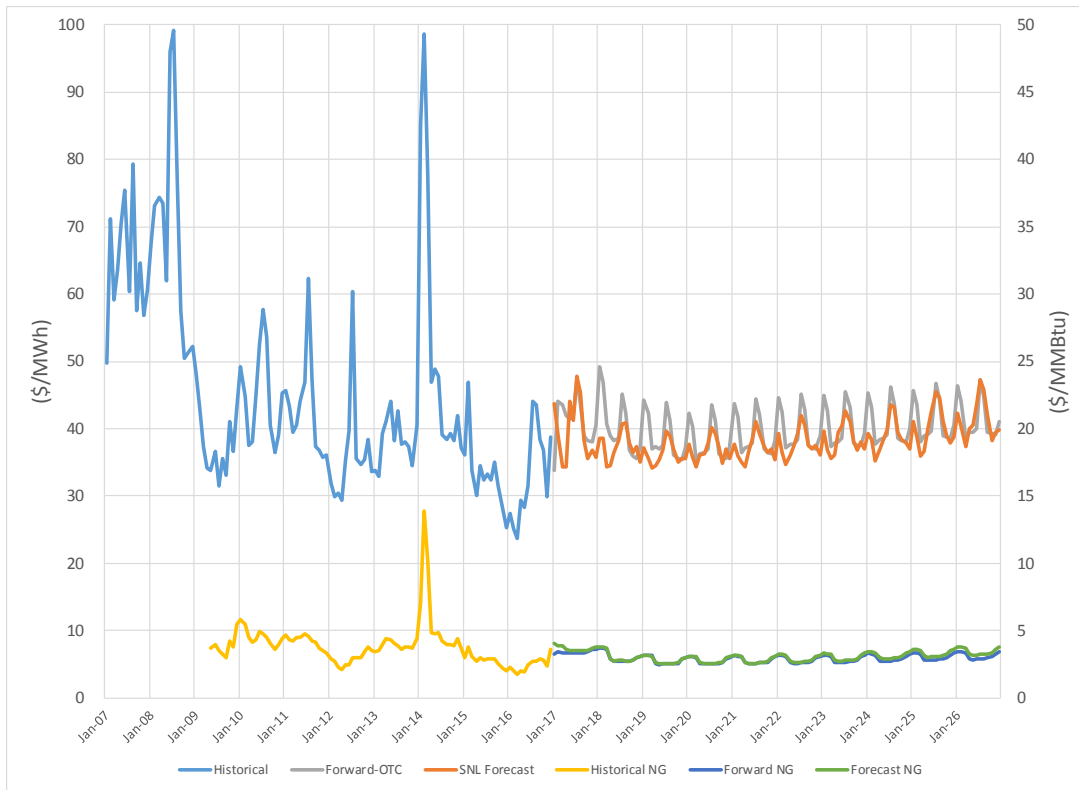


Figure 5-1: Historical and Projected On-Peak Power Prices and Natural Gas Prices

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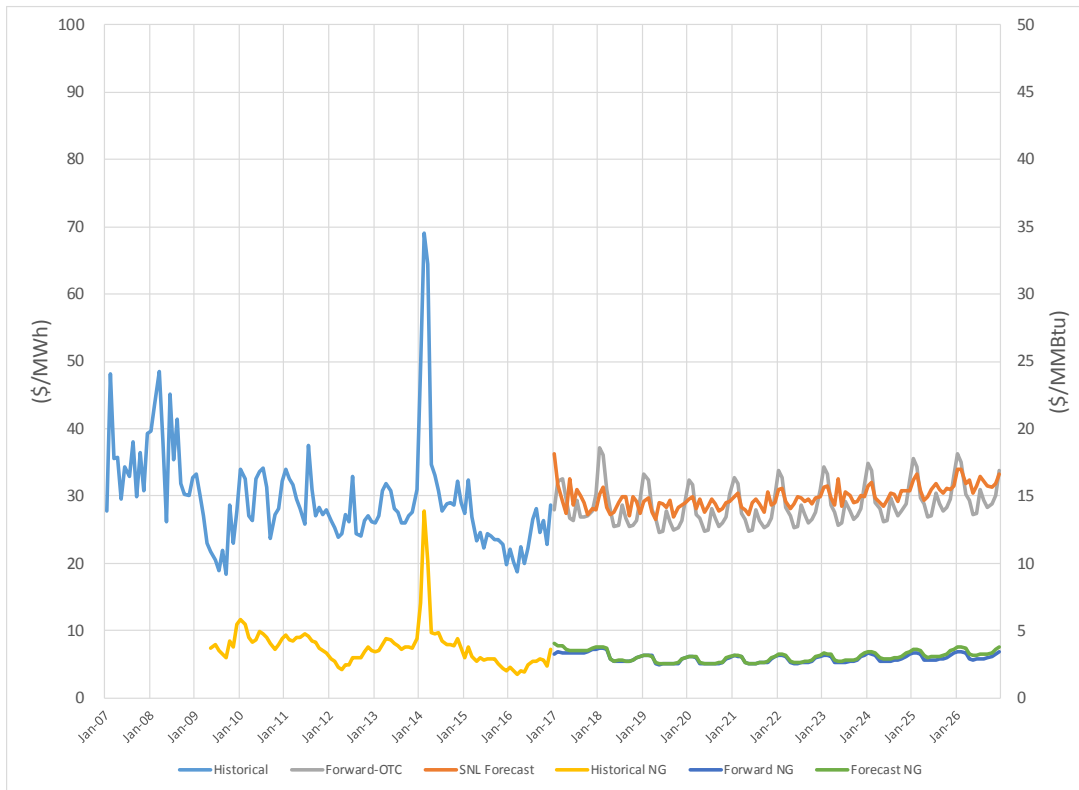


Figure 5-2: Historical and Projected Off-Peak Power Prices and Natural Gas Prices

nFront reviewed the historical MISO locational marginal prices (LMPs) for the MSCPA members’ Regional Transmission Organization (RTO) pricing nodes, and adjusted the SNL power price forecast of the Michigan Power Hub for locational factors where warranted. The locational factors represent the historical 5-year average of the basis differential between the members LMPs and the Michigan Power Hub. Table 5-1 identifies the RTO pricing node of each member and its locational factor.

Table 5-1: Member Price Nodes and Locational Factors

Member	RTO Pricing Node	Locational Factor (%)
Clinton	DECO.MSCPA	3.18%
Coldwater	CONS.MSCPA	3.79%
Hillsdale	CONS.MSCPA	3.79%
Marshall	CONS.MSCPA	3.79%
Union City	CONS.MSCPA	3.79%
MSCPA	Weighted Avg.	3.77%

The MSCPA total represents the weighted average based on each member’s load and locational factor.

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5.3 Results

The projections have been prepared for a 20-year period, beginning 2017 through 2036, and are presented in nominal dollars based on an annual inflation rate of 3.0 percent.

5.3.1 Natural Gas Prices

A projection of natural gas prices was developed by leveraging the SNL Forecast for the MichCon Citygate Hub, and adjusting to reflect annual inflation of 3.0 percent. Table 5-2 presents the annual natural gas price projection in nominal dollars. The natural gas prices are projected to grow at an annual average rate of 1.9 percent over 2017-2036, and range from \$2.83/MMBtu to \$5.28/MMBtu.

Table 5-2: Natural Gas Price Forecast (Nominal) (\$/MMBtu)

Year	MichCon Citygate
2017	3.67
2018	3.12
2019	2.83
2020	2.85
2021	2.91
2022	3.00
2023	3.13
2024	3.32
2025	3.50
2026	3.68
2027	3.87
2028	4.05
2029	4.24
2030	4.34
2031	4.50
2032	4.74
2033	4.93
2034	5.07
2035	5.16
2036	5.28

5.3.2 Power Prices

A projection of market energy prices was developed by leveraging the SNL Forecast of monthly on- and off-peak energy prices for the Michigan Power Hub, adjusting for locational factors, and adjusting to reflect annual inflation of 3.0 percent. Table 5-3 displays the annual on- and off-peak energy price projections in nominal dollars. The on-peak prices are projected to grow at an annual average rate of 2.3 percent over 2017-2036, and range from approximately \$38/MWh to \$64/MWh. The off-peak prices are projected to grow at an annual average rate of 2.4 percent over 2017-2036, and range from approximately \$30/MWh to \$49/MWh.

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Table 5-3: Power Price Forecast (Nominal) (\$/MWh)

Year	MSCPA (Weighted Avg.)	
	On-Peak	Off-Peak
2017	41.21	30.98
2018	39.06	30.13
2019	38.14	29.78
2020	39.05	30.41
2021	39.50	30.73
2022	40.62	31.65
2023	41.59	32.41
2024	42.40	32.75
2025	43.96	33.99
2026	45.67	35.47
2027	47.26	36.50
2028	48.57	37.56
2029	50.24	38.99
2030	51.99	40.15
2031	53.46	41.34
2032	55.90	43.10
2033	58.10	44.61
2034	59.85	45.97
2035	61.39	47.22
2036	63.55	48.77

6.0 MEMBER ENERGY EFFICIENCY CONSIDERATIONS

Effective April 20, 2017, the MSCPA members were required to comply with the state of Michigan's Enrolled Senate Bill No. 438 (SB 438; also referred to as Public Act No. 342 or PA 342). PA 342 is known as the Clean and Renewable Energy and Energy Waste Reduction Act, and is an act to amend Michigan's PA 295 of 2008. The purpose of PA 342 is to promote the development and use of clean and renewable energy resources and the reduction of energy waste through programs that will cost-effectively do the following:

- Diversify the resources used to reliably meet the energy needs of consumers in this state.
- Provide greater energy security through the use of indigenous energy resources available within the state.
- Encourage private investment in renewable energy and energy waste reduction.
- Coordinate with federal regulations to provide improved air quality and other benefits to energy consumers and citizens of this state.
- Remove unnecessary burdens on the appropriate use of solid waste as a clean energy source.

Under PA 342, the MSCPA members are required to develop energy waste reduction plans that accomplish the following:

- Propose a set of energy waste reduction programs that include offerings for each customer class, including low income residential.
- Specify necessary funding levels.
- Describe how energy waste reduction program costs will be recovered.
- Ensure, to the extent feasible, that charges collected from a particular customer rate class are spent on energy waste reduction programs that benefit that rate class.
- Demonstrate that the proposed energy waste reduction programs and funding are sufficient to ensure the achievement of applicable energy waste reduction standards.
- Specify whether the number of megawatt hours of electricity used in the calculation of incremental energy savings will be weather-normalized or based on the average number of megawatt hours of electricity sold by the provider annually during the previous 3 years to retail customers in the state of Michigan. Once the plan is approved by the commission, this option shall not be changed.
- Demonstrate that the provider's energy waste reduction programs, excluding program offerings to low-income residential customers, will collectively be cost-effective.
- Provide for the practical and effective administration of the proposed energy waste reduction programs.
- Include a process for obtaining an independent expert evaluation of the actual energy waste reduction programs to verify the incremental energy savings from each energy waste reduction program. All such evaluations are subject to public review and commission oversight.

In addition, the energy waste reduction plan may do one or more of the following:

- Utilize educational programs designed to alter consumer behavior or any other measures that can reasonably be used to meet the goals set forth in subsection (3) of PA 342.
- Propose to the commission measures that are designed to meet the goals set forth in subsection (3) of PA 342 and that provide additional customer benefits.

6.1 Member Energy Efficiency Programs and Achievements

As part of this Study, MSCPA provided the Energy Optimization Plan Annual Reports for 2016 (or 2015 for instances when 2016 data was not yet available) for each of its Members. nFront reviewed these reports and summaries of each Member's energy optimization program achievements are presented below.

6.1.1 Village of Clinton

The Residential Solutions program outperformed expectations for 2016 by exceeding the energy savings target and staying under budget. The Low Income Services program was a main driver of this success by greatly exceeding the energy savings target and staying under budget. The Educational Services program met expectations by reaching the energy savings and budget targets, while the Efficient Lighting program failed to reach the energy savings target but managed to stay under budget.

The Business Solutions program demonstrated mixed results for 2016, exceeding the energy savings target but incurring costs over budget. The Educational Services program met expectations by reaching the energy savings and budget targets, while the Efficient Lighting program topped the energy savings target but also went over the set budget.

6.1.2 Coldwater Board of Public Utilities

The Residential Solutions program fell short of the 2016 energy savings target but was under budget. The Low Income Services program greatly exceeded the energy savings target while staying significantly under budget. However, both the Residential Services and Educational Services programs fell short of their energy savings targets.

The Business Solutions program greatly exceeded the energy savings target for 2016 while staying under budget. Both the Business Services and Educational Services program exceeded energy savings targets and stayed under budget.

6.1.3 Hillsdale Board of Public Utilities

The Residential Solutions program fell short of expectations for 2015 by not achieving the energy savings target (expenses were less than budgeted). The Low Income Services program surpassed its energy savings target while staying within budget. While the Education Services program was able to meet its energy savings target, the Energy Start, Appliance Recycling, and Home Performance programs all failed to reach the energy savings targets.

The Business Solutions program outperformed expectations for 2016 by surpassing the energy savings target and incurring expenses less than budgeted. The Prescriptive and Custom program was a main driver of this success by greatly exceeding the energy savings target, while the Education program was able to meet the energy savings target.

6.1.4 City of Marshall Electric Department

The Residential Solutions program outperformed its expectations for 2015 by exceeding the energy savings target and incurring expenses less than budgeted. The Residential Services program was the main

driver of this success by surpassing the energy savings target and staying well under budget. The Low Income Services program did not reach the energy savings target but was able to stay under budget, while the Education Services program was able to meet the energy savings and budget targets.

The Business Solutions program failed to reach its expectations for 2015 by not meeting the energy savings target. The Business Services program did not meet the energy savings target but was able to stay under budget, while the Educational Services program was able to meet the energy savings and budget targets.

6.1.5 Union City

The Residential Solutions program outperformed its expectations for 2016 by exceeding the energy savings target while incurring costs less than budgeted. The Residential Services program was a main driver of this success by greatly surpassing the energy savings target and staying well under budget. The Low Income Services program also exceeded expectations by outperforming the energy savings and budget targets, while the Educational Services program managed to meet the energy savings target and stay under budget.

The Business Solutions program was able to outperform its expectation for 2016 by exceeding the energy savings target while incurring costs less than budgeted. The Business Services program surpassed the energy savings target and was able to stay well under budget. The Educational Services program was able to meet the energy savings target and stay under budget.

7.0 SUPPLY-SIDE OPTIONS AND SCREENING

Numerous supply-side options - including natural gas generating units, renewable technologies, and nuclear (small modular reactors, or SMRs) – were evaluated in this Study. The following identifies the supply-side options considered in the Study, and discusses the basis for developing the necessary cost and performance estimates. The options that were evaluated as potential purchased power agreements (PPA) are noted as such in subsequent discussions.

- General Electric Jenbacher units, similar to those recently constructed in Coldwater, based on cost and performance information provided by MSCPA.
- General Electric gas turbine gensets (GE-10 units), based on cost and performance information provided by MSCPA for used equipment that may be available for purchase/installation.
- General Electric LM6000 combined cycle units, based on cost and performance information provided by MSCPA.
- Repowering of the Endicott power plant to General Electric LM6000 combined cycle units, based on cost and performance information provided by MSCPA.
- General Electric Frame 7 simple cycle combustion turbines, based on planning level cost and performance estimates developed by nFront.
- General Electric Frame 7 F-class combustion turbines in 1x1 (one combustion turbine, one heat recovery steam generator, and one steam turbine) and 2x1 (two combustion turbines, two heat recovery steam generators, and one steam turbine) combined cycle configurations, based on planning level cost and performance estimates developed by nFront.
- Advanced class combustion turbines in 1x1 (one combustion turbine, one heat recovery steam generator, and one steam turbine) and 2x1 (two combustion turbines, two heat recovery steam generators, and one steam turbine) combined cycle configurations, based on planning level cost and performance estimates developed by nFront. These alternatives are intended to represent improved performance and economies of scale as compared to F-class alternatives.
- Small Module Reactor (SMR) nuclear technology, based on publicly available information from NuScale Power.
- Wind and solar photovoltaic (PV) resources, based on cost and performance information provided by Client.
- Landfill Gas (LFG) and biomass resources, based on planning level cost and performance estimates developed by nFront.

7.1 Estimated Cost and Performance

Table 7-1 summarizes the estimated cost and performance characteristics of the various supply-side options considered in this Study.

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Table 7-1: Supply-Side Options – Estimated Cost and Performance Characteristics

Option	Net Output (Summer MW)	Installed Capital Cost (2017 \$/kW-yr) ¹	Fixed O&M (2017 \$/kW-yr)	Non-Fuel Variable O&M (2017 \$/MWh)	Full Load Net Plant Heat Rate (Btu/kWh, HHV)
Jenbacher	12.6	\$62.60	\$0 - Use Existing Staff	\$27.93 per operating hour	9,160
GE-10 Turbines	44	\$35.80	\$0 - Use Existing Staff	\$27.93 per operating hour	12,090
LM6000 Combined Cycle (PPA)	190	PPA -\$102.00 (capacity payment)	\$44.50 (2020 \$)	\$4.00/MWh (2020 \$)	7,400
Endicott Repowering (PPA)	100	PPA - \$75.40 (capacity payment)	\$30.70 (2019 \$)	\$3.88/MWh (2019 \$)	7,200
7FA Simple Cycle	200	\$46.50	\$7.20	\$16.80	10,200
1x1 7FA Combined Cycle	300	\$82.25	\$10.90	\$3.95	6,750
2x1 7FA Combined Cycle	600	\$66.20	\$7.30	\$3.95	6,700
1x1 Advanced Class Combined Cycle	365	\$73.90	\$9.05	\$3.95	6,550
2x1 Advanced Class Combined Cycle	725	\$59.60	\$5.90	\$3.95	6,500
Small Modular Reactor	570	NuScale presentation material - all-in cost of approximately \$100/MWh including capital cost			
Wind (PPA)	20	All-in cost of \$40/MWh			
Solar PV (PPA)	10.0	All-In Cost of \$33/MWh (initial year, plus 0.5% annual degradation thereafter)			
LFG	3	\$163.90	\$205	Included in Fixed O&M	N/A - assume LFG is supplied at no cost
Biomass	50	\$234.80	\$114	\$5.70	13,500

(1). Installed capital cost per kW-yr reflects capital recovery factor applied to estimated capital cost per kW for all options except the LM6000 Combined Cycle (PPA) and Endicott Repowering (PPA). For PPA options, the capacity payments are expressed in \$/kW-yr.

7.2 Supply-Side Screening

In order to compare the economics of the supply-side options discussed previously, a levelized cost of energy (LCOE) screening analysis was performed. The LCOE compares the estimated all-in, life-cycle costs of each alternative on a cost per unit of energy basis (for this Study, in dollars per MWh) across a range of possible capacity factors. The LCOE analysis illustrates the potential economies of scale that MSCPA may be able to realize if it were able to obtain a share of a larger generating unit (i.e., through a power purchase agreement or ownership through participation in a development partnership with other entities). The LCOE analysis also provides insights into the cost of renewable energy technologies relative to the costs of natural gas-fired generating technologies. Additionally, the LCOE is a useful screening mechanism that reduces the number of options considered in the detailed economic evaluations discussed in Section 8 of this Study.

The remainder of this section provides a description of the LCOE approach, presents and discusses the results of the LCOE analysis, and discusses some emerging technologies that MSCPA may want to be aware of for future power supply studies.

7.2.1 Approach

The LCOE analysis considered capital costs, operating costs, and fuel costs (as appropriate for each supply-side option; as an example, evaluation of a power purchase agreement would not have a capital cost component) and expresses the total annual cost and corresponding energy generation on a nominal (current year) and present value basis. The cumulative present value costs are divided by the sum of the annual present worth factors to calculate the lifecycle levelized cost of energy for each option. Such an approach is widely used in comparing the relative economics of various supply-side options to determine if one (or more) option may be consistently more costly than the others across a range of possible capacity factors, allowing an initial list of supply-side options to be reduced to a smaller number to be considered in subsequent evaluations.

The LCOE calculations reflect the following assumptions:

- Escalation rates, inflation rates, and present worth discount rates provided by MSCPA.
- Fuel prices consistent with those presented in Section 3 of this Study.
- Capital recovery factor (CRF) based on 30-year financing terms (only applicable to options that are shown in Table 7-1 as having a capital cost component)
- Ranges of capacity factors from 5 percent to 90 percent, in 5 percent increments, with the following exceptions:
 - Solar PV – only evaluated capacity factor of approximately 20 percent, to reflect expected capacity factor for a solar PV resource.
 - Wind – only evaluated capacity factor of 42 percent, to reflect expected capacity factor for a wind resource.
 - LFG – only evaluated capacity factor of 85 percent, to reflect expected availability of a LFG resource that operates at full load whenever available.
 - SMR - only evaluated capacity factor of 90 percent, to reflect expected availability of a nuclear resource that operates at full load whenever available.
- Natural gas options include an interruptible natural gas delivery fee of \$0.70/MMBtu (escalating at 1.0 percent annually); this assumption is discussed in more detail in Section 8.0 of this Study.

7.2.2 Results

Table 7-2 presents a sample LCOE calculation, based on the cost and performance characteristics for the 2x1 advanced class combined cycle shown in Table 7-1. The sample calculation represents the LCOE over a 20-year period at a 65 percent capacity factor (i.e. the unit is represented to operate at full load for 65 percent of the hours of the year, or approximately 5,700 hours per year). As shown in Table 7-2, the LCOE for the 2x1 advanced class combined cycle is calculated as \$46.12/MWh at a 65 percent capacity factor.

Similar calculations were performed for the other supply-side options across the range of capacity factors discussed previously to allow for comparisons of the economics of each option. The results of the LCOE analysis for all supply-side options considered are presented in a tabular format in Table 7-3, and graphically in Figures 7-1 through 7-3. Highlighting in Table 7-3 identifies the most economic options at various capacity factors.

Analysis of Table 7-3 (as illustrated in Figures 7-1 through 7-3) indicates the following:

- The GE-10 turbines represent the least-cost natural gas-fired generating option at low capacity factors (i.e. less than 20 percent). At capacity factors below 20 percent, the relatively low capital cost of the GE-10 turbines offsets the relatively high heat rate. Compared to other peaking resources (i.e. simple cycle turbines at low capacity factors), the GE-10 is consistently lower in LCOE and is therefore the only peaking option carried forward to the detailed economic evaluations discussed in Section 8.0 of this Study.
- At their expected capacity factors, solar PV and wind look like they may be economical resources for MSCPA and its Members to consider. These resources were not the focus of this Study, as they are not fully dispatchable and they do not provide firm capacity at the time of MSCPA's system peak demand. Given the economics, solar PV and wind may warrant further evaluations (possibly through a request for proposals, or RFP, process). It should be noted that the economics of solar PV and wind are dependent on scale (i.e. a 10 MW AC solar PV project would likely have different costs than a 1 MW AC solar PV project), equipment selection, siting, transmission factors, and tax credits that may be available to project developers. As an illustration of the possible variation in economics between projects, MSCPA provided information it received as this Study was being finalized that offered pricing in the range of \$55/MWh based on a 50 MW (AC), which despite its scale is significantly higher than cost of solar PV reflected in this Study.
- Compared to other intermediate and baseload options, such as the Endicott repowering, the LM6000 combined cycle, 1x1 combined cycles, LFG, biomass, and SMR nuclear, the 2x1 combined cycles are lower in LCOE at capacity factors of 25 percent and higher. The 2x1 advanced class combined cycle is lower in LCOE than the 2x1 7FA combined cycle at all capacity factors considered. As a result, the 2x1 advanced class combined cycle is the only intermediate/baseload option carried forward to the detailed economic evaluations discussed in Section 8.0 of this Study. It should be noted that the relative size and associated capital cost of a 2x1 advanced class combined cycle (or, for that matter, any of the combined cycles evaluated in this Study) precludes it from being a viable stand-alone option for MSCPA. Instead, MSCPA would likely need to be a minority equity participant or enter into a power purchase agreement for a share of such a unit in order to capitalize on the economies of scale and obtain an appropriate amount of capacity from a combined cycle (similar to MSCPA's participation in the AMP Fremont Energy Center). These considerations are discussed in more detail in Section 8.0 of this Study.

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Table 7-2: Sample LCOE Calculation for 2x1 Advanced Class Combined Cycle

Levelized Cost of Energy (LCOE) Analysis												
Generator Description, Capital Cost, and Performance			2x1 Advanced CC O&M, Fuel, and Financing		Base Year	Escalation	Comments					
Net Output (kW)			725,000	Non-Fuel Variable O&M (\$/MWh)		\$3.95	3.0%					
Capital Cost (\$000)			\$725,000	Fixed O&M (\$/kW-Yr)		\$5.90	3.0%					
Net Plant Heat Rate (Btu/kWh, HHV)			6,500	Natural Gas Price (\$/MMBtu)		\$3.67	Varies					
Capacity Factor			65.0%	Present Worth Discount Rate		4.25%	N/A					
Net Generation (MWh)			4,128,150	Capital Recovery Factor		5.96%	N/A					
Year	Levelized Capital Cost (\$000)	Fixed O&M (\$000)	Non-Fuel Variable O&M (\$000)	Natural Gas Price (\$/MMBtu)	Interruptible Natural Gas Fee (\$/MMBtu)	Natural Gas Cost (\$000)	Other (\$000)	Other (\$000)	Total Cost (\$000)	Total Cost (c/kWh)	Present Worth Cost (c/kWh)	
2017	\$43,209	\$4,278	\$16,306	\$3.67	\$0.70	\$117,215	\$0	\$0	\$181,008	4.38	4.21	
2018	\$43,209	\$4,406	\$16,795	\$3.12	\$0.71	\$102,587	\$0	\$0	\$166,997	4.05	3.72	
2019	\$43,209	\$4,538	\$17,299	\$2.83	\$0.71	\$95,189	\$0	\$0	\$160,235	3.88	3.43	
2020	\$43,209	\$4,674	\$17,818	\$2.85	\$0.72	\$95,855	\$0	\$0	\$161,556	3.91	3.31	
2021	\$43,209	\$4,814	\$18,353	\$2.91	\$0.73	\$97,675	\$0	\$0	\$164,051	3.97	3.23	
2022	\$43,209	\$4,959	\$18,903	\$3.00	\$0.74	\$100,256	\$0	\$0	\$167,327	4.05	3.16	
2023	\$43,209	\$5,108	\$19,470	\$3.13	\$0.74	\$104,056	\$0	\$0	\$171,843	4.16	3.11	
2024	\$43,209	\$5,261	\$20,055	\$3.32	\$0.75	\$109,193	\$0	\$0	\$177,717	4.31	3.09	
2025	\$43,209	\$5,419	\$20,656	\$3.50	\$0.76	\$114,231	\$0	\$0	\$183,515	4.45	3.06	
2026	\$43,209	\$5,581	\$21,276	\$3.68	\$0.77	\$119,309	\$0	\$0	\$189,375	4.59	3.03	
2027	\$43,209	\$5,749	\$21,914	\$3.87	\$0.77	\$124,523	\$0	\$0	\$195,395	4.73	2.99	
2028	\$43,209	\$5,921	\$22,572	\$4.05	\$0.78	\$129,707	\$0	\$0	\$201,408	4.88	2.96	
2029	\$43,209	\$6,099	\$23,249	\$4.24	\$0.79	\$135,029	\$0	\$0	\$207,585	5.03	2.93	
2030	\$43,209	\$6,282	\$23,946	\$4.34	\$0.80	\$137,950	\$0	\$0	\$211,386	5.12	2.86	
2031	\$43,209	\$6,470	\$24,665	\$4.50	\$0.80	\$142,381	\$0	\$0	\$216,724	5.25	2.81	
2032	\$43,209	\$6,664	\$25,405	\$4.74	\$0.81	\$148,996	\$0	\$0	\$224,274	5.43	2.79	
2033	\$43,209	\$6,864	\$26,167	\$4.93	\$0.82	\$154,224	\$0	\$0	\$230,464	5.58	2.75	
2034	\$43,209	\$7,070	\$26,952	\$5.07	\$0.83	\$158,262	\$0	\$0	\$235,492	5.70	2.70	
2035	\$43,209	\$7,282	\$27,760	\$5.16	\$0.84	\$160,957	\$0	\$0	\$239,208	5.79	2.63	
2036	\$43,209	\$7,501	\$28,593	\$5.28	\$0.85	\$164,370	\$0	\$0	\$243,672	5.90	2.57	
Levelized Cost of Energy (c/kWh)										4.61		
Levelized Cost of Energy (\$/MWh)										46.12		

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Table 7-3: Summary of LCOE Analysis

Option	LCOE (\$/MWh)																	
	5%	10%	15%	20%	25%	30%	35%	40%	45%	50%	55%	60%	65%	70%	75%	80%	85%	90%
Jenbachers	\$186	\$115	\$91	\$79	\$72	\$67	\$64	\$61	\$59	\$58	\$56	\$55	\$54	\$54	\$53	\$52	\$52	\$51
GE-10 Turbines	\$137	\$96	\$82	\$75	\$71	\$69	\$67	\$65	\$64	\$63	\$62	\$62	\$61	\$61	\$60	\$60	\$60	\$60
Endicott Repowering (PPA)	\$195	\$131	\$110	\$99	\$93	\$89	\$86	\$83	\$82	\$80	\$79	\$78	\$77	\$77	\$76	\$75	\$75	\$75
Solar PV (PPA)				\$34														
LM6000 Combined Cycle	\$294	\$166	\$123	\$101	\$89	\$80	\$74	\$69	\$66	\$63	\$60	\$59	\$57	\$55	\$54	\$53	\$52	\$51
7FA Simple Cycle	\$391	\$214	\$156	\$126	\$109	\$97	\$88	\$82	\$77	\$73	\$70	\$67	\$65	\$63	\$62	\$60	\$59	\$58
1x1 7FA Combined Cycle	\$255	\$145	\$109	\$90	\$79	\$72	\$67	\$63	\$60	\$57	\$55	\$54	\$52	\$51	\$50	\$49	\$48	\$48
2x1 7FA Combined Cycle	\$208	\$121	\$93	\$78	\$70	\$64	\$60	\$57	\$54	\$52	\$51	\$50	\$48	\$48	\$47	\$46	\$45	\$45
1x1 Advanced Class Combined Cycle	\$230	\$132	\$100	\$83	\$74	\$67	\$62	\$59	\$56	\$54	\$52	\$51	\$50	\$49	\$48	\$47	\$46	\$45
2x1 Advanced Class Combined Cycle	\$188	\$111	\$85	\$73	\$65	\$60	\$56	\$54	\$51	\$50	\$48	\$47	\$46	\$45	\$45	\$44	\$43	\$43
Wind (PPA)								\$40										
LFG																		\$58
Biomass	\$923	\$487	\$342	\$269	\$225	\$196	\$175	\$160	\$148	\$138	\$130	\$124	\$118	\$113	\$109	\$105	\$102	\$99
SMR																		\$96

Note: Green highlighting represents option with lowest LCOE at a given capacity factor. Yellow highlighting represents option with second lowest LCOE at a given capacity factor.

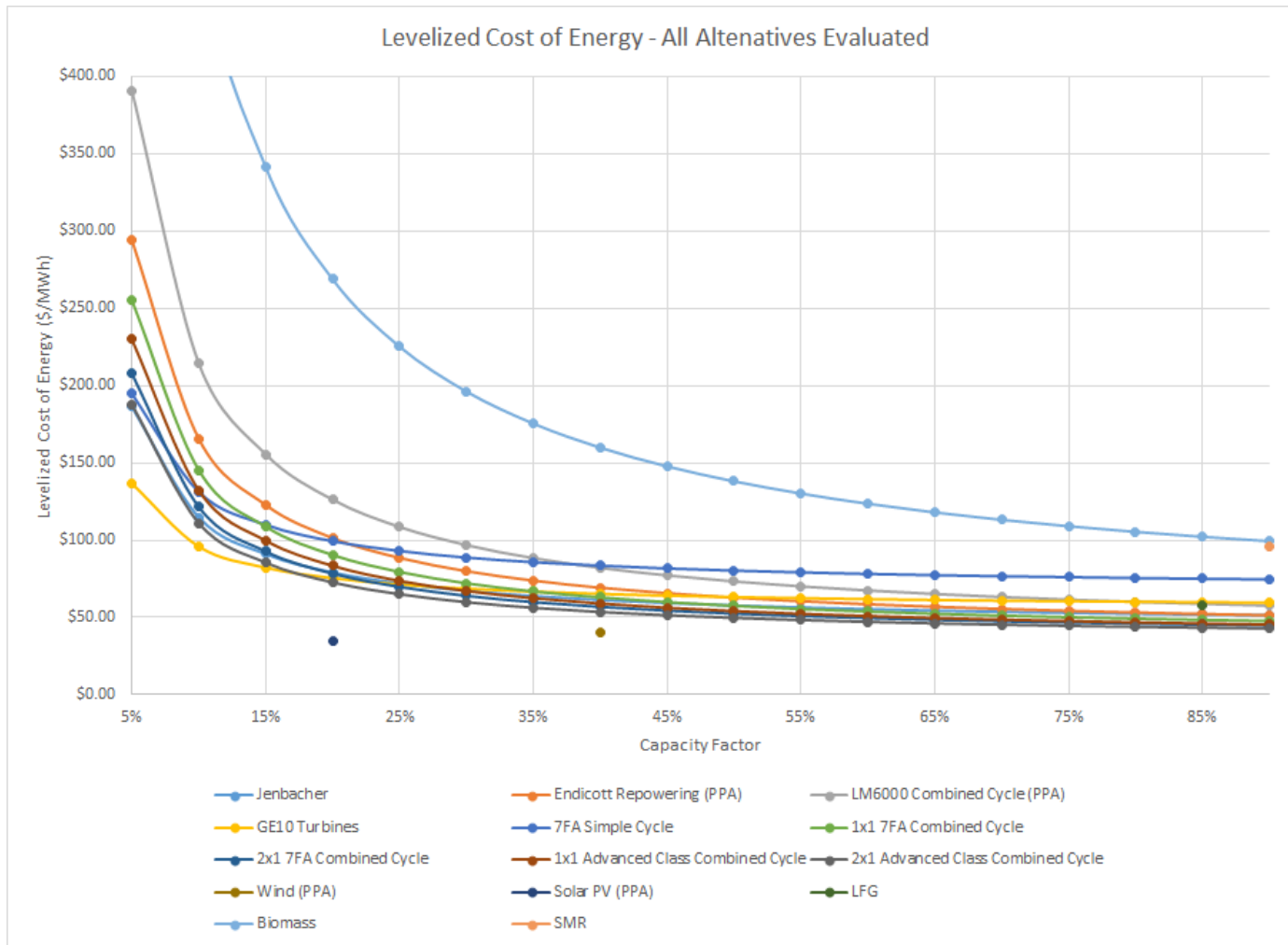


Figure 7-1: LCOE Results – All Options Considered

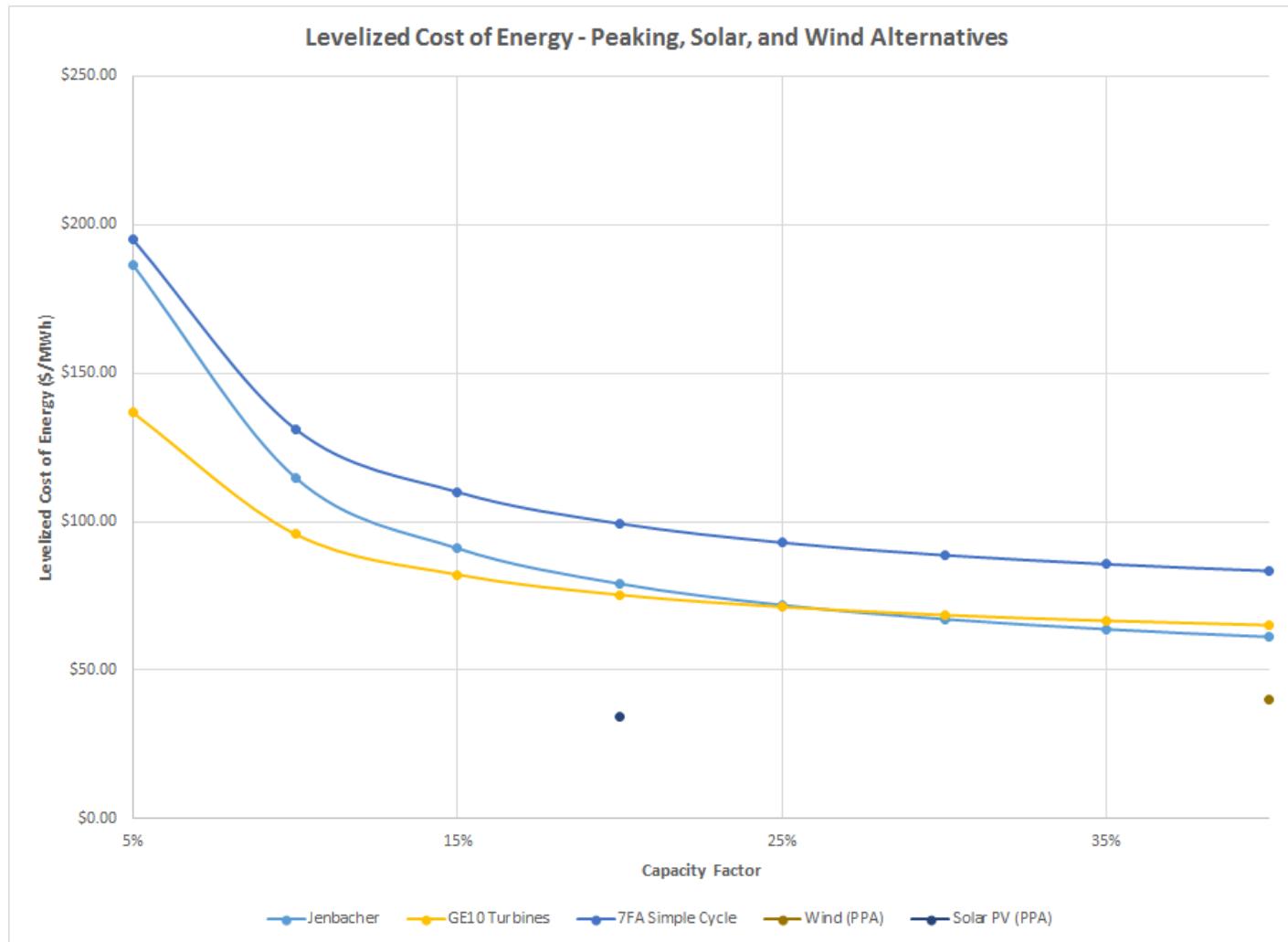


Figure 7-2: LCOE Results – Peaking, Solar, and Wind Options

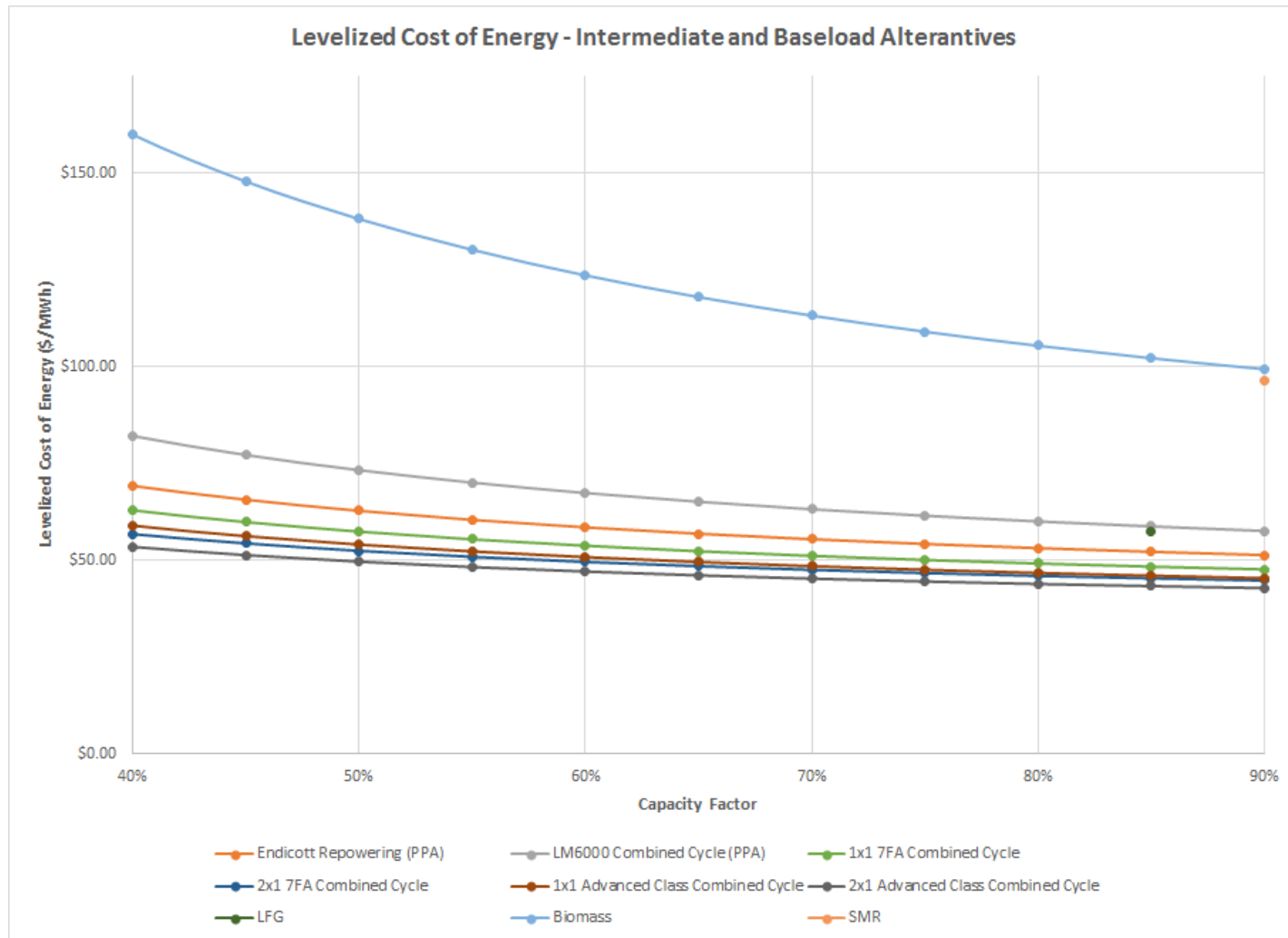


Figure 7-3: LCOE Results – Intermediate and Baseload Options

7.3 Discussion of Emerging Technologies

Although not considered in this Study, there are several power generating technologies that MSCPA may want to consider in future planning studies. High-level descriptions and cost information is presented below for the following technologies:

- Utility-scale solar PV with storage
- Distributed solar PV (residential and commercial)
- Concentrated solar power (CSP)
- Fuel cells

7.3.1 Utility-Scale Solar PV with Storage

The addition of a storage system to a solar PV installation can provide for various durations of energy generation at times when the PV system is not otherwise producing energy (or production is limited). The capacity of the energy storage system, duration of storage, and number of discharge cycles are all project-specific design criteria that may vary by project. However, for informational purposes a 50 MW solar PV installation with a battery storage system providing for 25 MW of capacity for a 2-hour duration may add an additional \$10/kW-month to the cost of a solar PV system without storage.

7.3.2 Distributed Solar PV (Residential and Commercial)

The solar PV option characterized in Table 7-1 is based on the AMP Solar project in Coldwater. Smaller scale distributed generation solar PV installations (i.e. for residential and commercial customers) would typically result in increased costs as compared to utility scale solar PV projects. Based on information available on the National Renewable Energy Laboratories (NREL) website, the LCOE for distributed residential solar PV may be approximately twice that of utility scale solar PV, while the LCOE of distributed commercial solar PV may be approximately 80 percent higher than that of utility scale PV³.

7.3.3 Concentrated Solar Power (CSP)

Concentrating solar power (CSP) generates electricity by using mirrors to reflect the sun to a concentrated point in order to generate steam for use in a steam turbine. According to the Solar Energy Industries Association, CSP facilities are most economic for capacities of 100 MW or greater, and a typical CSP facility requires between 5 to 10 acres of land per MW. CSP facilities can store solar energy for use when needed, offering a level of dispatchability; the economics of CSP are dependent upon the duration of thermal energy storage incorporated into the system.

7.3.4 Fuel Cells

Fuel cells convert fuel directly into electricity without a combustion process, and can operate on a number of different fuels (including hydrogen and natural gas). Fuel cells are currently cost prohibitive for power generation applications, with some estimates putting costs in a range of \$4,000/kW to more than \$20,000/kW⁴.

³ http://www.nrel.gov/analysis/data_tech_baseline.html. Relative economics stated are high level calculations based on NREL estimates of LCOE for utility scale, residential scale, and commercial scale.

⁴ https://energy.gov/sites/prod/files/2016/10/f33/fcto_myrrdd_fuel_cells.pdf.

8.0 EVALUATIONS OF ALTERNATIVE RESOURCE PLANS

nFront performed production cost analyses in order to evaluate different future plans that satisfy MSCPA's projected capacity and energy requirements over the 2017 through 2036 study period. Economic evaluations of the various plans were performed utilizing a cumulative present worth costs (CPWC) approach; such an approach allows for insight into the effect of variations on system costs, the timeframe in which such effects materialize, and recommendations of the optimal expansion plan to satisfy Client's projected system needs over the study period. As discussed in Section 7.0 of this Study, the LCOE screening analysis indicated that one peaking option (the GE-10 turbines) and one intermediate/baseload option (the 2x1 advanced class combined cycle) were carried forward to the production cost analyses. The units are assumed to be located in Michigan and therefore contribute to MSCPA's capacity for purposes of reserve margins.

The production cost analyses was performed using PROMOD™, an industry-accepted model licensed through ABB (formerly Ventyx). PROMOD™ performs an optimized hourly simulation of generation commitment and dispatch and market transactions, based on an hourly depiction of utility loads and all generating unit characteristics (e.g., capacity ratings, heat rate curves, availability, and minimum run time requirements), and considering system reliability and minimum reserve requirements.

The remainder of this section is organized as follows:

- Discussion of assumptions and considerations reflected in the production cost analyses
- Discussion of alternative resource plans and scenarios evaluated
- Presentation of Results
- Discussion of Results

8.1 ASSUMPTIONS AND CONSIDERATIONS

The economic evaluations performed for this Study and discussed in this section consider MSCPA's existing generating resources (as summarized in Section 2.0 of this Study), the load forecast (as summarized in Section 3.0 of this Study), projected capacity requirements (as discussed in Section 4.0 of this Study), fuel and market power prices (as discussed in Section 5.0 of this Study), and the addition of new simple and combined cycle generating units (as discussed in Section 7.0 of this Study). The following assumptions and considerations were also reflected in the economic evaluations.

8.1.1 Debt Service and Fixed O&M for Existing Generating Units

MSCPA provided debt service costs and fixed O&M costs for existing generating units. Although these types of costs are often considered as "sunk costs" that have no impact on comparative economics in evaluations in which there are no changes to existing units, the costs were explicitly considered in this Study for two reasons. First, these costs were considered to allow for a more comprehensive estimate of system costs over the study period. Second, these costs were included as doing so would allow for economic comparisons of expansion plans that reflect MSCPA potentially selling its ownership shares in certain units (i.e. AFEC and Prairie State). The annual debt service and fixed O&M costs provided by MSCPA for use in this Study are shown in Table 8-1. It should be noted that debt service costs were held constant for all years of the study period, while fixed O&M costs were escalated at 3 percent annually. Further, debt service requirements for Project 4 through 2030, while debt service for all other existing generating units were considered the 2036 study period.

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Table 8-1: Debt Service and Fixed O&M for Existing Generating Units

Unit	Annual Debt Service	Annual Fixed O&M
Prairie State	\$2,857,695	\$1,637,751
AFEC	\$2,639,546	\$2,070,861
AMP Hydro 1	\$9,773,657	\$551,200
AMP Meldahl	\$1,349,236	\$163,955
AMP Greenup	\$434,252	\$180,452
AMP Solar	\$153,791	See Note (1)
Project 4	\$1,260,000	\$324,000
Total	\$18,468,178	\$4,928,218
(1). AMP has not assigned a specific demand charge to this project to date.		

8.1.2 Transmission Service Costs

Similar to the debt service and fixed O&M costs for existing units discussed previously, costs for transmission service are often considered as “sunk costs” that have no impact on comparative economics. However, the costs were explicitly considered in this Study to allow for a more comprehensive estimate of system costs over the study period. MSCPA provided analysis of recent historical costs, which was used by nFront as the basis for estimating transmission costs based on projected loads. The annual transmission costs reflected in this Study are shown in Table 8-2.

Table 8-2: Annual Transmission Service Costs

Year	Schedule 26A	DECO	CONS	Total
2017	\$1,122,358	\$142,186	\$2,804,794	\$4,069,338
2018	\$1,186,937	\$144,340	\$3,077,771	\$4,409,048
2019	\$1,197,926	\$145,920	\$3,142,902	\$4,486,749
2020	\$1,220,051	\$146,972	\$3,214,705	\$4,581,728
2021	\$1,258,002	\$148,638	\$3,429,389	\$4,836,029
2022	\$1,269,090	\$149,840	\$3,495,415	\$4,914,346
2023	\$1,280,568	\$151,051	\$3,567,347	\$4,998,966
2024	\$1,292,282	\$151,884	\$3,619,707	\$5,063,873
2025	\$1,304,345	\$153,545	\$3,716,452	\$5,174,342
2026	\$1,316,431	\$154,787	\$3,792,266	\$5,263,484
2027	\$1,328,047	\$155,959	\$3,865,147	\$5,349,153
2028	\$1,339,241	\$156,647	\$3,913,586	\$5,409,474
2029	\$1,350,189	\$158,112	\$4,004,159	\$5,512,460
2030	\$1,360,683	\$159,109	\$4,070,056	\$5,589,847
2031	\$1,370,506	\$160,010	\$4,131,821	\$5,662,337
2032	\$1,379,729	\$160,427	\$4,167,364	\$5,707,521
2033	\$1,388,680	\$161,666	\$4,246,165	\$5,796,512
2034	\$1,397,745	\$162,503	\$4,303,230	\$5,863,478
2035	\$1,407,124	\$163,397	\$4,362,211	\$5,932,732
2036	\$1,416,516	\$163,856	\$4,398,201	\$5,978,573

8.1.3 Natural Gas Reservation Charges

As discussed in Section 7.0, the natural gas options included in the LCOE screening analysis included an adder of \$0.70/MMBtu (in 2017 dollars, escalating at 1.0 percent annually) to represent interruptible (non-firm) natural gas delivery charges. For peaking options (i.e. options expected to operate at low capacity factors, such as the Jenbacher, GE-10 turbines, and simple cycle 7FA options), it would not be economical to reserve a large quantity of firm natural gas if relatively little natural gas is utilized. In addition, MSCPA has indicated that availability of natural gas has not been a concern historically. However, the inherent assumption is that natural gas delivery would not be interrupted when the units are dispatched, which would likely be at times of peak demand and the electric and natural gas system. For intermediate or baseload units, such as the combined cycle options, it may not be prudent to assume interruptible gas operation.

In order to test the impact of natural gas delivery costs on the economics of competing expansion plans, a scenario was evaluated in which the combined cycle option was assumed to incur firm natural gas reservation charges based on annual natural gas required to operate at a 90 percent annual capacity factor. The firm natural gas reservation fee was assumed to be \$1/MMBtu in 2017, escalating at 3.0 percent annually.

8.1.3 Capital Cost Escalation and Interest During Construction

The estimated capital costs of the supply-side options presented and evaluated in Section 7.0 of this Study represent a 2017 dollar basis. Although the estimated capital costs include consideration of equipment and construction costs, as well as additional costs necessary to construct the units (often referred to as owner's costs), the estimated capital costs did not include consideration of escalation or interest during construction to adjust costs from a 2017 dollar basis to the installed year basis. MSCPA provided suggested capital cost (4.0 percent) and interest during construction (2.75 percent for capital costs less than \$20 million, and 4.25 percent for capital investments greater than \$20 million) rates for use in this Study, and these rates were used to developed estimated capital costs on an installed-year basis in the economic evaluations discussed in this section.

8.1.4 MISO Capacity Auction Prices

Section 4.0 of this Study discusses MSCPA's projected need for capacity and its ability to satisfy capacity requirements through a combination of in-State generating units and capacity credits purchased through the annual MISO Planning Reserve Auction (PRA). Historical capacity prices for MISO Zone 7 are presented in Table 8-3 and have varied significantly over the last 6 years.

Table 8-3: Historical MISO Zone 7 Capacity Prices

Year	\$/MW-Day	\$/kW-Mo
2013	1.05	0.03
2014	16.75	0.51
2015	3.48	0.11
2016	72.00	2.19
2017	1.50	0.05

Given the significant variation in historical capacity prices, three different scenarios were evaluated in the economic analysis performed for this Study:

- Capacity prices start at \$4/kW-Mo and escalate at 3.0 percent annually (based on the assumption when this Study commenced that future prices would be higher than 2016 prices)
- Capacity prices start at \$2/kW-Mo and escalate at 3.0 percent annually (based on the assumption that future prices would be consistent with 2016 prices)
- Capacity prices start at \$0.05/kW-Mo and escalate at 3.0 percent annually (based on 2017 actual prices)

8.2 ALTERNATIVE RESOURCE PLANS AND SCENARIOS

Several different resource plans were evaluated under different scenarios to provide MSCPA with insight into how the relative economics of competing expansion plans may be affected by changes to modeling assumptions. The expansion plans evaluated consist of the following (note that not all expansion plans were evaluated in every scenario):

- Reference Case – existing MSCPA generating system with no new unit additions; MSCPA’s projected capacity requirements shown in Table 4-1 are met by purchasing capacity credits.
- Case 1 – addition of 44 MW of GE-10 turbines in 2019 and a 50 MW share of an advanced class 2x1 combined cycle in 2021; remaining projected capacity requirements are met by purchasing capacity credits.
- Case 2 – addition of 44 MW of GE-10 turbines in 2019; remaining projected capacity requirements are met by purchasing capacity credits.
- Case 2A – addition of 66 MW of GE-10 turbines in 2019; remaining projected capacity requirements are met by purchasing capacity credits through the MISO PRA (only considered under Scenario 3 as described below).
- Case 3 – addition of 44 MW of GE-10 turbines in 2019 and a 100 MW share of an advanced class 2x1 combined cycle in 2021; remaining projected capacity requirements are met by purchasing capacity credits through the MISO PRA.
- Case 4 – Endicott Repowering PPA in 2019; remaining projected capacity requirements are met by purchasing capacity credits through the MISO PRA (only considered under Scenario 1 as described below).

Table 8-4 presents a summary of the different scenarios evaluated in this Study. The scenarios were developed in order to evaluate the following:

- Variations MISO capacity auction prices (3 scenarios)
- MSCPA selling its ownership share in AFEC
- MSCPA selling its ownership share in Prairie State
- Variations to natural gas transportation costs
- Inability to sell excess energy into the market when economic

Table 8-4: Scenarios Considered

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Scenario Number	Market Sales	Market Purchases	Changes to Existing Units	Initial MISO Capacity Auction Price (2017\$, 3% escalation)	Natural Gas Transportation for New Combined Cycle
1	Y	Y	None	\$4/kW-Mo	Interruptible (\$0.70/MMBtu in 2017\$, escalating at 1%)
2	Y	Y	None	\$0.05/kW-Mo	Interruptible (\$0.70/MMBtu in 2017\$, escalating at 1%)
3	Y	Y	AFEC Sold	\$4/kW-Mo	Interruptible (\$0.70/MMBtu in 2017\$, escalating at 1%)
4	Y	Y	Prairie State Sold	\$4/kW-Mo	Interruptible (\$0.70/MMBtu in 2017\$, escalating at 1%)
5	Y	Y	None	\$4/kW-Mo	Firm (\$1/MMBtu in 2017\$, escalating at 3%, 90% capacity factor)
6	N	Y	None	\$4/kW-Mo	Interruptible (\$0.70/MMBtu in 2017\$, escalating at 1%)
7	Y	Y	None	\$2/kW-Mo	Interruptible (\$0.70/MMBtu in 2017\$, escalating at 1%)

8.3 RESULTS OF THE PRODUCTION COST ANALYSES

As discussed previously, the economic evaluations were performed using a CPWC approach, which took into consideration MSCPA’s annual system costs (including fuel costs, energy costs, debt service and fixed O&M for existing units, debt service and fixed O&M for new units, costs for MISO capacity credits and transmission costs. For each case evaluated under each scenario, these costs were determined for each year of the Study period (2017 through 2036), with annual costs discounted back to 2017 dollars and present value costs then aggregated over the 20 year period. The cumulative presents worth costs for the cases can then be compared within and across scenarios. Table 8-5 presents a sample CPWC calculation (for Case 1 in Scenario 1), while Table 8-6 presents a summary of the CPWCs and relative cost comparisons of the various cases and scenarios). The highlighted rows in Table 8-5 indicate the expansion plan (case) with the lowest CPWC within a given scenario, and the CPWC comparisons shown in Table 8-6 reflect the relative economics of expansion plans within that scenario.

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Table 8-5: CPWC Calculation – Scenario 1, Case 1

Year	System Production Costs (\$000)	AMP Solar PPA (\$000)	PPA Energy Costs (\$000)	Market Purchases (\$000)	Market Sales (\$000)	Capital Costs for New Unit Additions (\$000)	Fixed O&M for New Unit Additions (\$000)	Debt Service for Existing Units (\$000)	Fixed O&M for Existing Units (\$000)	System Transmission Costs (\$000)	MISO Capacity Auction Costs (\$000)	Total Annual System Cost (\$000)	Total Present Worth of Annual System Costs (\$000)	Cumulative Present Worth of Annual System Costs (\$000)
2017	\$8,707	\$69	\$0	\$11,303	(\$163)	\$0	\$0	\$18,468	\$4,928	\$4,069	\$5,627	\$53,009	\$50,848	\$50,848
2018	\$9,843	\$69	\$3,798	\$7,278	(\$1,074)	\$0	\$0	\$18,468	\$5,076	\$4,409	\$6,186	\$54,054	\$49,737	\$100,585
2019	\$10,815	\$69	\$3,798	\$6,119	(\$1,137)	\$1,669	\$0	\$18,468	\$5,228	\$4,487	\$4,216	\$53,733	\$47,425	\$148,010
2020	\$11,398	\$69	\$3,813	\$6,211	(\$1,160)	\$1,669	\$0	\$18,468	\$5,385	\$4,582	\$4,428	\$54,863	\$46,448	\$194,459
2021	\$22,220	\$69	\$2,378	\$1,486	(\$7,159)	\$5,155	\$332	\$18,468	\$5,547	\$4,836	\$2,145	\$55,477	\$45,054	\$239,513
2022	\$23,083	\$69	\$2,369	\$1,667	(\$7,423)	\$5,155	\$342	\$18,468	\$5,713	\$4,914	\$2,299	\$56,658	\$44,137	\$283,650
2023	\$23,565	\$69	\$2,369	\$1,770	(\$7,039)	\$5,155	\$352	\$18,468	\$5,885	\$4,999	\$2,464	\$58,058	\$43,384	\$327,034
2024	\$22,495	\$69	\$2,387	\$3,044	(\$6,021)	\$5,155	\$363	\$18,468	\$6,061	\$5,064	\$2,638	\$59,723	\$42,809	\$369,843
2025	\$22,983	\$69	\$2,378	\$3,635	(\$5,934)	\$5,155	\$374	\$18,468	\$6,243	\$5,174	\$2,824	\$61,370	\$42,196	\$412,040
2026	\$23,971	\$69	\$871	\$4,449	(\$4,681)	\$5,155	\$385	\$18,468	\$6,430	\$5,263	\$3,019	\$63,399	\$41,814	\$453,854
2027	\$24,133	\$69	\$871	\$5,108	(\$4,225)	\$5,155	\$396	\$18,468	\$6,623	\$5,349	\$3,218	\$65,166	\$41,227	\$495,081
2028	\$24,281	\$69	\$867	\$6,041	(\$4,078)	\$5,155	\$408	\$18,468	\$6,822	\$5,409	\$3,423	\$66,867	\$40,579	\$535,660
2029	\$24,810	\$69	\$871	\$6,599	(\$3,856)	\$5,155	\$421	\$18,468	\$7,026	\$5,512	\$3,634	\$68,710	\$39,997	\$575,657
2030	\$25,239	\$69	\$871	\$6,979	(\$3,607)	\$5,155	\$433	\$18,468	\$7,237	\$5,590	\$3,850	\$70,284	\$39,245	\$614,903
2031	\$26,235	\$69	\$0	\$7,804	(\$3,190)	\$5,155	\$446	\$17,208	\$7,454	\$5,662	\$4,068	\$70,912	\$37,982	\$652,885
2032	\$27,450	\$69	\$0	\$8,089	(\$3,095)	\$5,155	\$460	\$17,208	\$7,678	\$5,708	\$4,290	\$73,012	\$37,513	\$690,398
2033	\$28,891	\$69	\$0	\$8,936	(\$3,255)	\$5,155	\$473	\$17,208	\$7,908	\$5,797	\$4,673	\$75,856	\$37,385	\$727,782
2034	\$29,827	\$69	\$0	\$10,111	(\$2,884)	\$5,155	\$488	\$17,208	\$8,146	\$5,863	\$5,037	\$79,020	\$37,356	\$765,139
2035	\$30,322	\$69	\$0	\$10,628	(\$2,673)	\$5,155	\$502	\$17,208	\$8,390	\$5,933	\$5,300	\$80,835	\$36,657	\$801,796
2036	\$32,272	\$69	\$0	\$10,417	(\$3,149)	\$5,155	\$517	\$17,208	\$8,642	\$5,979	\$5,574	\$82,683	\$35,966	\$837,762

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Table 8-6: CPWC Comparisons for All Cases and Scenarios

Scenario	Case No.	Case Description	CPWC (\$000)	CPWC Difference vs Least Cost Case	
				(\$000)	%
1	Reference Case	No Capacity Additions	\$870,780	\$51,476	6.3%
1	1	GE10 Turbines (44 MW) in 2019, followed by 50 MW share of 2x1 Advanced CC in 2021	\$837,762	\$18,458	2.3%
1	2	GE10 Turbines (44 MW) in 2019, no other unit additions	\$857,643	\$38,339	4.7%
1	3	GE10 Turbines (44 MW) in 2019, followed by 100 MW share of 2x1 Advanced CC in 2021	\$819,304	N/A	N/A
1	4	Innerpoint (100 MW) in 2019, no other capacity additions	\$885,869	\$66,565	8.1%
2	Reference Case	No Capacity Additions	\$755,771	N/A	N/A
2	1	GE10 Turbines (44 MW) in 2019, followed by 50 MW share of 2x1 Advanced CC in 2021	\$786,324	\$30,552	4.0%
2	2	GE10 Turbines (44 MW) in 2019, no other unit additions	\$774,458	\$18,687	2.5%
2	3	GE10 Turbines (44 MW) in 2019, followed by 100 MW share of 2x1 Advanced CC in 2021	\$798,051	\$42,279	5.6%
3	Reference Case	No Capacity Additions	\$818,879	\$51,476	6.7%
3	1	GE10 Turbines (44 MW) in 2019, followed by 50 MW share of 2x1 Advanced CC in 2021	\$785,861	\$18,458	2.4%
3	2	GE10 Turbines (44 MW) in 2019, no other unit additions	\$805,743	\$38,339	5.0%
3	2A	GE10 Turbines (66 MW) in 2019, no other unit additions	\$799,174	\$31,771	4.1%
3	3	GE10 Turbines (44 MW) in 2019, followed by 100 MW share of 2x1 Advanced CC in 2021	\$767,403	N/A	N/A
4	Reference Case	No Capacity Additions	\$824,666	\$51,476	6.7%
4	1	GE10 Turbines (44 MW) in 2019, followed by 50 MW share of 2x1 Advanced CC in 2021	\$791,648	\$18,458	2.4%
4	2	GE10 Turbines (44 MW) in 2019, no other unit additions	\$811,529	\$38,339	5.0%
4	3	GE10 Turbines (44 MW) in 2019, followed by 100 MW share of 2x1 Advanced CC in 2021	\$773,189	N/A	N/A
5	Reference Case	No Capacity Additions	\$870,780	\$20,650	2.4%
5	1	GE10 Turbines (44 MW) in 2019, followed by 50 MW share of 2x1 Advanced CC in 2021	\$853,139	\$3,008	0.4%
5	2	GE10 Turbines (44 MW) in 2019, no other unit additions	\$857,643	\$7,513	0.9%
5	3	GE10 Turbines (44 MW) in 2019, followed by 100 MW share of 2x1 Advanced CC in 2021	\$850,130	N/A	N/A
6	Reference Case	No Capacity Additions	\$871,311	\$25,410	3.0%
6	1	GE10 Turbines (44 MW) in 2019, followed by 50 MW share of 2x1 Advanced CC in 2021	\$845,901	N/A	N/A
6	2	GE10 Turbines (44 MW) in 2019, no other unit additions	\$858,174	\$12,273	1.4%
6	3	GE10 Turbines (44 MW) in 2019, followed by 100 MW share of 2x1 Advanced CC in 2021	\$863,657	\$17,756	2.1%
7	Reference Case	No Capacity Additions	\$812,612	\$4,058	0.5%
7	1	GE10 Turbines (44 MW) in 2019, followed by 50 MW share of 2x1 Advanced CC in 2021	\$811,746	\$3,191	0.4%
7	2	GE10 Turbines (44 MW) in 2019, no other unit additions	\$815,571	\$7,016	0.9%
7	3	GE10 Turbines (44 MW) in 2019, followed by 100 MW share of 2x1 Advanced CC in 2021	\$808,555	N/A	N/A

8.4 DISCUSSION OF RESULTS

The results of the PROMOD™ analysis and corresponding CPWC comparisons (as summarized in Table 8-6) indicate the following:

- In six of the seven scenarios considered, an expansion plan that includes the addition of GE-10 turbines as well as ownership shares in a new 2x1 advanced class combined cycle (specifically, either Case 1 or Case 3) is the lowest in CPWC. The relatively low capital cost of the GE-10 turbines provide a hedge against exposure to high MISO capacity auction prices (as the amount of capacity credits that would otherwise need to be purchased to meet reserve margin requirements is reduced). The GE-10 turbines have a relatively high heat rate, and as such are not expected to economically dispatch to serve MSCPA's loads; consequently, if combined cycle capacity is not added along with the GE-10 turbines, MSCPA's reliance on market purchases (and exposure to market price risk) increases.
- As alluded to in the previous bullet, participation in new combined cycle may be economic for MSCPA. Securing an interest in a new combined cycle is expected to reduce MSCPA's reliance on purchases from the MISO energy market.
- As MSCPA's share of a new combined cycle increases (i.e. from 50 MW to 100 MW), the favorable economics of the 100 MW share reflected in Table 8-6 are influenced by the assumed ability to sell excess energy into the market when economic to do so. Comparison of Scenario 6 to Scenario 1 indicates that if MSCPA is not able to sell excess energy into the market, a 50 MW interest in a new combined cycle is more economic than a 100 MW interest.
- Regarding the scenarios in which MSCPA sells its ownership shares in AFEC and Prairie State:
 - Selling ownership shares of AFEC or Prairie State appear to be economic but require more focused study to gauge risk of increased exposure to MISO energy market purchases.
 - The analysis reflected in this Study assumed that full debt service for these units could be eliminated; would need to verify that other parties would purchase MSCPA's share for full debt service amounts.
 - Cases with ownership shares of new combined cycle may be viewed as essentially replacing AFEC (located outside of Michigan), with an in-State resource that contributes to capacity requirements, and has lower heat rate (i.e. more efficient). The results would be reduced reliance on MISO capacity auction prices and potentially being able to increase sales into the MISO market if economic. In particular, Case 1 (which includes 50 MW of new combined cycle capacity) aligns well with the amount of combined cycle capacity that would be sold if MSCPA sold its ownership share of AFEC.
- Costs for natural gas transportation are an important consideration when analyzing the economics of combined cycles. Inclusion of firm natural gas transportation costs for the new combined cycle options (reflected in Scenario 5) reduces the CPWC differential between Cases 1 and 3 as compared to Case 2. Although Cases 1 and 3 remain lower in CPWC than Case 2, the reduction in CPWC differentials illustrates the importance of this assumption.
- As discussed previously in this section, MISO Zone 7 capacity auction prices have varied widely, and may continue to do so rather than demonstrating consistency in future years. Scenario 6 (which reflects capacity prices of \$2/kW-Mo in 2017, escalating at 3.0 percent annually) indicates that each of the four cases are within 1 percent of one another on a CPWC basis. Thus, it appears that this magnitude of capacity prices may be viewed as a "break even" at which the CPWC of

MICHIGAN SOUTH CENTRAL POWER AGENCY 2017 POWER SUPPLY STUDY

expansion plans with no capacity additions are very close to the CPWC of expansion plans with GE-10 turbines added (with and without the addition of various amounts of new combined cycle capacity).



MARNEY M. KAST
County Clerk
Court House, Room #1
29 N. Howell Street
Hillsdale, Michigan 49242

Email: mkast@co.hillsdale.mi.us

Phone: (517) 437-3391

Fax (517) 437-3392

DATE: July 27, 2017

TO: Scott Sessions, Mayor
Councilmen: Brian Watkins, Adam Stockford, Tim Dixon, William
Morrisey, Bruce Sharp, Bill Zeiser, Matt Bell and Patrick Flannery
David Mackie, City Manager

RE: Hillsdale City Council meeting – July 17, 2017

This letter is in response to the discussion at the City Council Meeting on July 17th regarding the information Mr. Steve French, City Clerk shared with you regarding the upcoming voting equipment. I am not sure where Mr. French received his information, but I would like to clear up some inaccuracies. To make sure I had my facts correctly, I spoke with one of the voting equipment committee members that worked closely with the Bureau of Elections since 2013 to address some of his concerns.

Below are some of the issues Mr. French addressed to the council and the correct information I received:

1. The State solicited sealed bids for the voting equipment that provided an opportunity for “last best offer”. This is permitted under state purchasing rules. After all bids were received, the three companies that received a passing score and passed certification, were invited in for negotiations and “last best offer”. All three companies, ES&S, Dominion and Hart were given an opportunity to revise their price. All three did lower their price. Mr. French’s statements imply that preferential treatment was given to Dominion and Hart. This is not true at all. The State went to great lengths to treat all three vendors equally. All three vendors participated in final negotiations and were aware of the “last best offer” provision.
2. Mr. French mentioned he filed a complaint with the Federal Election Commission. The Federal Election Commission deals with campaign finance reporting for federal level candidates. It has absolutely no role or oversight in the election administration process.
3. County pricing. The bid documents stated that the bid prices were maximums! There is absolutely nothing that prohibited a county from negotiating something less. Isn’t that what government is supposed to do with taxpayer money? Shouldn’t we be trying to always get a lower price if possible? Mr. French mentioned that this bid provision hurt small counties. In fact, many counties (large and small) banded together and were able to leverage better pricing. Hillsdale and other smaller counties benefitted from teaming up with Genesee, Oakland, Ottawa and Washtenaw.
4. Mr. French mentioned that it will be different having the target areas on the left for voters. Yes, it will. However, beginning in November 2017, all target areas (regardless of vendor) are going to the left. Hart was following a best practice for ballot standards established by the Election Assistance Commission. Now everyone will be following Hart’s lead.



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Page 2

It's perfectly reasonable that two people could look at the three vendors and make a different selection or have a different preferred vendor. However, his comments to the city council were completely inaccurate and almost implied that the State did something inappropriate. They would take great offense to that. If Mr. French would have addressed some of his concerns directly to me or the Bureau of Elections, we would have made sure he received the correct information.

I will continue to do my best implementing our new voting equipment with every jurisdiction and am looking forward to a smooth transition.

Please do not hesitate to contact me if you have any questions.

Sincerely,

Marney Kast
Hillsdale County Clerk

Cc: Steve French



August 4, 2017

Dave Mackie, Manager
City of Hillsdale
97 North Broad Street
Hillsdale, MI 49242

Re: Important information about channel lineup changes for our customers.

Dear Mr. Mackie,

As part of our continuing effort to keep you informed, we want you to know about an upcoming change to XFINITY customers' channel lineups. Beginning on or after September 14, 2017, channels in the 1000+ range will be reorganized into channel neighborhoods. Networks with similar content—like kids' networks, news networks, and sports networks—will be grouped together.

By reorganizing the channels this way, we hope to help customers easily find their favorite channels and more content like it right next door. All channels in the 1-999 range will stay right where they are. Some of our customers currently have channels in the 1000+ range, and those channels will be moving to their new channel neighborhoods with similar networks.

DVR recordings, favorites, and parental controls won't be affected for X1 customers, so they won't have to do a thing. Customers who don't have X1 will need to update their favorites after the switch.

We're informing our customers about this change through letters and emails. Attached is a sample of a communication that we'll be sending out to XFINITY customers with this messaging. We will continue to notify customers of any changes as necessary, and we will keep you informed as well.

Please feel free to contact me at 517-334-5686 if you have any questions.

Sincerely,

John P. Gardner
Director, External Affairs
Comcast, Heartland Region
1401 E. Miller Rd.
Lansing, MI 48911

Enclosure

Sample Customer LETTER

Dear [FIRSTNAME],

I'm writing to let you know that on or around [DATE], we'll be introducing new "channel neighborhoods" to your lineup. Channel neighborhoods are groups of channels with similar content, like sports, news, or kid's programming. This means that networks will be grouped together with others like them, making browsing easier.

All of your current channels from 1 – 999 will stay right where they are, with no changes to these channels in your guide. You will, however, see the new neighborhoods added to your guide as shown in the chart below. All of your channels that are 1000 and above, including ones you have now, will be arranged into these new neighborhoods.

Here's how your lineup will look once the new channel neighborhoods are added:

1-999	No Change	1200-1300	Sports	1650-1749	Kids & Family
1000-1099	Basic	1400-1499	Entertainment	1750-1799	Movies
1100-1199	News	1600-1649	Entertainment	1800-1899	Premiums

If you have XFINITY X1, you can continue to find your channels by speaking the networks, shows, or content you want into your X1 Voice Remote.

Take a look at the enclosed Frequently Asked Questions for more about the new channel neighborhoods. A list of channel changes is included for your reference, and you can see what's changing in your ZIP Code by going to xfinity.com/channelneighborhoods.

Thank you for being an XFINITY customer.

Sincerely,

[MARKETING/PRODUCT RSVP NAME]

[TITLE]



July 26, 2017

Mr. Dave Mackie, Manager
City of Hillsdale
97 North Broad Street
Hillsdale, MI 49242

Dear Mr. Mackie,

As part of our ongoing commitment to keep you updated on issues that concern our customers in Hillsdale, we would like to let you know that in the coming days we will be notifying our customers of updates to our Comcast Agreement for Residential Services as well as providing a copy of the updated agreement with their August bill.

The Comcast Agreement for Residential Services provides the terms and conditions for our Xfinity TV, Internet and Voice services and can be viewed at:
www.xfinity.com/Corporate/Customers/Policies/SubscriberAgreement.html. Key updates include the following.

- We've identified additional ways for us to notify customers of changes to our services, including by email and online on our website.
- We've moved some material related to our Internet and Voice services to our website.
- We require customers to notify us of changes to their telephone number and other contact information so we can ensure that we are contacting the correct person in accordance with applicable laws.
- We've updated portions of our arbitration provision to make its terms more clear.

A sample customer notification is attached for your reference.

If I can be of any further assistance, please contact me at 517-334-5686.

Sincerely,

John P. Gardner
Director, External Affairs
Comcast, Heartland Region
1401 E. Miller Rd.
Lansing, MI 48911

Attachment: Customer Notice Sample



We've made updates to our Comcast Agreement for Residential Services

We want to let you know that we're updating our customer terms of service. You can view the agreement [here](#), and you also will receive a copy with your upcoming bill. You don't need to take any action.

You should review the agreement, but here are a few of the key updates:

- We've identified additional ways for us to notify you of changes to our services, including by email and online on our website.
- We've moved some material related to our Internet and Voice services to our website. They may be viewed [here](#).
- Under the new agreement we require you to notify us of changes to your telephone number and other contact information so we can ensure that we are contacting the correct person in accordance with applicable laws.
- We've updated portions of our arbitration provision to make its terms more clear.

Thank you for being an XFINITY customer.



All part of our commitment to you



This is a service-related email. Comcast will occasionally send you service-related emails to inform you of service upgrades or new benefits.

Please do not reply to this email, it is not monitored. If you'd like to contact us, please visit our website [here](#).

Comcast respects your privacy. For a complete description of our privacy policy, [click here](#).

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Comcast Cable, One Comcast Center 1701 JFK Boulevard, Philadelphia, PA 19103
Attn: Email Communications



Political Signs

The City of Hillsdale strongly encourages our residents to be involved with the political process, and to support and advertise for any candidates or ballot proposals. However, a few rules have been adopted in order to keep street terraces clear of obstructions which could create a traffic hazard. Simply put, no temporary signs should be placed within the City right-of-way (generally 33 feet from the center of the street) or MDOT right-of-way for properties fronting M-99. If there is a sidewalk running along the street, do not place signs between the sidewalk and the street. If you see a sign that may pose a hazard, please call (517)437-6481 to report it.

Specifically with regard to political signs, the following sections of the Hillsdale Municipal Code of Ordinances apply:

26-4. – General sign provisions.

(b) The following signs shall be allowed within all districts without permit, but subject to the provisions of section 26-5.

(11) Political Signs – Twenty square feet or less.

(f) No sign shall be permitted in the right-of-way unless otherwise noted.

(h) Political signs shall be removed within ten days after the official election or referendum to which such sign pertains.

26-5. – Signs prohibited.

(a) No sign shall be placed in, upon or over any public right-of-way, alley, or other public place, except as may be otherwise permitted by this chapter or other ordinance of the city.

(b) No light pole, utility pole, tree within a public right-of-way, or other supporting member shall be used for the placement of any sign unless specifically designed for and otherwise approved by the city for such use.

(c) No sign shall be erected in any place where it may, by reason of its position, shape, color, or other characteristic, interfere with, obstruct the view of, or be confused with any authorized traffic sign, signal, or device, or constitute a nuisance per se.

26-6. – Permitted temporary signs in all districts.

(7) Political signs. Political signs are permitted on private property only (emphasis added) and shall not exceed six square feet in area and six feet in height.

26-13. – Removal of certain signs.

(f) Any sign placed within the right-of-way shall be forfeited to the public and subject to immediate confiscation and removal by the city at the sign owner's sole expense.

26-15. – Violations.

(a) Violation of any provision of this chapter shall constitute a municipal civil infraction, punishable as provided in Code of Ordinances of the City of Hillsdale, Michigan.

26-18. – Appeals and variances.

Any person aggrieved by a decision of the zoning administrator relative to the placement, area, height or construction of a sign may appeal such decision to the zoning board of appeals.

SOCIAL MEDIA POLICY CITY OF HILLSDALE

The City of Hillsdale has the right and duty to protect itself from unauthorized disclosure of information. Therefore, the City's Social Media Policy includes rules and guidelines for personal social networking and other electronic postings and communications, to the extent that they affect the City. In administering this policy, the City will honor the First Amendment's protection of an individual's right to free speech.

Applicability

This policy applies to all employees, elected officials, appointed members of boards and commissions of the City, and any other group or individuals that serve or are affiliated with the City of Hillsdale.

Definition

In the rapidly expanding world of electronic communication, "*social media*" can mean many things. "*Social media*," as that term is used in this Policy, includes all means of communicating or posting information or content of any sort on the Internet or through other means of electronic communication, including to an individual's own or someone else's weblog or blog, journal or diary, personal website, podcasts, social networking or affinity websites (including but not limited to: WordPress, Facebook, Myspace, Twitter, LinkedIn, YouTube, Flickr, Tumblr, or Photobucket), web bulletin board, wiki page, or a chat room, whether or not associated or affiliated with the City, as well as any other form of electronic communication, such as text messaging and the electronic communication of images, audio, and video.

Considerations in Use

The City respects the right of individuals to privately utilize blogs and social networking sites as a medium of self-expression and public conversation and does not intend to discourage such uses. The City understands that City employees and other individuals affiliated with the City may use social media for personal interests and affiliations, to comment on matters of public concern, or for other lawful purposes. However, because the City is a municipal corporation, use of social media by City employees and others affiliated with the City also presents certain risks and carries with it certain responsibilities, both for the City and for the individuals involved. Ultimately, City employees and other individuals are solely responsible for what they post online. Before creating online content, the City asks that its employees and those individuals otherwise affiliated with the City consider some of the risks and rewards that are involved in posting material online. The City has developed this Social Media Policy to assist in making such assessments.

In posting material online, employees of the City are cautioned to keep in mind that any of their conduct that adversely affects their job performance or the performance of fellow employees, or that adversely affects the residents of the City, individuals or entities affiliated with the City

(including, but not limited to, those who do business with the City), and/or the City's legitimate interests, may result in disciplinary action up to and including termination, as further provided in this Policy.

1. No use of social media may discriminate against or harass another person on the basis of any characteristic protected by applicable law.
2. Only individuals authorized by the City Manager and/or the Mayor have the authority to speak or communicate on behalf of the City. Any individual who is employed by or affiliated with the City, or who chooses to identify himself or herself as affiliated with the City, may be viewed as a spokesperson. Therefore, the City requires that such individual state in any personal social media posting or other electronic communication that the views expressed are his or her own and may or may not reflect those of the City, or of any person or organization affiliated with or conducting business with the City.
3. All employees or other applicable individuals and groups are expected to protect the privacy of the City and its employees. They are prohibited from disclosing personal and private information of others, without their express authorization, and any other proprietary and nonpublic information maintained by the City.
4. There shall be no posting of the City logo on personal blogs, and no use or communication of proprietary, confidential, or privileged information or materials, including information or materials protected by trademark, copyright, intellectual property, or other legal protection, or documents, information, or other materials issued, possessed by, or otherwise maintained by the City, unless approved by the City Manager in advance of the posting, use, or communication. There shall also be no advertisements or photographs of City services, or linking from a personal blog or social media site to any internal or external web site maintained by the City or any of its departments.
5. Individuals shall not post on personal blogs or social media photographs of City employees, council members, board members, commission members, persons engaged in City business, or individuals present at City events without the prior consent of those individuals.
6. There shall be no use of City time or City-owned equipment including, but not limited to, computers, licensed software, or cell phones, to conduct personal blogging or social networking activities unless authorized in advance by the City Manager.
7. Employees and other individuals should have no expectation of privacy while using any City communication equipment or facilities for any purpose, and the City has the right to access and monitor all postings and other electronic communications stored on or transmitted to or from City communication equipment or facilities. Employees and other individuals should be aware that postings and other electronic communications made while using any City communication equipment or facilities are considered public communications and may be subject to disclosure as such. The City also reserves the right to monitor social media; websites visited; postings; and comments and discussions that occur using the City's equipment, and the City reserves the right to use content management tools to monitor, review, or block content on social media that involve the use of the City's equipment. With regard to individual postings or communications made by

City employees or other individuals, such employees and individuals should be aware that the City reserves the right to and may use blog search tools and software to monitor social media and forums such as blogs and other types of personal journals, diaries, personal and business discussion forums, and social networking sites, provided those sites are publicly viewable or searchable.

Authorized Use

The City may specifically authorize individuals to engage in social networking and blogging to share municipal-related events; information and ideas; promote City services; communicate with the public; and issue or respond to breaking news or publicity. When social media is utilized, individuals must ensure that all communications maintain the City's integrity and reputation, while minimizing actual or potential legal risks. They should immediately correct any published mistakes and may not alter previous published posts to social media without specifically stating what change has been made. When the City Manager authorizes the use, the rules and guidelines in this policy apply to all individuals.

Authorized individuals may prepare and modify content for the City's social media. The content must be relevant, and add value. Questions or concerns regarding content, information, or material should be discussed with the City Manager. Authorized individuals must identify themselves and their affiliation with the City when posting information. Any copyrighted, proprietary, trade secret, or other information protected from disclosure by applicable law that has not been pre-authorized for dissemination or publication by the City Manager cannot be posted. Individuals contacted by anyone regarding any posting, or any individual with questions or concerns relating to this Policy, should direct the inquiry to the City Manager.

Responsibilities and Consequences of Non-Compliance

Supervisors are responsible for ensuring that all activity of those under their supervision complies with this Policy. The City Manager is authorized to take disciplinary action against employees that do not comply with the rules and guidelines set forth in this Policy. Any disciplinary action shall be consistent with existing City personnel policies and applicable collective bargaining agreements. Such disciplinary action can occur without advance notice.

Elected officials of the City and all appointed members of boards and commissions of the City are expected to comply with this Policy. The Mayor and City Council have the authority to remove appointed board and commission members due to non-compliance with the provisions of this Policy.

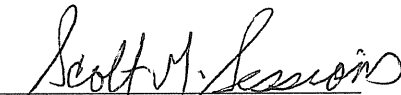
All employees, elected officials, board and commission members, and others affiliated with the City are personally responsible for their commentary on blogs and social networking sites and may be held personally liable for commentary that is considered defamatory, obscene, threatening, harassing, abusive, hateful, embarrassing, or libelous by any offended individual or entity.

Anyone who has reason to believe an employee or other individual may be violating any aspect of this Policy is to contact the City Manager. The City will investigate and take any necessary action. The City prohibits taking negative action against any employee or other individual affiliated with

the City for reporting a possible violation of this Policy or for cooperating in an investigation. Any employee who retaliates against another employee or other individual affiliated with the City for reporting a possible violation of this Policy or for cooperating in an investigation will be subject to disciplinary action consistent with City personnel policies and applicable collective bargaining agreements.

Revised Feb 15, 2016

Passed at the regular City Council meeting this 15th day of February, 2016.



Scott Sessions, Mayor



Stephen French, City Clerk



City of Hillsdale

Agenda Item Summary

MEETING DATE: August 21, 2017

AGENDA ITEM: New Business

FROM: Kim Thomas, City Assessor

SUBJECT: Neighborhood Enterprise Zone Rehabilitated Tax Exemption Certificate – 88 North West Street – David Roberts

BACKGROUND PROVIDED BY STAFF (Kimberly Thomas, Assessor)

On April 17, 2017, Council adopted Resolution #3307 to establish a Neighborhood Enterprise Zone covering the properties on North West Street between Westwood and M-99 on the west and between North Street and M-99 on the east. The establishment of the district was done to encourage rehabilitation of the existing residential structures and/or new construction in this neighborhood.

88 North West Street was purchased by David Roberts on July 29, 2016. The structure is a single family home that was converted to a 3-unit residential apartment building by a prior owner. At the time that Mr. Roberts purchased the property only one unit was habitable. After purchasing the property, Mr. Roberts installed a new roof and made some cosmetic improvements to the property.

The Clerk received an application for a Neighborhood Enterprise Zone Rehabilitated Tax Exemption Certificate from Mr. Roberts on July 10, 2017. According to the application, Mr. Roberts plans to invest an additional \$20,350 for interior repairs and \$18,000 on the exterior of the structure. His estimated project cost per unit is \$10,783. He is estimating 2 years to complete the project.

[Public Act 147 of 1992](#), as amended, sets requirements for the application process for Neighborhood Enterprise Zone Exemption Certificates.

Michigan Compiled Law (MCL) 207.772(m):

"Rehabilitated facility" means an existing structure or a portion of an existing structure with a current true cash value of \$80,000.00 or less per unit that has or will have as its primary purpose residential housing, consisting of 1 to 8 units, the owner of which proposes improvements that if done by a licensed contractor would cost in excess of \$5,000.00 per

owner-occupied unit or 50% of the true cash value, whichever is less, or \$7,500.00 per nonowner-occupied unit or 50% of the true cash value, whichever is less, or the owner proposes improvements that would be done by the owner and not a licensed contractor and the cost of the materials would be in excess of \$3,000.00 per owner-occupied unit or \$4,500.00 per nonowner-occupied unit and will bring the structure into conformance with minimum local building code standards for occupancy or improve the livability of the units while meeting minimum local building code standards. Rehabilitated facility also includes an individual condominium unit, in a structure with 1 or more condominium units that has as its primary purpose residential housing, the owner of which proposes the above described improvements. Rehabilitated facility also includes existing or proposed condominium units in a qualified historic building with 1 or more existing or proposed condominium units. Rehabilitated facility does not include a facility rehabilitated with the proceeds of an insurance policy for property or casualty loss. A qualified historic building may contain multiple rehabilitated facilities.

RECOMMENDATION:

Staff recommends that Council do all of the following:

1. Adopt a resolution either approving or disapproving the application (reasons for disapproval must be set forth in writing in the resolution);
2. If approved, direct the clerk to forward the application to the State Tax Commission (STC) before October 31, 2017.

RESOLUTION NO. 3318

**Resolution to Approve an Application for Neighborhood Enterprise Zone
Rehabilitated Certificate, PA 147 of 1992, as amended**

Minutes of a regular meeting of the Council of the City of Hillsdale, held on August 21, 2017, at City Hall Council Chambers, 97 North Broad Street in Hillsdale, Michigan at 7:00 p.m.

PRESENT: _____

ABSENT: _____

The following preamble and resolution were offered by _____, and supported by _____.

Resolution 3318: Approving an Application for a Neighborhood Enterprise Zone Rehabilitated Certificate for David Roberts Located at 88 North West Street

WHEREAS, the Council of the City of Hillsdale established a Neighborhood Enterprise Zone on April 17, 2017 as required under PA 147 of 1992 after a public hearing held on March 20, 2017; and

WHEREAS, the applicant David Roberts is not delinquent on any taxes related to the facility, and

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Hillsdale

Be and hereby is granted a Neighborhood Enterprise Zone Rehabilitated Facility Exemption for property located at 88 North West Street for a period of 10 years, beginning December 31, 2017, and ending December 30, 2027, pursuant to the provisions of PA 147 of 1992, as amended.

AYES: _____

NAYS: _____

RESOLUTION DECLARED ADOPTED.

CITY OF HILLSDALE

By: _____
Scott Sessions – Mayor


By: _____
Stephen M. French – City Clerk

Application for Neighborhood Enterprise Zone Certificate

Issued under authority of Public Act 147 of 1992, as amended.

STATE USE ONLY	
▶ Application No.	▶ Date Received

Read the instructions before completing the application. This application must be filed prior to building permit issuance and start of construction. Initially file one original application (with legal description) and two additional copies of this form with the clerk of the local governmental unit (three complete sets). The additional documents to complete the application process will be required by the State of Michigan only after the original application is filed with the clerk of the local governmental unit (LGU). This form is also used to file a request for the transfer of an existing NEZ certificate. Please see the instruction sheet.

PART 1: OWNER/APPLICANT INFORMATION (Applicant must complete all fields)			
Applicant Name David Roberts		Type of Approval Requested <input type="checkbox"/> New Facility <input type="checkbox"/> Rehabilitation Facility <input type="checkbox"/> Transfer (1 copy only)	
Facility's Street Address 88 N West St		Amount of years requested for exemption (6-15) 10	Is the facility owned or rented by occupants? <input checked="" type="checkbox"/> Owned <input type="checkbox"/> Rented
City City	State		
Name of City, Township or Village (taxing authority) City of Hillsdale		Type of Property <input type="checkbox"/> House <input type="checkbox"/> Duplex <input type="checkbox"/> Condo <input type="checkbox"/> Loft <input type="checkbox"/> Apartment - No. of Units _____	
<input checked="" type="checkbox"/> City <input type="checkbox"/> Township <input type="checkbox"/> Village			
County Hillsdale	School District Hillsdale		
Name of LGU that established district City of Hillsdale		Name or Number of Neighborhood Enterprise Zone NEZ District #3	Date district was established 03/20/2017
Identify who the work was completed by <input type="checkbox"/> Licensed Contractor <input checked="" type="checkbox"/> Other <u>Homeowner</u>		Estimated Project Cost (per unit) \$10,783.00	
Describe the general nature and extent of the new construction or rehabilitation to be undertaken. Include Breakdown of Investment Cost. Use attachments if necessary. See attached "Exhibit A" Upper unit - \$ 14,950 Lower unit - \$ 5,400 Porch and garage modifications - \$ 18,000			
Timetable for undertaking and completing the rehabilitation or construction of the facility. Two years			
PART 2: APPLICANT CERTIFICATION			
Contact Name David Roberts	Contact Telephone Number (830) 990-0123		
Contact Fax Number	Contact E-mail Address accounts@texas42.com		
Owner/Applicant Name David Roberts	Owner/Applicant Telephone Number (830) 990-0123		
Owner/Applicant Mailing Address (Street No., City, State, ZIP Code) 88 N West St, Hillsdale, MI 49242	Owner/Applicant E-mail Address accounts@texas42.com		
<i>I certify the information contained herein and in the attachments are true and that all are truly descriptive of the residential real property for which this application is being submitted.</i>			
<i>I certify I am familiar with the provisions of Public Act 147 of 1992, as amended, (MCL 207.771 to 207.787) and to the best of my knowledge, I have complied or will be able to comply with all of the requirements thereof which are prerequisite to the approval of the application by the LGU and the issuance of Neighborhood Enterprise Zone Certificate by the State Tax Commission.</i>			
Owner/Applicant Signature 	Date 07/10/2017		

PART 3: LGU ASSESSOR CERTIFICATION (Assessor of LGU must complete Part 3)			
The property to be covered by this exemption may not be included on any other specific tax roll while receiving the Neighborhood Enterprise Zone Exemption. For example, property on the Eligible Tax Reverted Property (Land Bank) specific tax roll cannot be granted a Neighborhood Enterprise Zone Exemption that would also put the same property on the Neighborhood Enterprise Zone specific tax roll.			
<input type="checkbox"/> By checking this box I certify that, if approved, the property to be covered by this exemption will be on the Neighborhood Enterprise Zone Exemption specific tax roll and not on any other specific tax roll.			
Name of LGU			
Name of Assessor (First and last name)		Telephone Number	
Fax Number		E-mail Address	
<i>I certify that, to the best of my knowledge, the information contained in Part 3 of this application is complete and accurate.</i>			
Assessor's Signature			Date
PART 4: LGU ACTION/CERTIFICATION (LGU clerk must complete this section before submitting to the State Tax Commission)			
Action taken by LGU: <input type="checkbox"/> Exemption Approved for _____ Years (6-15) <input type="checkbox"/> Exemption Approved for _____ Years (11-17 historical credits) <input type="checkbox"/> Exemption Denied (include Resolution Denying)		The State Tax Commission requires the following documents be filed for an administratively complete application: <input type="checkbox"/> 1. Original Application <input type="checkbox"/> 2. Legal description of the real property with parcel code # <input type="checkbox"/> 3. Resolution approving/denying application (include # of years) <input type="checkbox"/> 4. REHABILITATION APPLICATIONS ONLY. Statement by the assessor showing the taxable value of the rehabilitated facility not including the land, for the tax year immediately preceding the effective date of the rehabilitation.	
Date of resolution approving/denying this application			
Clerk's Name (First and Last)		Telephone Number	
Fax Number		E-mail Address	
Mailing Address		City	State ZIP Code
<i>I certify that I have reviewed this application for complete and accurate information and determined that the subject property is located within a qualified Neighborhood Enterprise Zone.</i>			
<i>I certify this application meets the requirements as outlined by Public Act 147 of 1992 and hereby request the State Tax Commission issue a Neighborhood Enterprise Zone Certificate.</i>			
Clerk Signature			Date

The LGU should mail the original completed application and required documents to the following address:

State Tax Commission
 P.O. Box 30471
 Lansing, MI 48909

Note: Additional documentation will be required for further processing of the application and for the issuance of the certificate of exemption. These documents should be sent directly to the State of Michigan only after the original application is filed with the LGU clerk and approved by the LGU. See the instruction sheet attached.

Any questions concerning the completion of this application should be directed to the LGU clerk.

Exhibit A

- Upper unit – 14,950 total estimated cost
 - Removal of fir flooring, installation of ½" plywood, GenieMat soundproofing, ½" plywood, reinstallation of old flooring, sanding and refinishing. - \$ 650
 - Replace all windows with new vinyl insulated units - \$ 5,000
 - Install new kitchen with cabinets and appliances - \$ 4,000
 - Two full baths - \$ 2,000
 - Restore and reconfigure staircase - \$ 300
 - New insulation - \$ 3,000
- Lower unit – 5,400 total estimated cost
 - Replace old windows with new vinyl insulated units - \$ 3,500
 - Reconfigure main bathroom - \$ 600
 - Remodel 2nd bathroom - \$ 600
 - Remove carpet, sand, and refinish fir flooring - \$ 200
 - Install LED recessed lighting - \$ 500
- Exterior work – \$ 18,000 total estimated preliminary cost
 - Replace the existing front porch with a 2nd floor deck and a new roof to match the pitch of the existing roof. - \$ 3,000
 - Enlarge the garage and add a third unit above it with a kitchen and two bathrooms. - \$ 15,000

Legal description: W2 THE S 49.5 FT OF LOT 156 ORIGINAL PLAT SECOND WARD.

Property Identification number: 006-227-276-25

Grantor	Grantee	Sale Price	Sale Date	Inst. Type	Terms of Sale	Liber & Page	Verified By	Prcnt. Trans.
RIGNEY, LAMBERT M	ROBERTS, DAVID	52,000	07/29/2016	WD	FINANCIAL PRESSURE	1629/0994		100.0
RIGNEY, MARY ANN (RICE)	RIGNEY, LAMBERT M	0	11/26/2013	MS	NOT A TRANSFER	1582/0813		0.0
CHARLAND, CHRISTOPHER & B	RIGNEY, LAMBERT & MARY AN	0	09/24/2002	QC	QUIT CLAIM DEED	1029/0042		100.0
RIGNEY, LAMBERT M & MARY	RIGNEY, LAMBERT M & MARY	0	04/05/1983	QC	NOT A TRANSFER	0510/0358		0.0

Property Address	Class: 401 RESIDENTIAL	Zoning: B-3	Building Permit(s)	Date	Number	Status			
88 N WEST ST	School: HILLSDALE SCHOOL DISTRICT		RESIDENTIAL RE-ROOF	09/13/2016	PB16-0627	NEW PERMIT			
	P.R.E. 0%		SINGLE-FAMILY RESIDENTIAL	08/09/2016	PUO2016-183	ASSMT COMP			
Owner's Name/Address	MAP #: WARD 3		RESIDENTIAL RE-ROOF	10/22/2013	PB13-0708	ASSMT COMP			
ROBERTS, DAVID 227? N WEST ST HILLSDALE MI 49242	2017 Est TCV 52,497 TCV/TFA: 21.95		Land Value Estimates for Land Table 006.006.CITY OF HILLSDALE						
Tax Description	X Improved	Vacant	* Factors *						
. W2 THE S 49.5 FT OF LOT 156 ORIGINAL PLAT SECOND WARD.	Public Improvements		Description	Frontage	Depth	Front Depth	Rate %Adj.	Reason	Value
Comments/Influences	X Sidewalk		SQUARE FOO RESIDENTIAL	49.50	297.00	1.0000	0.0000	0 100*	0
3-UNIT RENTAL CONV TO SGL FAM 2015	X Water		50 Actual Front Feet, 0.34 Total Acres						13,231
	X Sewer		* denotes lines that do not contribute to the total acreage calculation.						
	X Electric		50 Actual Front Feet, 0.34 Total Acres Total Est. Land Value = 13,231						
	X Gas		Work Description for Permit PB16-0627, Issued 09/13/2016: RE-ROOF (MAY ADD OVERHANG)						
	X Curb		Work Description for Permit PUO2016-183, Issued 08/09/2016: SINGLE-FAMILY RESIDENTIAL OCCUPANCY - AS OF TODAY 8/08/16 BUT WANTS TO CONVERT TO TWO - CHECK BACK IN A COUPLE OF MONTHS.						
	Street Lights		MOVING IN AROUND AUGUST 16TH						
	Standard Utilities		Work Description for Permit PB13-0708, Issued 10/22/2013: RE-ROOF CONVERSION BACK TO SINGLE FAMILY?						
	Underground Utils		EXTENSIVE CODE VIOLATIONS						
	Topography of Site								
	X Level								
	Rolling								
	Low								
	High								
	Landscaped								
	Swamp								
	Wooded								
	Pond								
	Waterfront								
	Ravine								
	Wetland								
	Flood Plain								
	Year	Land Value	Building Value	Assessed Value	Board of Review	Tribunal/Other	Taxable Value		
	2017	6,600	19,400	36,100	26,000M		26,000S		
	2016	3,700	20,100	23,800			19,157C		
	2015	900	18,200	19,100	19,100J		19,100S		
	2014	900	29,700	30,600			28,895C		

26,000 Revised by 2017 March Board of Review

Building Type		(3) Roof (cont.)		(11) Heating/Cooling			(15) Built-ins			(15) Fireplaces			(16) Porches/Decks			(17) Garage	
X	Single Family Mobile Home Town Home Duplex A-Frame	X	Eavestrough Insulation 36 Front Overhang 36 Other Overhang	X	Gas Wood	Oil Coal	Elec. Steam	3	Appliance Allow. Cook Top Dishwasher Garbage Disposal Bath Heater Vent Fan Hot Tub Unvented Hood Vented Hood Intercom Jacuzzi Tub Jacuzzi repl.Tub Oven Microwave Standard Range Self Clean Range Sauna Trash Compactor Central Vacuum Security System	Interior 1 Story Interior 2 Story 2nd/Same Stack Two Sided Exterior 1 Story Exterior 2 Story Prefab 1 Story Prefab 2 Story Heat Circulator Raised Hearth Wood Stove Direct-Vented Ga	Area 220 189	Type CGEP (1 Story) CCP (1 Story)			Year Built: Car Capacity: Class: CD Exterior: Siding Brick Ven.: 0 Stone Ven.: 0 Common Wall: 1/2 Wal Foundation: 18 Inch Finished ?: Auto. Doors: 0 Mech. Doors: 0 Area: 625 % Good: 0 Storage Area: 0 No Conc. Floor: 0		
X	Wood Frame		Drywall Paneled		Plaster Wood T&G	X Forced Air w/o Ducts Forced Air w/ Ducts Forced Hot Water Electric Baseboard Elec. Ceil. Radiant Radiant (in-floor) Electric Wall Heat Space Heater Wall/Floor Furnace Forced Heat & Cool Heat Pump No Heating/Cooling											
Building Style: TWO-STORY		Trim & Decoration															
Yr Built 0		Remodeled 0		Ex X Ord Min			Size of Closets										
Condition: Poor Part. Construct.: 50%		Lg X Ord Small		Doors X Solid H.C.			Central Air Wood Furnace										
Room List		(5) Floors					(12) Electric										
	Basement 1st Floor 2nd Floor Bedrooms	Kitchen: Other: Other:					60 Amps Service										
(1) Exterior		(6) Ceilings		No./Qual. of Fixtures			Stories Exterior			Foundation Rate			Bsmnt-Adj Heat-Adj		Size Cost		
	Wood/Shingle Aluminum/Vinyl X Brick			Ex. X Ord. Min			2 Story Brick			104.79			0.00 0.00		1196 125,329		
X Insulation		(7) Excavation		No. of Elec. Outlets			Other Additions/Adjustments										
	Basement: 1196 S.F. Crawl: 0 S.F. Slab: 0 S.F. Height to Joists: 0.0			Many X Ave. Few			(13) Plumbing										
(2) Windows		(8) Basement		(13) Plumbing			(14) Water/Sewer										
	Many Avg. Large Avg. Small X Few X Small	Basement: 1196 S.F. Crawl: 0 S.F. Slab: 0 S.F. Height to Joists: 0.0		Average Fixture(s): 3 3 Fixture Bath 2 Fixture Bath Softener, Auto Softener, Manual Solar Water Heat No Plumbing Extra Toilet Extra Sink Separate Shower Ceramic Tile Floor Ceramic Tile Wains Ceramic Tub Alcove Vent Fan			3 Fixture Bath 2 Fixture Bath Softener, Auto Softener, Manual Solar Water Heat No Plumbing Extra Toilet Extra Sink Separate Shower Ceramic Tile Floor Ceramic Tile Wains Ceramic Tub Alcove Vent Fan			3 Fixture Bath 2 Fixture Bath Softener, Auto Softener, Manual Solar Water Heat No Plumbing Extra Toilet Extra Sink Separate Shower Ceramic Tile Floor Ceramic Tile Wains Ceramic Tub Alcove Vent Fan			1975.00 1025.00 1025.00 1415.00			2 3,950 1 1,025 1 1,025	
X	Wood Sash Metal Sash Vinyl Sash X Double Hung Horiz. Slide Casement Double Glass Patio Doors X Storms & Screens	Conc. Block Poured Conc. Stone Treated Wood Concrete Floor		(9) Basement Finish			(14) Water/Sewer			(15) Built-Ins & Fireplaces							
	Many Avg. Large Avg. Small X Few X Small	Recreation SF Living SF Walkout Doors No Floor SF		1 Public Water 1 Public Sewer Water Well 1000 Gal Septic 2000 Gal Septic			Appliance Allowance (16) Porches CGEP (1 Story), Standard CCP (1 Story), Standard			1415.00 30.44 22.00			3 4,245		220 6,697 189 4,158		
(3) Roof		(10) Floor Support		Lump Sum Items:			(17) Garages										
X	Gable Hip Flat X Asphalt Shingle	Gambrel Mansard Shed		Joists: Unsupported Len: Cntr.Sup:			Class:CD Exterior: Siding Foundation: 18 Inch (Unfinished) Base Cost Common Wall: 1/2 Wall			16.19 -500.00			625 10,119 1 -500				
Chimney: Brick							Notes: 3 UNIT - USED AS SINGLE FAMILY, MAY CONVERT BACK TO DUPLEX 2017 UPSTAIRS GUTTED (FUTURE APARTMENT); 1 UNIT DOWNSTAIRS Phy/Ab.Phy/Func/Econ/Comb.%Good= 45/100/100/100/45.0, Depr.Cost = 102,523 ECF (63.WARD 3 CITY OF HILLSDALE) 0.766 => TCV of Bldg: 1 = 78,533 50 % Completed => Est. True Cash Value 2017 = 39,266										

*** Information herein deemed reliable but not guaranteed***



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88 N WEST ST

2017-07-11

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NEZ - Rehab

Date of Estimate: 7/13/2017
 Applicant: David Roberts
 Parcel #: 006-227-276-25
 PRE %: 0%
 2017 Taxable Value \$ 19,400 (Frozen until last 3 years of certificate)
 Taxable Value After Rehab \$ 55,200

(assuming no change in value for 10 years)

Taxes are calculated by multiplying (taxable value x (tax rate/1,000)) x 1.01 (1% admin fee)

Based on 2017 tax rates

(Building only - land is taxed at ad valorem rate)

	Tax Rate	Annual Taxes (incl admin fee)	10 yr total
Ad Valorem	56.4013	\$ 3,144.49	\$ 31,444.85

	NEZ		
Year 1 (frozen taxable)	56.40130	\$	1,105.13
Year 2 (frozen taxable)	56.40130	\$	1,105.13
Year 3 (frozen taxable)	56.40130	\$	1,105.13
Year 4 (frozen taxable)	56.40130	\$	1,105.13
Year 5 (frozen taxable)	56.40130	\$	1,105.13
Year 6 (frozen taxable)	56.40130	\$	1,105.13
Year 7 (frozen taxable)	56.40130	\$	1,105.13
Year 8 (5/8 local & county oper)	43.10174	\$	2,403.01
Year 9 (3/4 local & county oper)	51.18433	\$	2,853.63
Year 10 (7/8 local & county oper)	53.79281	\$	2,999.06
			\$ 15,991.58

Savings:

\$ 15,453.27

City of Hillsdale Agenda Item Summary

MEETING DATE: August 21, 2017

AGENDA ITEM: New Business

SUBJECT: Municipal Employees' Retirement System (MERS) Valuation

BACKGROUND PROVIDED BY: City Manager, Dave Mackie

Bargaining unit agreements were reached with the Police, Fire and IBEW for changes to the Defined Benefit Plan effective 7-1-2017. This resulted in capping the Final Average Compensation (FAC) for employees at retirement. We are required by MERS to obtain a valuation report showing the estimated financial impact to the City.

The Valuation was based on December 31, 2016 data. As noted, there is an immediate impact reducing the unfunded liability for these departments. Also, benefit changes result in a reduction of employer contributions which is amortized over a fixed period of time.

RECOMMENDATION

I recommend the City Council pass a motion to accept the MERS valuation report of financial impact as presented.



CBIZ Retirement Plan Services
CBIZ Benefits & Insurance Services, Inc.
17199 Laurel Park North, Ste. 405
Livonia, MI 48152
<http://retirement.cbiz.com>

Municipal Employees' Retirement System of Michigan

**Hillsdale, City of (3001)
Divisions 02, 05, 12
Retirement Plan Options**



CBIZ Retirement Plan Services
CBIZ Benefits & Insurance Services, Inc.
17199 Laurel Park North, Ste. 405
Livonia, MI 48152
<http://retirement.cbiz.com>

August 9, 2017

In care of:
Municipal Employees' Retirement
System of Michigan
1134 Municipal Way
Lansing, Michigan 48917

The purpose of this report is to show the financial implications to the employer of different retirement plan design options for Hillsdale, City of (3001) – Divisions 02, 05, 12. The report consists of separate sections that correspond to the different plan options under consideration. In addition, there is an executive summary at the beginning of the report that summarizes all the options under consideration and shows the results for each option, if multiple options are requested. Each section contains the following additional detail:

- An executive summary that describes the plan provisions and provides a brief explanation of the results.
- An exhibit showing the short-term impact of the proposed benefit change – that is, the impact on next year's contribution (this exhibit is only shown for supplemental valuations).

This report should not be relied upon for any other purpose. Reliance on information contained in this report by anyone for anything other than the intended purpose could be misleading.

The information in this report is purely actuarial in nature. It is not intended to serve as a substitute for legal, accounting, and investment advice.

This report was prepared at the request of MERS and the municipality and may be provided only in its entirety by the municipality to other interested parties. CBIZ Retirement Plan Services is not responsible for the consequences of any unauthorized use.

Please see the Comments on Asset Smoothing in the annual valuation report.

Please refer to the following sections of this report for additional information:

- Risk Characteristics of Defined Benefit Plans
- Important Comments
- Miscellaneous and Technical Assumptions

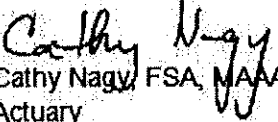



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<http://retirement.cbiz.com>

The undersigned are members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

If you need further information to make an informed decision, please contact MERS at (800) 767-6377 for assistance.

Sincerely,


Cathy Nagy, FSA, MAAA
Actuary


W. James Koss, ASA, MAAA
Actuary



CBIZ Retirement Plan Services
CBIZ Benefits & Insurance Services, Inc.
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CBIZ Retirement Plan Services
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Livonia, MI 48152
<http://retirement.cbiz.com>

Option 1
Capped FAC



Executive Summary

The purpose of this report is to show the impact on the liabilities and contributions of the proposed benefit changes for Hillsdale, City of (3001), Divisions 02, 05, 12. The following proposed benefit changes have been considered:

Division	Proposed Change in Benefit
Police (02)	FAC capped at \$65,000 effective 7/1/2017, and cap increased to \$70,000 effective 7/1/2022
Fire (05)	FAC capped at \$65,000 effective 7/1/2017, and cap increased to \$70,000 effective 7/1/2022
BPU Union (12)	FAC capped at \$80,000 effective 7/1/2017, and cap increased to \$85,000 effective 7/1/2022.

The results of our calculations are shown as follows:

- **Baseline:** This is the current DB plan.
- **Option 1:** Capped FAC according to table above. Please note our calculations reflect the ultimate cap amount and the employer contributions are expressed as a percentage of uncapped pensionable payroll.
- The exhibits immediately following this page show the short-term impact of the proposed benefit change (ie the change in the Actuarial Accrued Liability [AAL] as of December 31, 2016 and the change in the employer contribution for the fiscal year beginning July 1, 2018).

Please note the following regarding these calculations:

- The option would change both the AAL and the Normal Cost. The change in AAL will be recognized over 22 years. The employer Normal Cost is the cost to provide benefits accrued each year. In the long run, the employer is expected to pay the Normal Cost, if all the actuarial assumptions are met in the future.
- Under **Option 1** (capped FAC) there is an immediate impact on the unfunded accrued liability (UAL) because the Final Average Compensation (FAC) for current active members is capped.
- Because the proposed benefit change results in a reduction in employer contributions, under the MERS funding policy, the impact of the change is recognized over a period of time (i.e. the change in the AAL is amortized over a fixed period).



Hillsdale, City Of (3001) - Police (Division 02)
Employer Computed Contributions - Based on 12/31/2016 Actuarial Valuation

	Current Benefits	Proposed Benefits	Difference
1. Benefits			
a) Benefit Formula	2.50% Mult. (80% Max)	2.50% Mult. (80% Max)	
b) Normal Retirement Age	60	60	
c) Vesting Provision	V-10	V-10	
d) F50 Retirement Condition	-	-	
e) F55 Retirement Condition	F55(20)	F55(20)	
f) F(N) Retirement Condition	-	-	
g) Rule of X	-	-	
h) FAC Period	FAC - 3	FAC - 3 (Capped at \$70,000)	FAC - 3 (Capped at \$70,000)
i) RS50 Percent	-	-	
j) DROP+	-	-	
k) D-2	-	-	
l) Benefit E	-	-	
m) Benefit E1	-	-	
n) Benefit E2	-	-	
o) Load for Sick Leave In FAC	-	-	
p) Member Contribution Rate	3.00%	3.00%	
2. Member Counts			
a) Active	12	12	0
b) Retired	16	16	0
c) Vested Former Members	2	2	0
d) Total	<u>30</u>	<u>30</u>	<u>0</u>
3. Annual Payroll	\$ 600,317	\$ 600,317	\$ -
4. Actuarial Value of Assets	\$ 3,868,369	\$ 3,868,369	\$ -
5. Actuarial Accrued Liability			
a) Active	\$ 2,090,689	\$ 1,914,959	\$ (175,730)
b) Retired	3,810,441	3,810,441	0
c) Vested Former Members	148,439	148,439	0
d) Pending Refunds	<u>7,157</u>	<u>7,157</u>	<u>0</u>
e) Total	\$ 6,056,726	\$ 5,880,996	\$ (175,730)
6. Unfunded Accrued Liability (UAL) (5a - 4)	\$ 2,188,357	\$ 2,012,627	\$ (175,730)
7. Division Percent Funded (4 / 5e)	63.9 %	65.8 %	1.9 %
8. Cost as a Percentage of Payroll			
a) Employer Normal Cost	8.85 %	6.20 %	(2.65) %
b) Amortization of UAL*	<u>23.30</u>	<u>21.17</u>	<u>(2.13)</u>
c) Total Employer Contribution (8a + 8b)	32.15 %	27.37 %	(4.78) %
d) Total Employer Contribution \$ (8c x 3)	\$ 211,644	\$ 180,168	\$ (31,476)

* Please see the Appendix on the MERS website for a description of the amortization policy.

^ Please note the new assumptions will be phased in over a 5 year period. The cost as a percentage of payroll, the dollar contribution and the increase in the employer contribution reflect the full impact of the new assumptions. They do not reflect any phase-in of the new assumptions.

This report may be provided to other interested parties only in its entirety and only with the prior permission of MERS and the municipality.



Hillsdale, City Of (3001) - Fire (Division 05)
Employer Computed Contributions - Based on 12/31/2016 Actuarial Valuation

	Current Benefits	Proposed Benefits	Difference
1. Benefits			
a) Benefit Formula	2.50% Mult. (80% Max)	2.50% Mult. (80% Max)	
b) Normal Retirement Age	60	60	
c) Vesting Provision	V-10	V-10	
d) F50 Retirement Condition	-	-	
e) F55 Retirement Condition	F55(20)	F55(20)	
f) F(N) Retirement Condition	-	-	
g) Rule of X	-	-	
h) FAC Period	FAC - 3	FAC - 3 (Capped at \$70,000)	FAC - 3 (Capped at \$70,000)
i) RS50 Percent	-	-	
j) DROP+	-	-	
k) D-2	-	-	
l) Benefit E	-	-	
m) Benefit E1	-	-	
n) Benefit E2	-	-	
o) Load for Sick Leave in FAC	-	-	
p) Member Contribution Rate	5.00%	5.00%	
2. Member Counts			
a) Active	4	4	0
b) Retired	4	4	0
c) Vested Former Members	1	1	0
d) Total	9	9	0
3. Annual Payroll	\$ 207,778	\$ 207,778	\$ -
4. Actuarial Value of Assets	\$ 1,292,383	\$ 1,292,383	\$ -
5. Actuarial Accrued Liability			
a) Active	\$ 569,525	\$ 531,478	\$ (38,047)
b) Retired	912,897	912,897	0
c) Vested Former Members	34,760	34,760	0
d) Pending Refunds	0	0	0
e) Total	\$ 1,517,182	\$ 1,479,135	\$ (38,047)
6. Unfunded Accrued Liability (UAL) (5e - 4)	\$ 224,799	\$ 186,752	\$ (38,047)
7. Division Percent Funded (4 / 5e)	85.2 %	87.4 %	2.2 %
8. Cost as a Percentage of Payroll			
a) Employer Normal Cost	7.69 %	5.55 %	(2.14) %
b) Amortization of UAL*	7.11	5.76	(1.35)
c) Total Employer Contribution (8a + 8b)	14.80 %	11.31 %	(3.49) %
d) Total Employer Contribution \$ (8c x 3)	\$ 33,720	\$ 25,776	\$ (7,944)

* Please see the Appendix on the MERS website for a description of the amortization policy.

^ Please note the new assumptions will be phased in over a 5 year period. The cost as a percentage of payroll, the dollar contribution and the increase in the employer contribution reflect the full impact of the new assumptions. They do not reflect any phase-in of the new assumptions.

This report may be provided to other interested parties only in its entirety and only with the prior permission of MERS and the municipality.



Hillsdale, City Of (3001) - BPU Union (Division 12)
Employer Computed Contributions - Based on 12/31/2016 Actuarial Valuation

	Current Benefits	Proposed Benefits	Difference
1. Benefits			
a) Benefit Formula	2.25% Mult. (80% Max)	2.25% Mult. (80% Max)	
b) Normal Retirement Age	60	60	
c) Vesting Provision	V-10	V-10	
d) F50 Retirement Condition	-	-	
e) F55 Retirement Condition	F55(25)	F55(25)	
f) F(N) Retirement Condition	-	-	
g) Rule of X	-	-	
h) FAC Period	FAC - 3	FAC - 3 (Capped at \$85,000)	FAC - 3 (Capped at \$85,000)
i) RS50 Percent	-	-	
j) DROP+	-	-	
k) D-2	-	-	
l) Benefit E	-	-	
m) Benefit E1	-	-	
n) Benefit E2	-	-	
o) Load for Sick Leave in FAC	-	-	
p) Member Contribution Rate	9.16%	9.16%	
2. Member Counts			
a) Active	10	10	0
b) Retired	17	17	0
c) Vested Former Members	2	2	0
d) Total	29	29	0
3. Annual Payroll	\$ 639,326	\$ 639,326	\$ -
4. Actuarial Value of Assets	\$ 2,759,183	\$ 2,759,183	\$ -
5. Actuarial Accrued Liability			
a) Active	\$ 996,247	\$ 580,999	\$ (415,248)
b) Retired	2,707,471	2,707,471	0
c) Vested Former Members	72,059	72,059	0
d) Pending Refunds	16,532	16,532	0
e) Total	\$ 3,792,309	\$ 3,377,061	\$ (415,248)
6. Unfunded Accrued Liability (UAL) (5e - 4)	\$ 1,033,126	\$ 617,878	\$ (415,248)
7. Division Percent Funded (4 / 5e)	72.8 %	81.7 %	8.9 %
8. Cost as a Percentage of Payroll			
a) Employer Normal Cost	2.57 %	(2.02) %	(4.59) %
b) Amortization of UAL*	10.44	5.75	(4.69)
c) Total Employer Contribution (8a + 8b)	13.01 %	3.73 %	(9.28) %
d) Total Employer Contribution \$ (8c x 3)	\$ 91,188	\$ 26,184	\$ (65,004)

* Please see the Appendix on the MERS website for a description of the amortization policy.

^ Please note the new assumptions will be phased in over a 5 year period. The cost as a percentage of payroll, the dollar contribution and the increase in the employer contribution reflect the full impact of the new assumptions. They do not reflect any phase-in of the new assumptions.

This report may be provided to other interested parties only in its entirety and only with the prior permission of MERS and the municipality.



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Risk Characteristics of Defined Benefit Plans

It is important to understand that retirement plans, by their nature, are exposed to certain risks. While risks cannot be eliminated entirely, they can be mitigated through various strategies. Below are a few examples of risk (this is not an all-inclusive list):

- Economic - investment return, wage inflation, etc.
- Demographic - longevity, disability, retirement, etc.
- Plan Sponsor and Employees - contribution volatility, attract/retain employees, etc.

The MERS Retirement Board adopts certain assumptions and methods to mitigate the economic and demographic risks, and the contribution volatility risks. For example, the investment risk is the largest economic risk and is mitigated by having a balanced portfolio and a clearly defined investment strategy. Demographic risks vary based on the age of the workforce and are mitigated by preparing special studies called experience studies on a regular basis to determine if the assumptions used are reasonable compared to the experience. Risk may be mitigated through a plan design that provides benefits that are sustainable in the long run. An Experience Study is completed every five years to review the assumptions and methods. The next Experience Study will be completed in 2020.



Important Comments

1. The results are based on information provided by the municipality and MERS. The actuary is unaware of any additional information that would impact these results.
2. This report describes the financial effect of the proposed benefit plan. No statement contained within is a recommendation in favor of or in opposition to the proposed benefit plan.
3. The reader of this report should keep in mind that actuarial calculation are mathematical estimates based on current data and assumptions of future events (which may or may not materialize). As a result, actuarial calculations can and do vary from one valuation year to the next, sometimes significantly if the group valued is very small (less than 30 lives). The cost impact of a benefit change may fluctuate over time, as the demographics of the group changes.
4. The calculations in this report were prepared based on December 31, 2016, demographic and financial information unless noted elsewhere in the report.
5. The valuation date is December 31, 2016.
6. Please note, the assumptions and methods used in these calculations are consistent with those used in the December 31 2016, Annual Actuarial Valuation (except where noted otherwise) and are summarized in an Appendix. This Appendix is located on the MERS website at www.mersofmich.com.
7. In the event that more than one plan change is being considered, the user of this report should remember that the results of separate actuarial valuations cannot be added together. The total can be considerably greater than the sum of the parts due to the interaction of various plan provisions with each other and with the assumptions used.
8. Retirement benefits and employer contributions are based on a percentage of members' reported pay for open divisions. If actual reported payroll differs substantially from payroll used in this report, the dollar contribution should be adjusted proportionately.
9. The results do not show the potential impact on other post-employment benefits (such as retiree health care insurance) or ancillary benefits (such as life insurance).
10. If the user of this report is not sure how to interpret certain results in the report or how to read the report, they should contact MERS at (800) 767-6377 before relying on the results of this report.



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11. Additional disclosures required by Actuarial Standard of Practice:

- All actuarial calculations have been prepared in conformity with generally accepted actuarial principles and practices and with the Actuarial Standards of Practice issued by the Actuarial Standards Board.
- The valuation was based upon information furnished by the municipality and MERS staff. We checked for internal and year to year consistency, but did not otherwise audit the data. CBIZ Retirement Plan Services is not responsible for the accuracy or completeness of the information provided for the preparation of these calculations.



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Miscellaneous and Technical Assumptions

1. The results in this report are based on the assumptions used in the December 31, 2016 annual valuation.
2. FAC Load – 3.00%
3. Withdrawal Scaling Factor – 1.00