

**OFFICIAL PROCEEDINGS**  
**CITY COUNCIL**  
**ELECTRICAL ADVISORY COMMITTEE**  
**CITY OF ESCANABA, MICHIGAN**  
***Special Joint Meeting***  
***Wednesday, November 13, 2013***

Pursuit to a meeting notice posted November 8, 2013, the meeting was called to order by the Mayor Marc D. Tall at 6:00 p.m. in the Council Chambers of City Hall located at 410 Ludington Street.

Present: Mayor Marc D. Tall, Council Members, Patricia A. Baribeau, Ronald J. Beauchamp, Ralph B. Blasier, and Leo J. Evans

Absent: None

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

Absent: Electrical Advisory Committee (EAC) Members: Jon Anthony, Two vacancies, and Power Plant Liaison.

Also Present: City Attorney Ralph B.K. Peterson, Electric Superintendent Mike Furmanski, Josh Krainiak Electric Distribution Engineer, City Controller Mike Dewar, Jack Scott of Pro Energy Services, Charles DeTiege of Escanaba Green Energy (EGE), members of the public and media.

Beauchamp moved, Baribeau 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.**

Electric Superintendent Mike Furmanski updated the City Council, Electrical Advisory Committee and Citizens of Escanaba on the following departmental activities;

- Bells Brewery Project;
- OSF Rehabilitation Building Project;
- New Home Construction;
- Reviewed the Annual Pole Testing Program.

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

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

- Power Plant was not called upon to operate during the month of October;
- There were no OSHA work related injuries or illnesses during the month of October;
- Reviewed No. 2 Turbine bearing replacement and realignment of Turbine Generator No. 1;
- Reviewed other maintenance and equipment replacements which occurred throughout the month.

**Update – Escanaba Power Supply Costs/U.P. Power Supply and Market Conditions.**

Electric Superintendent Mike Furmanski provided a high level overview of Escanaba's power supply costs in light of the current power supply developments in the U.P. (See Attachment – A) Mr. Furmanski concluded by stating City power costs were in a good competitive condition with stable rates, as compared to other Upper Peninsula communities.

**Update – Energy Optimization Program.**

Electric Distribution Engineer Josh Krainiak provided an update regarding energy optimization work that was recently performed by Orange Energy Solutions at a number of commercial establishments in the City of Escanaba as part of the Energy Optimization program. The visits installed door gaskets, night covers, and strip curtains primarily at grocery, convenience stores, and restaurants, on older refrigeration units. Mr. Krainiak advised the work, from a selective list obtained from City electric customers, went well within the City. The needed repairs provided savings to customers and increased their awareness on other energy savings projects at their businesses. After a brief review on details of the program and how it was funded, Council Members suggested promoting and marketing the program in the future to the media and members of the public.

**Update – City of Escanaba/Upper Peninsula Power Company Mediation.**

Administration and City Attorney Peterson provided an update on the upcoming mediation between the City and UPPCO over disputes related to the terminated operating agreement. Non-Binding arbitration was scheduled in Menominee, Monday, November 18, 2013.

**Update – Power Plant Purchase Agreement.**

Charles DeTiege provided an update on the status of Power Plant Purchase Agreement between the City of Escanaba and Escanaba Green Energy, LLC. Mr. DeTiege briefly reviewed the details and framework that was required to obtain the \$1,000,000 deposit from Black Diamond Company.

**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 6:47 p.m.

Respectfully submitted,

Robert S. Richards, CMC  
City Clerk

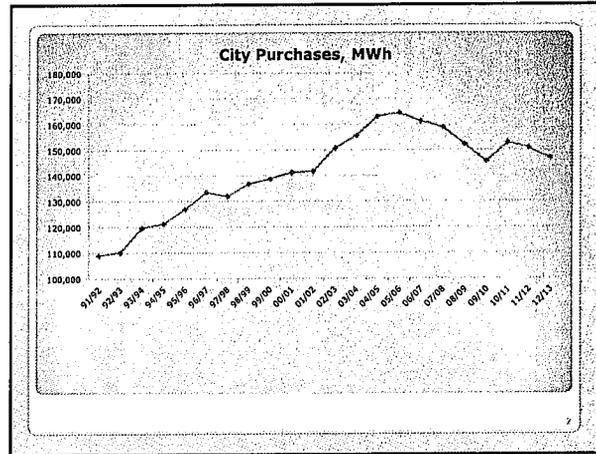
Approved:

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Marc D. Tall, Mayor

# Power Costs Update

November 13, 2013

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- Wholesale Energy Components
  - Energy
  - Capacity
  - Transmission Costs (ATC)
  - Market Expenses (MISO)

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- Status of each component
  - Energy – Contract through Dec 2018
  - Capacity – Contract through May 2017
  - ATC – Costs estimated
  - MISO – Costs estimated

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- Energy
  - Full requirements purchase at our node
  - \$57.10 through Dec 2016
  - \$52.32 for Jan – Dec 2017
  - \$54.94 for Jan – Dec 2018
  - Indicative prices for Jan 2019 – May 2020 slightly higher
  - May 2020 was requested as an end date to match up with MISO Planning Year
  - MISO P/Y runs June 1 – May 31

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- Capacity
  - Capacity Zonal Resource Credits (ZRCs) are needed to meet our expected peak load (plus reserves) annually. Prices are in \$/kw-mo. 1 ZRC = 12,000 kw-months.
  - \$0.50 for P/Y 13/14 (purchased 2.4 ZRCs)
  - \$0.20 for P/Y 14/15
  - \$0.40 for P/Y 15/16
  - \$0.60 for P/Y 16/17
  - Indicative prices for P/Ys 17/18 and 18/19 are 3X-4X costs of 16/17

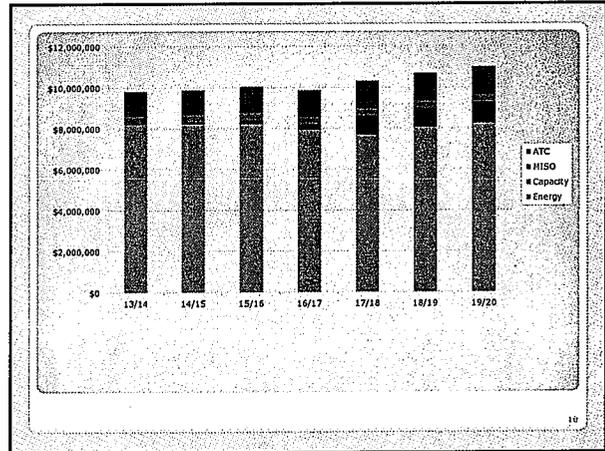
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- **ATC and MISO**
- These costs are determined by ATC and MISO.
- Fixed price contracts are not available

- **Assumptions used:**
- 144,000 MWh energy annually
- 34 ZRCs of capacity annually

Energy	\$8,222,400	\$8,222,400	\$8,222,400	\$7,935,600	\$7,891,280	\$8,049,880	\$8,246,000
Capacity	\$14,400	\$81,800	\$168,200	\$244,800	\$300,000	\$300,000	\$1,020,000
MISO	\$980,000	\$980,000	\$980,000	\$980,000	\$980,000	\$980,000	\$980,000
ATC	\$1,200,000	\$1,200,000	\$1,285,000	\$1,315,987	\$1,347,571	\$1,377,217	\$1,377,217
TOTALS	\$9,796,800	\$9,864,000	\$10,057,000	\$9,856,387	\$10,298,851	\$10,687,177	\$11,001,217
\$/MWh	\$68.00	\$68.50	\$69.57	\$68.45	\$71.52	\$74.22	\$76.40
% Change to 13/14		0.69%	2.40%	0.61%	5.12%	9.09%	12.29%
P/Y	13/14	14/15	15/16	16/17	17/18	18/19	19/20

Yellow Cells = indicative pricing      Green Cells = Estimated



- **Other Components Needed**
- **Michigan Renewable Energy Credits (MIRECs)**
  - MIRECs have a 3 year shelf life. We have purchased MIRECs to meet our state requirements through 2015. 2015 price was \$1.50/MIREC. Previous prices were \$0.30 - \$0.50.
  - Future MIREC prices are in the \$1.75 - \$7.00 range.
  - MIRECs are purchased with RE plan money.
  - We need approximately 15,000 MIRECs/year.

- **Sensitivity - Capacity**
  - MISO believes many coal plants will shut down in 2016 due to EPA regulations
  - This could lead to capacity scarcity
  - Capacity prices could rise significantly
  - MISO estimates Cost of New Entry (CONE) at approximately \$8/kw-mo. (annual cost of \$3.3M)
  - Self supply capacity with generating station = \$12/kw-mo. Would still need to purchase some ZRCs
  - Self supply capacity with CT only = \$4/kw-mo. Would need to purchase 68% of ZRCs.

- Sensitivity – Presque Isle
  - Possible impacts of Presque Isle Power Plant
    - MISO has determined PIPP must stay running
    - SSR costs of \$35-82M
    - Escanaba's share = \$80,000 - \$186,000
- Sensitivity – Escanaba Plant Sale
  - Current SSR covers \$3.7M of \$4.5M plant costs
  - Elimination of \$800k plant costs helps overall

City / Utility	Projected example customer classification and usage - Effective JAN 2014		
	Residential 500 kWh/mo	Commercial 4000 kWh/mo	Large Power 200,000 kWh & 463 kW
Menominee			
WPS	\$53.41	\$394.76	\$15,981.55
Escanaba		Single phase \$347.98	
City of Escanaba	\$53.53	Three phase \$355.95	\$15,374.02
Marquette			
Marquette BLP	\$56.15	\$471.20	\$19,282.75
Maristique		Single phase \$421.20	
Cloverland REA	\$66.60	Three phase \$436.20	\$18,733.89
Gladstone		Single phase \$494.80	
WPPI	\$68.05	Three phase \$495.80	\$19,191.00
Iron Mountain	Single phase \$78.60	Single phase \$591.84	
WE Energies	Three phase \$83.50	Three phase \$606.62	\$22,420.87
Shipemng			
UPPCO	\$102.75	\$755.20	\$24,440.50