

OFFICIAL PROCEEDINGS
CITY COUNCIL
ELECTRICAL ADVISORY COMMITTEE
CITY OF ESCANABA, MICHIGAN
Special Joint Meeting
Wednesday, December 12, 2012

Pursuit to a meeting notice posted December 6, 2012, the meeting was called to order by the Mayor Leo J. Evans at 6:04 p.m. in the Council Chambers of City Hall located at 410 Ludington Street.

Present: Mayor Leo J. Evans, Council Members, Patricia A. Baribeau, Ronald J. Beauchamp, and Brady L. Nelson.

Absent: Council Member Walter A. "Pete" Baker.

Present: Electrical Advisory Committee (EAC) Members: Chairperson Tim Wilson, Jon Anthony, Ann Bissell, and Glendon Brown .

Absent: Electrical Advisory Committee Members: Larry Arkens, and Three vacancies

Also Present: City Manager James V. O'Toole, Electric Superintendent Mike Furmanski, City Controller Mike Dewar, Pro Energy Escanaba Power Plant Manager Jack Scott, Power System Engineering representative Tom Butz, Escanaba Green Energy representatives Charles DeTiege and, members of the public, and Media.

Beauchamp moved, Nelson seconded, **CARRIED UNANIMOUSLY**, to approve the agenda as submitted.

UNFINISHED BUSINESS - None

CONFLICT OF INTEREST - None

PUBLIC HEARING - None

NEW BUSINESS

Update - Electric Department –General Operations.

Electrical Superintendent Mike Furmanski updated the City Council, Electrical Advisory Committee and Citizens of Escanaba on the current departmental activities, and the MISO Y1 contract. The following items were reviewed

- New Entrance Signs;
- Pole Maintenance;
- Tree Trimming Bid;
- Sub-Station transformers. Electric Superintendent will investigate purchase of a transformer as a backup for the new substation and report back at the January Joint Meeting;
- MISO Y1 update.

Update– Operation and Maintenance of Power Plant – Pro Energy Services, Inc.

Pro Energy Services, Inc. updated the City Council, Electrical Advisory Committee and Citizens of Escanaba on the status of the operation and maintenance of the power plant.

- No accidents or injuries;
- Plant was not called up to run;
- Down time was used for maintenance.

Update – Electric Operations Budget Comparison.

City Controller Dewar provided an update on Electric Operations as compared to the budget for Fiscal Year 2012/2013 through October. The following (See Attachment – A):

- Fiscal 2012/13 Fund Electric Budget – Comparison of Changes;
- Comparative Income Statement First Four Months of the Current Fiscal Year;
- Insurance Costs.

Update – Load Forecast Study.

Administration provided an update on the need to have a load forecast done. The last Load Forecast Study was completed in 2003.

- Changes to load forecast figures now that City was working with MISO;
- After review and discussion, Administration would seek a RFP for a new Load Forecast Study and bring to Council for approval.

Update – Capacity Changes in the MISO market.

Power System Engineering representative Tom Butz provided an update on the changes coming soon to the MISO market. (Attachment – B)

- Administration researching best option;
- Administration asked to seek approval on a capacity cap from Council;
- There was a lot of uncertainty until the MISO Auction occurred;
- The Capacity was available now. Members questioned whether the information could be analyzed and make a decision the following month;

It was the consensus of the Electrical Advisory Committee to move forward to secure capacity at an amount of a maximum amount of \$178,000.

After discussion Nelson moved, Baribeau seconded, to move forward to secure Power Plant Capacity for the 2013/14 fiscal year at an amount not to exceed \$178,000.

Ayes: Nelson, Baribeau, Evans

Nays: Beauchamp

MOTION CARRIED.

Update – Power Plant Purchase Agreement.

EGE Representative Charles DeTiege provided an update on the status of power plant purchase agreement between the City of Escanaba and Escanaba Green Energy, LLC.

- Final documentation details for the loan was in hand;
- December 20th was still a target date for the sale provided Homeland Security did not delay the wire transfer;
- Sale would happen by the end of year;
- Reviewed details of what issues were resolved;
- EGE was still working on final property loan and insurance.

GENERAL PUBLIC COMMENT - None

COUNCIL/COMMITTEE, STAFF REPORTS - None

ADJOURNMENT

Hearing no further public comment, or further reports from the Electrical Advisory Committee or Council, the meeting adjourned at 7:55 p.m.

Respectfully submitted,

Robert S. Richards, CMC
City Clerk

Approved:

Leo J. Evans, Mayor

CITY OF ESCANABA

01123R3ELECTR(C)PowerCosts201213IP&LCompoBudget1012

Electric Utility Fund
Comparative Income Statement
First Four Months of the Fiscal Year
Through 10/31/12

4 Months

	Col. (1)	Col. (2)	Col. (3)	Col. (4)	Col. (5)	Col. (6)	Col. (7)
	Budget Based On Continued Plant Operation	Pro-Rated Revised Budget	Financials - As Booked - As Of 10/31/12	Adjustments	Adjusted Financials As Of 10/31/12	\$\$\$ Change	% Change
Sales to Customers	\$13,069,000	\$4,356,333	\$4,401,246		\$4,401,246	\$44,913	1.0%
Less:							
Power Purchases	(8,833,450)	(2,944,483)	(2,813,875)		(2,813,875)	130,608	-4.4%
ATC Transmission Costs	(1,216,170)	(405,390)	(393,781)		(393,781)	11,609	-2.9%
Transaction Costs (WPS/GLU/MISO)	(275,926)	(91,975)	(93,086)		(93,086)	(1,111)	1.2%
Gross Profit - Retail Sales	\$2,743,454	\$814,485	\$1,100,595		\$1,100,595	\$186,020	20.3%
Other Revenue (Includes EO Revenues)	631,200	210,400	439,865 (1)	(\$200,000)	239,865	29,465	14.0%
Electric Department Overhead	(651,347)	(183,782)	(183,782)		(183,782)		
City Administration	(1,510,507)	(503,502)	(503,272)		(503,272)		
Distribution System Maintenance	(456,198)	(152,066)	(166,210)		(166,210)		
Distribution System Depreciation	(300,000)	(100,000)	(100,000)		(100,000)		
Distribution Costs	(2,818,052)	(939,350)	(953,264)		(953,264)	(13,914)	1.5%
Profit/(Loss) Before Generation Operations	\$556,602	\$185,535	\$587,107		\$387,107	\$201,572	108.6%
Sales to MISO	1,200,000	400,000	594,318		594,318	194,318	48.6%
SSR Payments from MISO	3,710,279	1,236,760	0 (5)	1,236,780	1,236,780	0	0.0%
Plant O&M	(3,856,879)	(1,285,626)	(1,028,097) (2)	(145,000)	(1,173,097)	112,529	-8.8%
Fuel & Ash Costs	(1,000,000)	(333,333)	(488,516)		(488,516)	(155,183)	46.6%
Power Plant Depreciation	(300,000)	(100,000)	0 (3)	(100,000)	(100,000)	0	-0.0%
Prior Year Costs	0	0	0		0	0	0.0%
Generation Costs	(5,156,879)	(1,718,959)	(1,516,613)		(1,761,613)	(42,654)	2.5%
Profit/(Loss) - Generation Operations	(\$246,600)	(\$62,199)	(\$922,295)		\$69,465	\$181,664	-184.5%
Contribution to General Fund	(483,624)	(154,541)	0 (4)	(154,541)	(154,541)	0	-0.0%
Net Profit/(Loss)	(\$153,622)	(\$51,205)	(\$335,188)	\$637,219	\$302,031	\$353,236	

- (1) Eliminate EGE Payment
- (2) Estimate ProEnergy Bonus
- (3) Book Steam Generation Depreciation
- (4) Book Contribution to General Fund
- (5) Apply SSR Reimbursement

City of Escanaba

u:\123R3\ELECTRIC\Analysis of Options\1213InsuranceCosts

Electric Utility Fund

Comparison of Generating Operations Insurance Costs

	Total	F/Y 2011/12	F/Y 2012/13	F/Y 2013/14
MMRMA - Property & G/L				
7/1/11-6/30/12	\$66,994.00	\$66,994.00		
7/1/12-6/30/13	52,384.00		\$52,384.00	
Marsh - G/L & Auto & Umbrella				
6/5/11-6/4/12	\$82,703.00	\$75,811.00		
6/5/12-9/4/12	20,841.00	6,947.00	\$13,894.00	
9/5/12-12/4/12	20,840.00		20,840.00	
12/5/12-12/4/13	91,497.00		53,373.00	\$38,124.00
ProEnergy - G/L & Auto				
11/12	\$76,807.50	\$76,807.50		
12/13 EST			\$80,000.00	
TOTALS		\$226,559.50	\$220,491.00	\$38,124.00
City Budget as Submitted to MISO			<u>\$225,364</u>	
City Budget as Approved by MISO			<u>\$178,764</u>	

NB-3

CITY OF ESCANABA

2012-2013 Electric Fund Budget - Comparison of Changes

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	(Col 1) Budget As Adopted 2012-13 \$15,482,200	(Col 2) Changes Resulting From Rate Ordinance Adoption (\$2,007,000)	(Col 3) Budget Based On Rate Changes \$13,475,200	(Col 4) Changes Resulting From Continued Plant Operation \$0	(Col 5) Budget Based On Continued Plant Operation \$13,475,200	(Col 6) MISO Adjustments	(Col 7) MISO Reimbursement Budget
Operating Revenues							
General Administrative	(1,510,507)	0	(1,510,507)	0	(1,510,507)		
Power Purchases/Ancillary Costs	(10,325,546)	0	(10,325,546)	0	(10,325,546)		
Transmission and Distribution	(428,514)	0	(428,514)	0	(428,514)		
Customer Service	(27,684)	0	(27,684)	0	(27,684)		
Overhead to General Fund	(551,347)	0	(551,347)	0	(551,347)		
Distribution System Depreciation	(300,000)	0	(300,000)	0	(300,000)		
Net Operating Income	2,338,602	(2,007,000)	331,602	0	331,602		
Power Sales to MISO	0	0	0	1,200,000	1,200,000		
SSR Payment from MISO ***	0	0	0	3,710,279	3,710,279		
Plant O&M	0	0	0	(3,331,515)	(3,331,515)		(\$3,231,515)
Fuel Expense	0	0	0	(1,000,000)	(1,000,000)		
Management Fee / Bonus	0	0	0	(300,000)	(300,000)		(300,000)
Plant Insurance	0	0	0	(225,364)	(225,364)		(178,764)
Plant Depreciation	0	0	0	(300,000)	(300,000)		0
Net Generation Operations	0	0	0	(246,600)	(246,600)		(\$3,710,279)
Plus: Interest Earnings	225,000	0	225,000	0	225,000		
Less: Contributions to Other Funds	(463,624)	0	(463,624)	0	(463,624)		
NET INCOME	2,099,978	(2,007,000)	92,978	(246,600)	(153,622)		

*** This assumes that we are reimbursed by MISO at the agreed upon level, starting no later than 7/1/12

12/12/2012

- Three Options to Secure Capacity
 - PRA - Planning Resource Auction
 - Allow Pricing to be Based on Supply/Demand
 - Self Schedule
 - Assign Owned Generation to Load
 - Opt Out
 - Purchase Bilateral from another Market Participant
- Alternatives for Bilateral Deals Before Auction
 - Escanaba Green Energy
 - Great Lakes Utilities
 - Nextera

MISO Capacity – New (Cont)

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- Decision Options
 - Open Position – Let Auction Determine Costs
 - Pricing Uncertain – Not Recommended
 - Long-term Bilateral?
 - Seek to Lock in Large Percent Capacity Need
 - Some will remain in Short-term or open position
 - Short-term Bilateral?
 - Seek to Lock in All Capacity Need for 1-3 Years
 - Watch First Auction Results April 2013
 - Likely to Drive Pricing in Bilateral Market

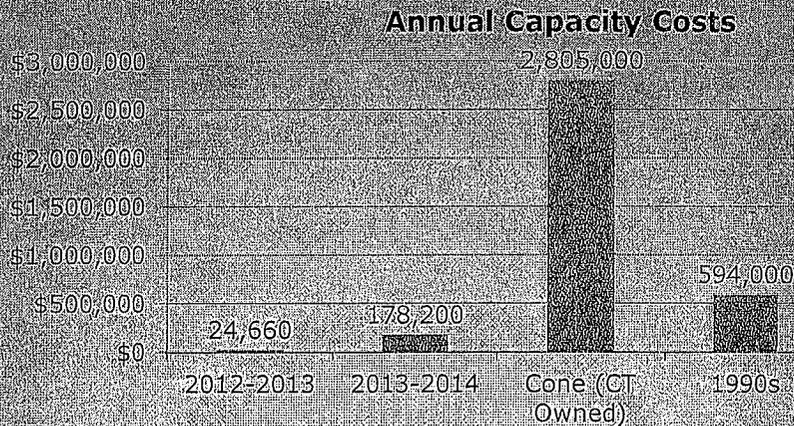
MISO Capacity – New (Cont)

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- **Additional Cost Information**
 - **Cost of New Entry (CONE)**
 - Designed to Show Annual Cost of Owning New Peaking Unit
 - Currently \$85-90/kW-year
 - **Total Capacity Cost Estimate of Owning New Peaking**
 - \$2.8 Million
 - **Capacity Prices in MAPP Years (mid 1990s)**
 - \$18/kW-year or \$594,000

MISO Capacity – New (Cont)

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MISO Capacity – New (Cont)

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12/12/2012

- **Implications of Zonal Capacity**
 - LOLE – Defined by zone
 - Results in 6.2% PRM for Zone 2
 - Current PRM of 3.77%
 - Uncertain on Auction Pricing Outcome
 - Limits of Import and Export Capacity
 - Not sure on limits at this point
 - Cost of moving Capacity from One Node to Another
 - Uncertain into Future – Introduces a “basis” risk – moving capacity from one zone to another

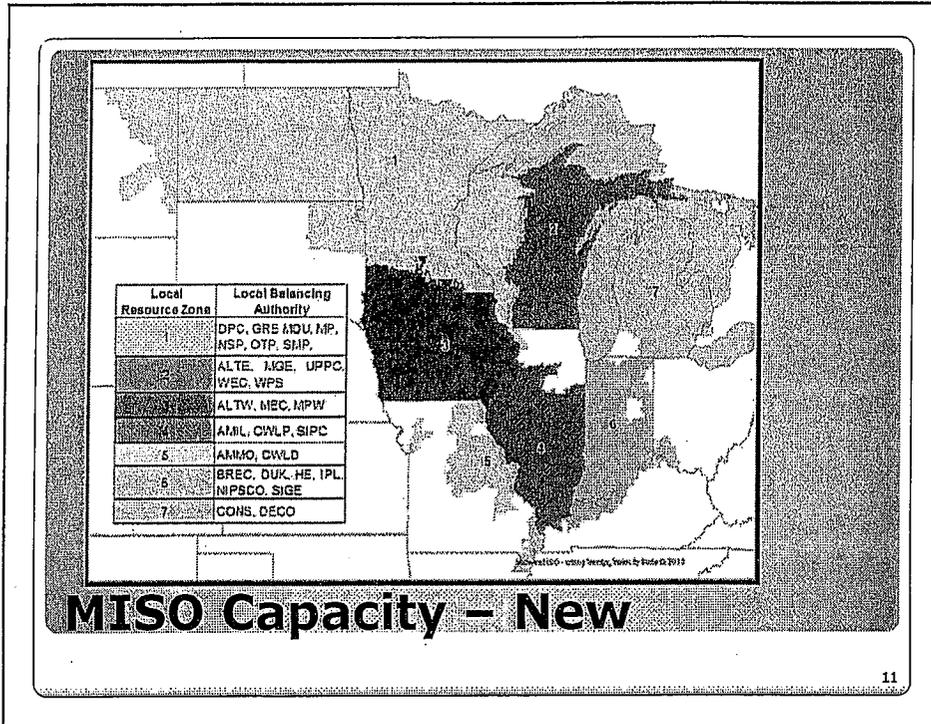
MISO Capacity - New (Cont)

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- **Initial Pricing Indication**
 - Short-term Bilateral Market
 - \$5.40/kW-yr (\$0.45/kW-mo) compared to current one zone pricing of \$0.05/kW-mo
 - Long-term pricing uncertain at this point
 - Not Many Willing to Deal
 - One Year Term Deals Available
 - Total 2013-2014 Costs Estimated at \$178,200 (33 MW @ \$5.40/kW-yr)

MISO Capacity - New (Cont)

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- City of Escanaba is in Zone 2
 - Includes
 - Alliant East
 - Madison Gas Electric
 - UPPCO
 - WE Energies
 - Wisconsin Public Service
- MISO Capacity - New (Cont)**
- 12

12/12/2012

- Market Begins June 1, 2013
- Significant Changes -
 - Seven Zones of Capacity and Demand Defined
 - Reserve Requirements Calculated by Zone
 - Import/Export and Capacity Needs Defined for Each Zone
 - Annual Assessment of Demand and Capacity rather than Monthly
 - Same MW value for all year defines need
 - Planning Resource Auction (PRA) available to transact capacity from Generation to Load
 - Bilateral Purchases and Self Supply Also Available

MISO Capacity – New (Cont)

- Dates of Interest
 - MISO Planning Year – June 1- May 31
 - Generation Verification Tested Capacity (GVTC)
 - Generation Testing from Sept 1 to Aug 31 of year prior to planning Year
 - Results Due Oct 31 of year prior to Planning Year
 - UCAP Values Established 12/1
 - November 1 Previous Year – Peak Load Forecast Due
 - Bilateral Purchases Arranged – up to 3 days before April 1 Auction

MISO Capacity – New (Cont)

- **Summary of Today's Capacity**
 - **Load Obligations –**
 - Non-Coin Peak Load including Losses + Reserve Requirements Must be Greater than Total Capacity
 - UCAP of Owned Units + Any Purchases of Capacity
 - **Capacity Position**
 - Buying Capacity + City Generation
 - Uncertainty on Plant Closing Date
 - Locked in through March 2013
 - Very Modestly Priced - \$0.05/kW-month
 - Current Annual Costs 2012-2013 = \$24,660
 - **Current Capacity Market through May 2013**

MISO Capacity – Today (Cont)

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MISO Capacity – New Approach

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12/12/2012

- Key Timeline Items
 - MISO Planning Year – June 1- May 31
 - Generation Verification Tested Capacity (GVTC)
 - Generation Testing from Sept 1 to Aug 31 of year prior to planning Year
 - Results Due Oct 31 of year prior to Planning Year
 - UCAP Values Established 12/1
- Planning Reserve Requirements
 - Based on Loss of Load Expectation Study
 - Loss of Load serving of 1 day per 10 years
 - Provide Results Based on Coin vs. Non-Coin Load, and Also UCAP vs ICAP
 - 2012-2013 Non-Coin Peak UCAP Reserve Requirement
 - 3.79%

MISO Capacity – Today (Cont)

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- Peak Demand Forecast
 - LSE Requirement to Provide to MISO by Nov 1
 - Must be Based on 50/50 Probability
 - Load Forecast Method Provides This by Design
 - Coincident with MISO
 - Need to Provide Description of Forecast Drivers
 - Econometric, Weather, etc.
- Capacity Requirement
 - Based on Max Demand Plus PRMR and Losses
 - Each Load Serving Entity (LSE) Must have Enough Capacity for Resource Adequacy

MISO Capacity – Today

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12/12/2012

- **Generation Capacity - Millions of Watts (MW)**
 - Similar to Horsepower Rating of Engines
- **Amount of Capacity Must be Greater Than Peak Demand Plus Reserves**
 - Accounting for Variance In..
 - Projected Peak vs. Actual
 - Available Generation Units
- **Reserves..**
 - Additional Generation Capacity
 - Accounts for Variance Factors

Capacity – Basic Concepts

3

- **Key Terms**
 - **Planning Reserve Margin Requirements (PRMR)**
 - Percent Additional Capacity Required Above Peak
 - **Installed Capacity Values (ICAP)**
 - Maximum Tested Output of Gen units (MW)
 - **Unforced Capacity Values (UCAP)**
 - $ICAP \times \text{three Avg year Equiv Forced Outage Rates}$
 - Designed to Take Into Account Availability of Units
 - **Coincident vs. Non-Coincident Peak with MISO**
 - Coincident Peak – Same time as MISO Peak
 - **Peak Losses – System Transmission Losses to Serve Load**

MISO Capacity – Today (Cont)

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12/12/2012

Capacity Changes in the MISO Market

December 12, 2012

- Capacity – Basic Concepts
- MISO Capacity – Today's World
- MISO Capacity – New Approach

Agenda