



CITY COUNCIL/ELECTRICAL  
ADVISORY COMMITTEE- STUDY  
SESSION

February 9, 2011 - 6:00 p.m.

CITY COUNCIL

Gilbert X. Cheves, Mayor  
Leo Evans, Mayor Pro-tem  
Patricia Baribeau, Council Member  
Brady Nelson, Council Member  
Walter Baker, Council Member

ADMINISTRATION

James V. O'Toole, City Manager  
Robert S. Richards, CMC, City Clerk  
Ralph B.K. Peterson, City Attorney  
Mike Furmanski, Electrical Superintendent  
Michael Dewar, City Controller  
Thomas Butz, Power System Engineering

ELECTRICAL ADVISORY COMMITTEE

Ronald Beauchamp, Chairman  
John Mellinger, Vice Chairman  
Larry Arkens, Committee Member  
Glendon Brown, Committee Member  
Ann Bissell, Committee Member  
Tim Wilson, Committee Member  
John Anthony, Committee Member  
Donald Racicot, Committee Member

City Council Chambers located at: City Hall - 410 Ludington Street - Room C101 - Escanaba, MI 49829

Special Study Session Agenda  
**Wednesday, February 9, 2011**

NEW BUSINESS

1. **Update - Power Plant Operations.**  
**Explanation:** The Plant Operator will discuss current plant operations, plant maintenance issues and costs associated with operations of the facility.
2. **Update - Electric Department.**  
**Explanation:** Electrical Superintendent Michael Furmanski will discuss current departmental activities, operations and provide a project update on the design of the new electrical substation.
3. **Update- Operation and Maintenance - Request for Proposal (RFP).**  
**Explanation:** Administration will update the City Council, Electrical Advisory Committee and Citizens of Escanaba on the status of the Operation and Maintenance Request for Proposal.
4. **Update- Sale of Generation Facilities - Request for Proposal (RFP).**  
**Explanation:** Administration will update the City Council, Electrical Advisory Committee and Citizens of Escanaba on the status of the Sale of Generation Facilities Request for Proposal.
5. **Approval - Environmental Work Plan Development.**  
**Explanation:** Administration is seeking approval to retain Mountain Engineering, Inc of Iron Mountain Michigan in an amount not to exceed \$9,900 to complete an environmental work plan which will detail the types and levels of contamination at the Power Plant property and determine the costs associated with implementing a "Due Care" plan at the site.

**6. Approval – UPPCO Substation Assets.**

**Explanation:** The Upper Peninsula Power Company is requesting the City of Escanaba purchase UPPCO assets located at the Escanaba facility prior to the termination of the UPPCO Operating Agreement in an amount not to exceed \$35,484.83.

**7. Update – Power Purchase Agreement(s) – Short Term/ Long Term – Power Cost Options.**

**Explanation:** Administration will provide an overview and update on the various options being considered for short-term and/or long-term power. Additionally a review will take place on future options being investigated by the Administration in securing reliable, long-term power.

**8. Update – Midwest Independent System Operating (MISO) and American Transmission Company (ATC) and Congestion.**

**Explanation:** Administration will provide an overview and review on the cost of delivering energy (congestion) to Escanaba and what improvements are being considered and/or implemented by MISO and ATC to improve the regional transmission system to the area.

**9. Update – Coal Supply.**

**Explanation:** Administration will provide an update on the existing inventory of coal and the possibility of having to purchase additional coal.

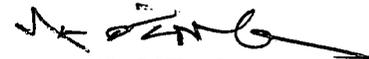
GENERAL PUBLIC COMMENT

COMMISSION/STAFF COMMENT AND ANNOUNCEMENTS

ADJOURNMENT

The City of Escanaba will provide all necessary, reasonable aids and services, such as signers for the hearing impaired and audiotapes of printed materials being considered at the meeting to individuals with disabilities at the meeting/hearing upon five days notice to the City of Escanaba. Individuals with disabilities requiring auxiliary aids or services should contact the City of Escanaba by writing or calling City Hall at (906) 786-9402.

Respectfully Submitted,



James V. O'Toole  
City Manager

the power to help you succeed.

NB #3  
CC/EAC  
2/9/11

*Request for Proposal*  
City of Escanaba, Michigan

for  
**Operating and Maintenance  
Agreement**

January 12, 2011

Contact: Thomas Butz  
10710 Town Square Drive, NE, Suite 201  
Minneapolis, MN 55449  
Office: 763-783-5354  
Mobile: 612-961-9495  
Fax: 763-755-7028

Email: [butzt@powersystem.org](mailto:butzt@powersystem.org)  
Web Site: [www.powersystem.org](http://www.powersystem.org)

Project Website: [www.escanabaenergy.com](http://www.escanabaenergy.com)

**Power System  
Engineering, Inc.**

Madison, WI · Minneapolis, MN · Marietta, OH · Indianapolis, IN



# **City of Escanaba Michigan**

## **Request for Proposal**

### **Operating and Maintenance Contractor**

#### **Background**

This issuance of the O&M Request for Proposal (RFP) for the City of Escanaba, Michigan (City) follows a series of events starting from the point when the plant sale RFPs were sent in the fourth quarter of 2008 and again in September 2009:

- The City of Escanaba has an operating and maintenance agreement with UPPCO to operate the Escanaba Coal Fired Generation Plant and the Oil Fired Combustion Turbine.
- UPPCO provided notice to terminate the agreement, and the date of the agreement termination is June 6, 2011.
- The City has a concurrent RFP seeking to sell the generation facilities, but needs to make sure there are continuous plant operations after the June 6, 2011 termination date.
- The City's first choice is to sell the plant but accomplishing a plant closing by June 6, 2011 is likely to be difficult, and there is a need to find another operator for the facilities by June 6, 2011, due to the termination of the existing operating agreement.
- A proposal that contemplates initial operation of the plant for a brief period before completing the purchasing the plant will be considered. The main goal is to have plant operation continuity after June 6, 2011, while continuing to seek a party to purchase the generation facilities.
- The entity offering to provide the O&M agreement is also invited to pursue the option of purchasing the plant under a separately issued RFP.
- Plant operations during the term of the O&M agreement will include accommodating all due diligence necessary for a prospective buyer of the facilities and also accommodating the environmental cleanup if necessary based on the Phase II Environmental Site Assessment.

#### **Introduction**

Escanaba, Michigan is located 120 miles north and east of Green Bay, Wisconsin on the shores of Lake Michigan. City of Escanaba (City) is responsible for providing electricity to the residents of Escanaba, Michigan. City provides electricity needs by purchasing from MISO and offering its generation into the market. Generation includes two 12.5 MW coal-fired steam generation facilities and a 15 MW oil-fired combustion turbine (CT) unit. City is selling the coal-fired steam generation plant and the CT in a separate RFP.

City is requesting proposals from entities that can provide operating and maintenance services of the currently operating generation facilities (Operator). City is currently contracted with UPPCO

for the O&M of the steam and combustion turbine facilities. Escanaba plant operations for both the steam units and the combustion turbine are staffed by an IBEW union workforce, and this is expected to continue into the future with the next O&M agreement. The City desires to maintain continuity of plant operations and employment.

See Appendix I for the one-line diagram of the substation serving the generation facilities (and part of the City load), Appendix II for the plant survey, Appendix III for more information on the steam generation facilities and Appendix IV for more information on the CT unit.

### **MISO Membership**

The City of Escanaba became a MISO Market Participant on December 1, 2009, and has contracted with UPPCO to offer in the City generation resources, and bid the City load requirements. Generation resources have been dispatched according to MISO directives and the current plant operating staff has become accustomed to operating in the MISO environment. MISO Market Agent Responsibilities are currently being outsourced, but the proposal for O&M could include taking on these responsibilities if the proposing party has interest and can demonstrate capabilities in this capacity. Escanaba has Network Integrated Transmission Service(NITS) from MISO and has a Generation - Transmission Interconnection Agreement.

### **Regional Transmission Capacity**

The American Transmission Company (ATC) is in the process of increasing transmission capacity into the Upper Peninsula and specifically in the Delta County area serving Escanaba. Recent planning studies and discussions with ATC have provided descriptions of plans and expressed that there is ATC management and board support for developing necessary facilities.

### **Response Package and Pricing**

All applicable Response Package(s) must be included as part of each submittal. If more than one submittal is made, separate packages, clearly marked, must be prepared for each submittal.

All price quotes must be communicated in the attached Response Package. Prices quoted shall be clearly stated as indicative based on stated assumptions or firm without any provision for variance.

As an option, the responding party has the option to submit a signed contract that fully represents the desired terms for the O&M agreement. This approach has the advantage of providing an agreement that can be executed, rather than starting with a higher level description of the proposed terms and conditions.

**It is important to note that City will evaluate the bids with a strong emphasis on a party's demonstrated ability of operating and maintaining coal fired and the combustion turbine facilities.**

### **Anticipated Terms of Transaction**

Under the anticipated structure of the O&M Contract, the Operator will be reimbursed for actual costs incurred, subject to certain approvals and budgetary constraints. A fixed fee payable to the Operator along with an incentive fee earned for the attainment of superior operating results (such as availability, plant efficiency, dispatch requirements) represent the forms of compensation to the Operator for services performed under the O&M Contract.

The term of the agreement could be as short as six months or as long as five years depending on a range of outcomes, including possible plant sale, not selling the plant and needing to run the plant until transmission improvements are completed. If the plant sale is not likely to occur, the City will likely pursue filing an Attachment Y with MISO requesting that the plant be put on standby for a defined timeframe. MISO may or may not grant this request, and this will also impact the term of the O&M agreement.

### **Scope of Services**

The City shall provide overall asset management and may provide the majority of the fuel procurement depending on the experience of the Operator. Operator shall conduct and have full responsibility for the day to day management, administration, operations, environmental compliance, and maintenance of the facility. Operator shall provide the following services:

- a) Provide a competent management team and recruitment of skilled workforce;
- b) Develop, implement and maintain an O&M staffing plan;
- c) Implement required Operation and Maintenance training programs;
- d) Review and provide input to the plant regarding operability, maintainability, environmental issues, and safety issues;
- e) Develop and implement O&M policies and procedures to support the day to day operations and maintenance of the facility, to provide for safe, efficient and compliant operation and maintenance of the Facility;
- f) Develop and implement maintenance programs to support both preventive and predictive maintenance elements to ensure reliable plant operation;
- g) Develop and implement administrative procedures to control general accounting, purchasing, inventory control, cost accounting, payroll administration, O&M and capital budget preparation;
- h) Develop and maintain procedures for filing and maintenance of vendor information;
- i) Develop and implement a safety program, an emergency response plan, and security plan for the Facility Site;
- j) Manage and direct procurement procedures and programs for the required goods and services for the Facility ongoing operation and maintenance;
- k) Preparation of detailed operating plans and budgets including an annual O&M budget and maintenance plan;

- l) Operate the plant in accordance with the OEM requirements and recommendations, utilize Good Utility Practice, follow all laws and environmental regulations and agreements with the Company; and
- m) Maintain the plant in a manner such to maximize profitability of meeting efficiency, output, and availability targets.

**Bidding Process**

If a party is interested in submitting a bid, notice must be made by January 31, 2011. On-site facility tours will be available anytime before February 14, 2011 by contacting the City Official Contact. Operating and Maintenance Proposals must be provided by February 14, 2011. The proposals will be evaluated and information will be presented to the Electric Advisory Committee and the City Council. The top two proposals will be selected by February 21, 2011. In the event that negotiations are not successfully completed with the recommended bidder, negotiations will be initiated with the second place bidder.

**Reservation of Rights**

City reserves the right to accept or reject any proposals at its sole discretion. In addition, City reserves the right to consider other alternatives outside of this request to satisfy its requirements.

**Schedule**

The following schedule and deadlines apply to this RFP:

<b>Activity</b>	<b>Date</b>
Issue RFP	January 12, 2010
Notice of Intent to Bid	January 31, 2011
RFP Response Package Due (5 PM Eastern Time)	February 14, 2011
Short-list Selection	February 21, 2011
Joint Electric Advisory Committee Meeting and City Council presentation of short list parties	February 23, 2011
City Council Action	March 3, 2011

City reserves the right to unilaterally revise or suspend the schedule.

**Proposal Responses and Inquiries**

Please direct any questions and send proposals to the City Official Contact. City is requesting that questions from bidders be submitted through the Official Contact via email.

City Official Contact:  
 Thomas Butz  
 Power System Engineering, Inc.

10710 Town Square Drive, NE, Suite 201  
Minneapolis, MN 55449  
Phone: (763) 783-5343  
Fax: (763) 755-5122





# Appendix III - Steam Plant Description

## General Description

The Escanaba Generating Station consists of two coal-fired generating units and an oil-fired combustion turbine (CT) generator. (CT is located adjacent to the coal-fired generating units.) City owns a parcel of land on the north side of the City of Escanaba, Michigan on the shores of Lake Michigan that is approximately 37 acres in area. This description relates solely to the coal-fired units. The station has access to Lake Michigan, railroad facilities, and roads allowing a range of fuel delivery alternatives.

The coal-fired units were designed by Black and Veatch and began commercial operation in 1958. The units are basically identical. Each includes a top supported two-drum boiler supplied by Babcock and Wilcox. The units are rated for 125,000 lbs. per hour of steam at 600 psig and 825°F. Steam temperature control is accomplished by balancing boiler overfire air. The boiler may be operated at 140,000 lbs. per hour of steam flow for up to two hours.

The coal is fed to the boiler by Alstom stokers and burned on a Detroit Stoker Rotograte traveling grate. Each grate is 15'-4-½" wide by 18' net length for a surface area of 276.7 square feet. Each boiler has an economizer for preheating feedwater to the boiler, but does not have a combustion air preheater. At rated capacity, boiler performance data states the efficiency of the boiler at 84.3 percent. The average annual net heat rate of the steam generation plant is 14,500 Btu/kWh. The design grate heat release at 125,000 lbs. per hour steam flow burning coal is an extremely conservative 592,477 Btu/hr.-square foot. If this boiler were converted to burning wood even as high as 55 percent moisture content, the grate heat release appears to be adequately sized.

The boilers are balanced draft units, each with a single forced draft fan providing combustion air from the ground floor elevation and a single induced draft fan located after the mechanical collectors and the electrostatic precipitators. Flue gas cleaning consists of centrifugal mechanical collectors followed by a three-field electrostatic precipitator installed in 1979. Steam from the boiler in each unit is piped to a turbine generator that was supplied by Allis Chalmers and has a nameplate rating of 12,650 kW gross. Steam is extracted to four feedwater heaters, and the turbine exhausts to a surface condenser utilizing circulating water from Lake Michigan. The steam turbine drives a Allis Chalmers generator operating at 3,600 rpm.

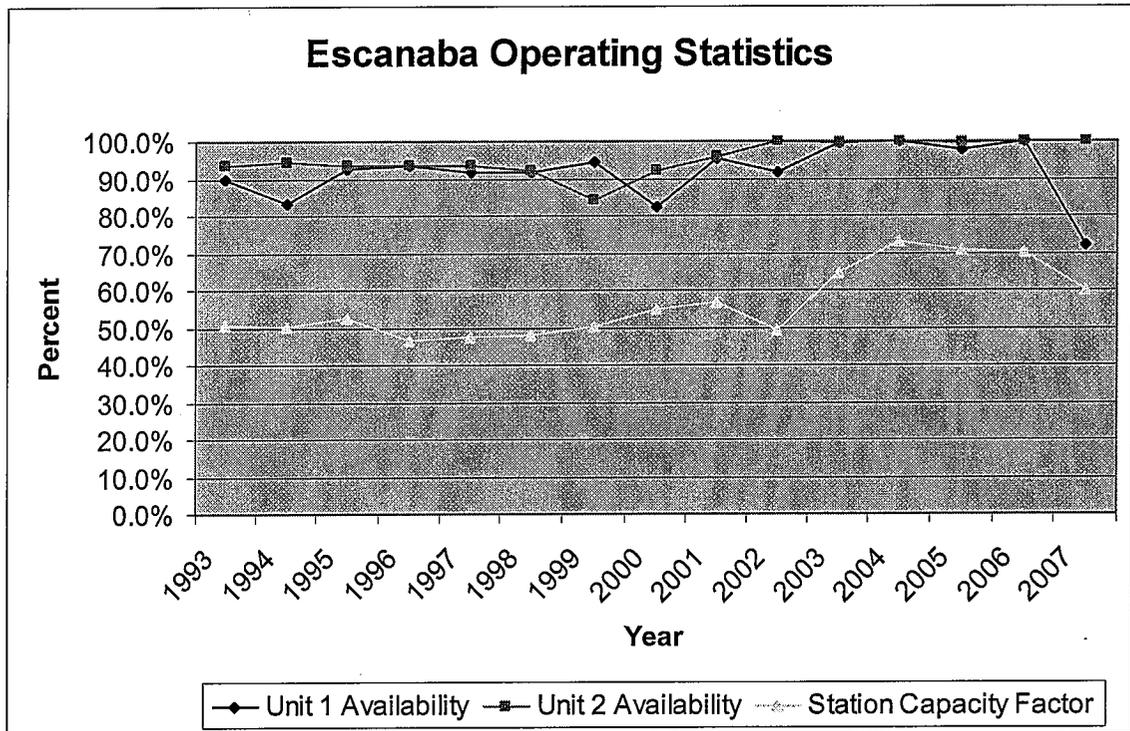
## Operation

The coal-fired units operate continuously whenever they are available. Typically, during the day, they are operating at high loads, as much as 13 MW gross for each unit. Considering the station service requirements of 500 kW for each unit, the net output is approximately 12.5 MW. The current State of Michigan Operating Permit references a nameplate rating of 12.5 MW.

During the night, the units are typically ramped down as directed by MISO. The minimum load for each unit is 4 MW gross. Operating the units at minimum load during the off-peak hours as

opposed to shutting them down and restarting has most probably helped the availability of the units.

The historical equivalent availability and capacity factor of the coal-fired units at Escanaba have been excellent as summarized graphically below:



The Upper Peninsula Power Company (UPPCO), under contract by the City of Escanaba, has operated the station since 1958. UPPCO has been acquired by the Wisconsin Public Service Corporation. The plant is currently operated and maintained by a staff 28 people, as follows (three Full-Time Equivalents are currently used for UPPCO hydro operations):

- 4 - Shift Engineers (1 per operating shift).
- 4 - Boiler Turbine Engineers (1 per operating shift).
- 4 - Oilers (1 per operating shift).
- 1 - Electrical and Controls Technician.
- 2 - Generation Technologists.
- 2 - Coal Handling Personnel.
- 3 - Relief Operators.
- 1 - Station Clerk.
- 1 - Environmental Consultant.
- 1 - Station Supervisor.
- 1 - Station Superintendent.
- 4 - Maintenance Generation Specialists.

## **Fuel**

Escanaba Units 1 and 2 are solely fueled by coal. There is no auxiliary fuel capability. Startup is accomplished by using waste wood on the boiler grates. Given the infrequency of plant startups, this works quite adequately.

Annually, the City requests proposals from potential coal suppliers. Coal is requested to be sized 2"x 0". The coal typically has a calorific value of 12,500 Btu/lb. and must contain less than 1.5 percent sulfur in accordance with the current operating permit. Coal is currently transported by ship and stored on a dock immediately north of the plant. There are also rail facilities adjacent to the property that could be developed for fuel delivery. This dock is not owned by Escanaba, but leased from C. Reiss Coal Company. There is adequate draft next to the coal pile, so that the ship can unload directly to the storage pile. Generally, the plant purchases sufficient coal to operate the plant for one year. Annual coal requirements vary between 60,000 and 80,000 tons. Coal is loaded into a dump truck from the storage pile using a front-end loader and transported to the in feed hopper at the station.

## **Permit Requirements**

The Escanaba Generating Units operate under a renewable operating permit issued by the State of Michigan. The current operating permit is valid from January 1, 2011 through December 31, 2015

The coal units are limited to 1.5 percent sulfur coal and a stack opacity of 20 percent based on a 6-minute average, except for one 6-minute average of not more than 27 percent opacity. The particulate emissions must not exceed 0.30 pounds per million Btus of heat input to the boiler. The plant has a very good operating history of permit compliance.

Historic operating costs are available for parties submitting notice of intent to bid.

The plant is in a fugitive dust non-attainment zone. This fugitive dust issue is primarily related to the operation of the Canadian National ore dock operations located just south of the Escanaba Generation Units.

The Michigan Department of Environmental Quality (MDEQ) made allegations against the City of Escanaba regarding the operation of the Continuous Opacity Monitoring System (COMS). The proceeding was settled in a civil Consent Order and has requirements that apply to any future owners of the plant. Details of the Consent Order are found in the attached PDF document.

# Appendix IV - Combustion Turbine Unit Description

## General Description

The Escanaba Generating Station consists of two coal-fired generating units and an oil-fired combustion turbine (CT) generator. The site is located on the north side of Escanaba, Michigan on the shores of Lake Michigan.

The CT is a General Electric Frame 5 unit that was manufactured in 1968. The unit was originally installed in New Hampshire and then in Ecuador. The air-cooled generator has a nameplate of 21,176 kVA at 0.85 power factor which equates to 18 MW output. Prior to being shipped to Escanaba in 2002, the purchase contract required the unit to be completely overhauled. It is uncertain how many operating hours were on the unit prior to purchase by Escanaba, but since that time the turbine has operated for 2,689 hours and been started 280 times. The unit is equipped with an evaporative cooler for the combustion air to improve capacity and efficiency in hot weather, and water injection for capacity enhancement as well as NOx reduction. Water for the NOx reduction is provided by the coal-fired generation facilities. A 100,000-gallon tank for number 2 fuel oil is located adjacent to the CT. The unit has black start capability. While this unit is currently fueled only with number two fuel oil, it could be adapted to use fuel oil and/or natural gas fuel.

## Operation

The CT typically operates between 350 to 500 hours annually. Operation is typically driven by the need for transmission support. For the period from 2003 through 2007, the CT had a 2.7 percent capacity factor and a 99.72 percent equivalent availability factor.

## Fuel Oil

There will be a mutually agreed fuel purchase strategy developed. Fuel for this unit is delivered by truck and must be less than 0.05 percent sulfur content.

## Permit Requirements

The current Renewable Operating Permit limits this unit to emit 35.9 tons of nitrogen oxide emissions annually. This is equivalent to approximately 1,360 hours of operation at full load.

**City of Escanaba**  
**Power Plant**  
**O & M Agreement**  
**Response Package**  
**January 12, 2011**

# Escanaba 2011 Power Plant O&M Response Package

## I. RESPONDENT INFORMATION

Corporate Name: \_\_\_\_\_

Corporate Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Parent's Corporate Name: \_\_\_\_\_

Parent's Corporate Address: \_\_\_\_\_  
\_\_\_\_\_

Authorized Representative:

Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Phone: \_\_\_\_\_  
Fax: \_\_\_\_\_  
E-mail: \_\_\_\_\_  
Signature: \_\_\_\_\_

Primary Contact:

Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Phone: \_\_\_\_\_  
Fax: \_\_\_\_\_  
E-mail: \_\_\_\_\_  
Signature: \_\_\_\_\_

# Escanaba 2011 Power Plant O&M Response Package

## II. BASIC INFORMATION

Proposed targeted date of negotiating the O&M Agreement is March-April 2011.

The date of transferring plant operations from UPPCO (the current plant operator) is June 6, 2011. Is this time frame acceptable?

Yes \_\_\_\_\_ No \_\_\_\_\_

## III. EXECUTIVE SUMMARY

Please give a brief description of this proposal:

## Escanaba 2011 Power Plant O&M Response Package

**IV. PURPOSE OF RESPONDING TO THE RFP (Check all that Apply)**

**A. Interest in Power Generation Facilities**

- Operation of Steam Generation and Combustion Turbine Facilities (required)
- Ownership of Steam Generation and Combustion Turbine Facilities (optional)
- Provide MISO Market Agent Services for the City (optional)

**V. EXPECTED TIME FRAME OF OPERATION OF FACILITIES**

**A. Time frame interested in operating the generation facilities:**

- 6 months - 1 year
- 1-2 years
- 3-5 years
- Other (please specify below):

**VI. PRICING**

**A. Proposed Annual Management Fee for Operating Plant Facilities**

Proposed Term: \_\_\_\_\_ Initial Payment \$ \_\_\_\_\_

Required Notice of termination: \_\_\_\_\_

Fill in Table Below or attach details:

Beginning Date	Ending Date	Management Fee
June 6, 2011	June 5, 2012	

# Escanaba 2011 Power Plant O&M Response Package

## VII. PLANT OPERATION EXPERIENCE

Please provide a description of other facilities that are operated by the respondent and describe how this experience qualifies the respondent to assume operation of the Escanaba Generation Facilities:

## VIII. PLANT STAFFING

1. Is the staffing envisioned to be Union Employees?  
Yes \_\_\_\_\_ No \_\_\_\_\_
2. List all key personal being considered to be assigned to the Escanaba Plant Operation and attach resumes.
3. Provide Description of Operating Plans

4. Provide description of how existing UPPCO plant employees will be considered for future employment.

# Escanaba 2011 Power Plant O&M Response Package

## IX. FINANCIAL INFORMATION

Please provide the following financial/credit information:

If company is rated by S&P, Moody's, and/or Fitch, please provide latest credit report (if responding company is not rated, then please provide for parent company and/or other guarantor):

\_\_\_\_\_ S&P    \_\_\_\_\_ Moody's    \_\_\_\_\_ Fitch

\_\_\_\_\_ Most recent SEC Form 10K and most recent SEC Form 10Q Report  
\_\_\_\_\_ Three most recent Annual Reports

What form of performance security will be provided to support the proposal?

## X. OPERATIONS PLANNING

Provide a description on the various planning cycles involved with power plant operations, including the annual budgeting process, maintenance outages, and preventive maintenance planning

## Escanaba 2011 Power Plant O&M Response Package

### XI. REPORTING REQUIREMENTS

While the city is required to approve the reports, the operator will gather the following data.

1. Please provide a description on how the following data requirements would be submitted:
  - a. GADS Data
  - b. MAERS data
  - c. DMR data
  - d. Quarterly Annual and Semi Annual DEQ Reports
  - e. Daily outflow and overage reports to the DEQ
  - f. Greenhouse gas reporting

### XII. PLANT OPERATIONS PERFORMANCE INCENTIVE PLAN

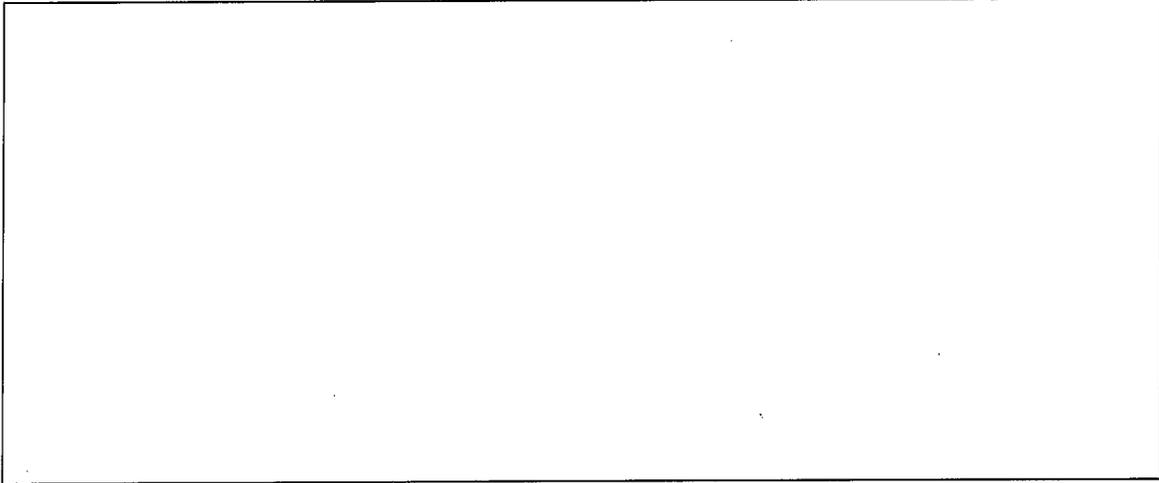
The proposed O&M arrangements are intended to provide incentives to the operator for the highest levels of plant operations performance and compliance to operating regulations. Please provide a description on how the proposing party is planning on what operations metrics will be evaluated, and the proposed incentives for meeting the performance objectives.

1. Goals
  - a. Unit Availability
  - b. Lowest Possible Operating Costs
  - c. Compliance to Environmental Regulations
2. Provide specific targets and proposed incentives for each goal area.

# Escanaba 2011 Power Plant O&M Response Package

## XIII. REFERENCES

Please provide contact information from relevant business transactions.

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STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
OFFICE OF THE DIRECTOR

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In the matter of administrative proceedings )  
against the CITY OF ESCANABA, a )  
corporation organized under the laws of the )  
State of Michigan and doing business at 2000 )  
Power Plant Road, in the City of Escanaba, )  
County of Delta, State of Michigan. )  
)

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AQD No. \_\_-2009

SRN: B1573

STIPULATION FOR ENTRY OF FINAL ORDER  
BY CONSENT

This proceeding resulted from allegations by the Michigan Department of Environmental Quality ("MDEQ") Air Quality Division ("AQD") against the City of Escanaba, ("City"), a Michigan corporation with an electric power generation unit ("Facility") located at 2000 Power Plant Road in the City of Escanaba, County of Delta, State of Michigan, with State Registration Number ("SRN") B1573. The MDEQ alleges that at the Facility the City failed to properly operate, perform acceptable daily calibrations, conduct and submit annual calibration error tests, maintain the Continuous Opacity Monitoring System ("COMS") and report COMS downtime for the EUBOILER No. 1 and for the EUBOILER No. 2 in violation of Title 40 of the Code of Federal Regulations ("CFR"), Part 64.7(b), 64.7(c), 64.9(a)(ii), which are also violations of the Michigan Administrative Code ("MAC"), 2001 AACS R 336.1213 (Rule 213) and Renewable Operating Permit (ROP) No. MI-ROP-B1573-2004 General Condition Nos. 25 and 27, Tables E2 and E3, Section III. The MDEQ also alleges that at the Facility, for EUBOILER No. 1 and the EUBOILER No. 2, the City failed to submit complete accurate semi-annual and annual ROP certifications of compliance regarding deviations, as cited herein and in the January 25, 2008 Letter of Violation ("LOV") and June 20, 2008 Notice. The City and MDEQ stipulate to the termination of this proceeding by entry of a Stipulation for Entry of a Final Order by Consent ("Consent Order").

The City and MDEQ stipulate as follows:

1. The Natural Resources and Environmental Protection Act, 1994 PA 451, ("Act 451"), MCL 324.101 et seq. is an act that controls pollution to protect the environment and natural resources in the State.

2. Article II, Pollution Control, Part 55 of Act 451 ("Part 55"), MCL 324.5501 et seq., provides for air pollution control regulations in this State.

3. The Michigan Department of Natural Resources ("MDNR") is authorized pursuant to Section 5503 of Part 55 to administer and enforce all provisions of Part 55. Section 301 of Part 3 provides the authority to the Director of the MDNR to delegate powers and duties.

4. The MDEQ was created as a principal department within the Executive Branch of the State of Michigan pursuant to Executive Order 1995-18. All statutory authority, powers, duties, functions and responsibilities of the MDNR AQD were transferred to the Director of the MDEQ ("Director").

5. The Director has delegated authority to the Chief of the AQD ("AQD Chief") to enter into this Consent Order.

6. The termination of this matter by a Consent Order pursuant to Section 5528 of Part 55 is proper and acceptable.

7. The City and the MDEQ agree that the signing of this Consent Order is for settlement purposes only and does not constitute an admission by the City that the law has been violated.

8. This Consent Order becomes effective on the date of execution ("effective date of this Consent Order") by the AQD Chief.

9. The City shall achieve compliance with the aforementioned regulations in accordance with the requirements contained in this Consent Order.

#### COMPLIANCE PROGRAM AND IMPLEMENTATION SCHEDULE

##### 10. A. Permit

1. On and after the effective date of this Consent Order, the City shall fully comply with the terms and conditions of Renewable Operating Permit No. MI-ROP-B1573-2004 (ROP) General Conditions Nos. 25 and 27; and Table E-2 (EUBOILER #1) and Table E-3 (EUBOILER #2). The General Conditions, Table E-2 and Table E-3 of the ROP are attached as Exhibit A, incorporated by reference, and made an enforceable part of this Consent Order.

##### B. Emission Limitations

On and after the effective date of this Consent Order, emissions of opacity from the EUBOILER No. 1 and from the EUBOILER No. 2 shall not continue for more than two hours in excess of 20 percent opacity based upon 6-minute averages, excepting one 6-minute average per hour of not

more than 27 percent opacity as set forth in Rule 301(a) (R336.1301(a)), as specified in General Condition No. 2 of Exhibit A.

C. Operating Conditions

On and after the effective date of this Consent Order, the City shall not start up the EUBOILER No. 1 or the EUBOILER No. 2 unless the COMS is operating as specified in paragraph 11 of this Consent Order. In the event that the City becomes aware of a COMS failure while either EUBOILER No. 1 or EUBOILER No. 2 is operating, the City shall promptly investigate the malfunction and repair it expeditiously.

RECORDKEEPING, REPORTING, AND PERFORMANCE AUDITS

11. On and after the effective date of this Consent Order, except for routine maintenance and for malfunctions as defined in MAC R 336.1113(d), the City shall calibrate, operate and maintain a COMS on both the EUBOILER No. 1 and on the EUBOILER No. 2. These COMS shall be designed and installed in compliance with Performance Specification 1 of 40 CFR Part 60, Appendix B and calibrated, operated and maintained according to the procedures specified in 40 CFR Part 60, Section 60.13. The City shall also maintain accurate records of all COMS maintenance activities. This information shall be kept on file at the Facility for a period of at least five (5) years, and shall be made available to the MDEQ upon written or verbal request.

12. On and after the effective date of this Consent Order, the City shall perform an annual performance audit of the EUBOILER No. 1 and the EUBOILER No. 2 continuous opacity monitoring system using the procedures set forth in U.S. EPA Proposed Procedure 3-Quality Assurance Requirements for Continuous Opacity Monitoring Systems at Stationary Sources, Federal Register, May 2, 2003, Pages 24692-24700. The City shall notify the AQD Upper Peninsula District Supervisor and the AQD Technical Programs Unit Supervisor of the date and time of the annual audit, in writing, no less than 30 days prior. By August 15 annually, and within 60 days of completion, the City shall submit the results of the annual performance audit to the AQD Upper Peninsula District Supervisor and to the AQD Technical Programs Unit Chief, at the address listed in paragraph 15 below, as specified in Table E-2, Section IV.(3) and E-3 Section IV.(3) of Exhibit A.

13. On and after the effective date of this Consent Order, the City shall perform monitoring, recordkeeping, and reporting of deviations from permit requirements for the EUBOILER No. 1 and the EUBOILER No. 2, and submit semiannual reporting, by March 15 and September 15, to the AQD Upper

Peninsula District Supervisor and to the AQD Technical Programs Unit Chief, at the address listed in paragraph 15 below, as specified in Table E-2, Section IV.(2) and E-3 Section IV.(2) of Exhibit A.

14. On and after the effective date of this Consent Order, within 30 days following the end of each calendar quarter, the City shall submit quarterly excess emission reports ("EER") and a summary of the COMS for the EUBOILER No. 1 and for the EUBOILER No. 2 using the format and procedures set forth in 40 CFR 60.7(c) and (d). The EER shall include the magnitude, in actual percent opacity, of each six minute average of opacity greater than the permit limit and the time period represented by such averages. It shall also include the cause of the excess emission, if known, periods of COMS downtime, any corrective action taken, and total operating time of the source(s). If no exceedances or COMS downtime occurred during the time period, the City shall report that fact. The quarterly excess emission reports shall be submitted to the AQD Upper Peninsula District Supervisor and to the AQD Technical Programs Unit Chief, at the address listed in paragraph 15 below. This information shall be kept on file at the Facility for a period of at least five (5) years, and shall be made available to the MDEQ upon written or verbal request.

15. Reports required to be submitted under this Consent Order shall be sent to the AQD Upper Peninsula District Supervisor, Department of Environmental Quality, 420 Fifth Street, Gwinn, Michigan 49841-3004; and to the AQD Technical Programs Unit Chief, Department of Environmental Quality, Constitution Hall, 3rd Floor North, 525 Allegan Street, Lansing MI 48933. Prior to termination of this Consent Order the continuing requirement to generate, and submit, these reports shall be incorporated in the Renewable Operating Permit.

#### GENERAL PROVISIONS

16. This Consent Order in no way affects the City's responsibility to comply with any other applicable state and federal, or local laws or regulations, including without limitation, any amendments to the federal Clean Air Act, 42 USC 7401 et seq., Act 451, Part 55 or their rules and regulations, or to the State Implementation Plan.

17. This Consent Order constitutes a civil settlement and satisfaction as to the resolution of the violations specifically addressed herein; however, it does not resolve any criminal action that may result from these same violations.

18. Within thirty (30) days after the effective date of this Consent Order, the City shall pay to the General Fund of the State of Michigan, in the form of a check made payable to the "State of

Michigan" and delivered to the Michigan Department of Environmental Quality, Financial and Business Services Division, Revenue Control, P.O. Box 30657, Lansing, Michigan 48909-8157, a settlement amount of \$45,500.00, which includes AQD costs for investigation and enforcement. This total settlement amount shall be paid within thirty (30) days of the effective date of this Consent Order. To ensure proper credit, all payments made pursuant to this Consent Order shall include the Agreement Identification No. AQD3312 on the face of the check. This settlement amount is in addition to any fees, taxes, or other fines that may be imposed on the City by law.

19. On and after the effective date of this Consent Order, if the City fails to comply with paragraph 10.B. of this Consent Order, the City is subject to stipulated fines of up to \$1,500.00 per day of violation. On and after the effective date of this Consent Order, if the City fails to comply with paragraphs 11, 12, 13 or 14 of this Consent Order, the City is subject to stipulated fines of up to \$2,000.00 per day of violation. On and after the effective date of this Consent Order, if the City fails to comply with any other provision of Exhibit A or this Consent Order, the City is subject to a stipulated fine of up to \$500.00 per violation. The amount of the stipulated fines imposed pursuant to this paragraph shall be within the discretion of the MDEQ. Stipulated fines submitted under this Consent Order shall be by check, payable to the State of Michigan within thirty (30) days of written demand and shall be delivered to the Michigan Department of Environmental Quality, Financial and Business Services Division, Revenue Control, P.O. Box 30657, Lansing, Michigan 48909-8157. To ensure proper credit, all payments shall include the Agreement Identification No. AQD3312S on the face of the check. Payment of stipulated fines shall not alter or modify in any way the City's obligation to comply with the terms and conditions of this Consent Order.

20. The AQD, at its discretion, may seek stipulated fines or statutory fines for any violation of this Consent Order which is also a violation of any provision of applicable federal and state law, rule, regulation, permit, or MDEQ administrative order. However, the AQD is precluded from seeking both a stipulated fine under this Consent Order and a statutory fine for the same violation.

21. To ensure timely payment of the settlement amount assessed in paragraph 18 and any stipulated fines assessed pursuant to paragraph 19 of this Consent Order, the City shall pay an interest payment to the State of Michigan each time it fails to make a complete or timely payment under this Consent Order. The interest payment shall be determined at a rate of interest that is equal to one percent (1%) plus the average interest rate paid at auctions of 5-year United States treasury notes during the six months immediately preceding July 1 and January 1, as certified by the state treasurer, compounded

annually, and using the full increment of amount due as principal, calculated from the due date specified in this Consent Order until the date that delinquent payment is finally paid in full. Payment of an interest payment by the City shall be made to the State of Michigan in accordance with paragraph 18 of this Consent Order. Interest payments shall be applied first towards the most overdue amount or outstanding interest payment owed by the City before any remaining balance is applied to a subsequent payment amount or interest penalty.

22. The City agrees not to contest the legal basis for the settlement amount assessed pursuant to paragraph 18. The City also agrees not to contest the legal basis for any stipulated fines assessed pursuant to paragraph 19 of this Consent Order, but reserves the right to dispute in a court of competent jurisdiction the factual basis upon which a demand by MDEQ of stipulated fines is made. In addition, the City agrees that said fines have not been assessed by the MDEQ pursuant to Section 5529 of Part 55 and therefore are not reviewable under Section 5529 of Part 55.

23. This compliance program is not a variance subject to the 12 month limitation specified in Section 5538 of Part 55.

24. This Consent Order shall remain in full force and effect for a period of at least two (2) years. Thereafter, the Consent Order shall terminate only upon written notice of termination issued by the AQD Chief. Prior to issuance of a written notice of termination, the City shall submit a request, to the AQD Chief at the Michigan Department of Environmental Quality, Air Quality Division, P.O. Box 30260, Lansing, Michigan 48909-7760, consisting of a written certification that the City has fully complied with all the requirements of this Consent Order and has made all payments including all stipulated fines required by this Consent Order. Specifically, this certification shall include: (i) the date of compliance with each provision of the compliance program and the date any payments or stipulated fines were paid; (ii) a statement that all required information has been reported to the AQD Upper Peninsula District Supervisor; (iii) confirmation that all records required to be maintained pursuant to this Consent Order are being maintained at the Facility; and, (iv) such information as may be requested by the AQD Chief.

25. In the event the City sells or transfers the Facility, with SRN B1573, it shall advise any purchaser or transferee of the existence of this Consent Order in connection with such sale or transfer. Within thirty (30) calendar days, the City shall also notify the AQD Upper Peninsula District Supervisor, in writing, of such sale or transfer, the identity and address of any purchaser or transferee, and confirm the fact that notice of this Consent Order has been given to the purchaser and/or transferee. As a condition of the sale, the City must obtain the consent of the purchaser and/or transferee, in writing, to assume all of

the obligations of this Consent Order. A copy of that agreement shall be forwarded to the AQD Upper Peninsula District Supervisor within thirty (30) days of assuming the obligations of this Consent Order.

26. Prior to the effective date of this Consent Order and pursuant to the requirements of Sections 5511 and 5528(3) of Part 55, the public was notified of a 30-day public comment period and was provided the opportunity for a public hearing.

27. Section 5530 of Part 55 may serve as a source of authority but not a limitation under which the Consent Order may be enforced. Further, Part 17 of Act 451 and all other applicable laws and any other legal basis or applicable statute may be used to enforce this Consent Order.

28. The City hereby stipulates that entry of this Consent Order is a result of an action by MDEQ to resolve alleged violations of the Facility located at 2000 Power Plant Road, in the City of Escanaba, Michigan. The City further stipulates that it will take all lawful actions necessary to fully comply with this Consent Order, even if the City files for bankruptcy in the future. The City will not seek discharge of the settlement amount and any stipulated fines imposed hereunder in any future bankruptcy proceedings, and the City will take necessary steps to ensure that the settlement amount and any future stipulated fines are not discharged, including requesting an order from the pertinent U.S. Bankruptcy Court designating the settlement amount and any future stipulated fines as exceptions to discharge pursuant to 11 U.S. Code Section 523(a)(7). The City, during and after any future bankruptcy

proceedings, will ensure that the settlement amount and any future stipulated fines remain an obligation to be paid in full by the City to the extent allowed by applicable bankruptcy law.

The undersigned certifies that he/she is fully authorized by the City to enter into this Consent Order and to execute and legally bind the City to it.

CITY OF ESCANABA

\_\_\_\_\_  
Print Name and Title

\_\_\_\_\_  
Signature

Date: \_\_\_\_\_

The above signatory subscribed and sworn to before me this \_\_\_\_ day of \_\_\_\_\_, 2009.

\_\_\_\_\_  
Notary Public

Approved as to Content:

Approved as to Form:

\_\_\_\_\_  
G. Vinson Hellwig, Chief  
AIR QUALITY DIVISION  
DEPARTMENT OF  
ENVIRONMENTAL QUALITY

\_\_\_\_\_  
Alan F. Hoffman, Section Head  
ENVIRONMENTAL REGULATION SECTION  
ENVIRONMENT, NATURAL RESOURCES,  
AND AGRICULTURE DIVISION  
DEPARTMENT OF ATTORNEY GENERAL

Dated: \_\_\_\_\_

Dated: \_\_\_\_\_

FINAL ORDER

The Chief of the Air Quality Division having had opportunity to review the Consent Order and having been delegated authority to enter into Consent Orders by the Director of the Michigan Department of Environmental Quality pursuant to the provisions of Part 55 of Act 451 and otherwise being fully advised on the premises,

HAS HEREBY ORDERED that the Consent Order is approved and shall be entered in the record of the MDEQ as a Final Order.

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

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G. Vinson Hellwig, Chief  
Air Quality Division

Dated: \_\_\_\_\_

**STATE OF MICHIGAN  
RENEWABLE OPERATING PERMIT**

Is Hereby Issued To:

***City of Escanaba Generating Station***

SRN: B1573

Located At:

***2000 Power Plant Road  
Escanaba, Michigan 49829***

Application Number: 200200066

Permit Number: MI-ROP-B1573-2004

Effective Date: July 1, 2004

Expiration Date: June 30, 2009

This permit is issued in accordance with and subject to Part 5506(3) of Article II, Chapter 1, Part 55 (Air Pollution Control) of P.A. 451 of 1994. Pursuant to Air Pollution Control Rule 210(1), this permit constitutes the permittee's authority to operate the major source identified above in accordance with the general conditions, special conditions and attachments contained herein. Operation of the major stationary source and all emission unit/process groups listed in the permit are subject to all applicable future or amended rules and regulations pursuant to P.A. 451 and the Clean Air Act.

This permit does not relieve the permittee from the responsibility to obtain the necessary permits to install pursuant to Air Pollution Control Rule 201 for new or modified process or process equipment. In addition, issuance of this Renewable Operating Permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.

Michigan Department of Environmental Quality

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Brian D. Brady, District Supervisor  
Air Quality Division

## A. General Requirements

For the purpose of this Renewable Operating Permit, the permittee is defined as any person who owns or operates a process or process equipment at a stationary source for which a Renewable Operating Permit has been issued. This permit is issued to the **City of Escanaba Generating Station**, hereinafter the permittee for this Renewable Operating Permit. The department is defined in R336.1104(d) as the Director of the Department of Environmental Quality or his or her designee.

### Enforceability

All conditions in this permit are both federally enforceable and state enforceable unless otherwise noted. Those requirements which are enforceable by the state only are designated by an asterisk. (R336.1213(5))

### General Conditions

1. A challenge by any person, the Administrator of the EPA, or the department to a particular condition or a part of this Renewable Operating Permit shall not set aside, delay, stay, or in any way affect the applicability or enforceability of any other condition or part of this Renewable Operating Permit. (R336.1213(1)(f))
2. Except as provided in subrules 2, 3, and 4 of R 336.1301, a person shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of a density greater than the most stringent of R 336.1301(1)(a) or (b) unless otherwise specified in this Renewable Operating Permit. The grading of visible emissions shall be determined in accordance with R 336.1303. (R336.1301(1) in pertinent part, 40 CFR 52.21(j))
  - a) A 6-minute average of 20% opacity, except for one 6-minute average per hour of not more than 27% opacity.
  - b) A limit specified by an applicable federal new source performance standard.
3. Any collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in R 336.1370(2). (R336.1370)
4. Any air cleaning device shall be installed, maintained, and operated in a satisfactory manner and in accordance with the Michigan Air Pollution Control rules and existing law. (R336.1910)
5. The department may require the owner or operator of any source of an air contaminant to conduct acceptable performance tests, at the owner's or operator's expense, in accordance with R 336.2001 and R 336.2003, under any of the conditions listed in R 336.2001(1). (R336.2001)
6. A change in ownership or operational control of a stationary source covered by a Renewable Operating Permit shall be made pursuant to R 336.1216(1). (R336.1219(3))
7. The permittee shall not cause or permit the emission of an air contaminant or water vapor in quantities that cause, alone or in reaction with other air contaminants, either of the following:
  - a) Injurious effects to human health or safety, animal life, plant life of significant economic value, or property.\* (R336.1901(a))  
\* This requirement is state enforceable only.
  - b) Unreasonable interference with the comfortable enjoyment of life and property.\* (R336.1901(b))  
\* This requirement is state enforceable only.

8. The permittee shall comply with all conditions of this Renewable Operating Permit. Any permit noncompliance constitutes a violation of Act 451 of 1994, as amended, Part 55, (Air Pollution Control) and is grounds for enforcement action, for permit revocation or revision, or for denial of the renewal of the Renewable Operating Permit. All terms and conditions of this Renewable Operating Permit that are designated as federally enforceable are enforceable by the Administrator of the EPA and by citizens under the provisions of the CAA. Any terms and conditions based on applicable requirements which are defined as "state only" are not enforceable by the EPA or citizens pursuant to the CAA. (R336.1213(1)(a))
9. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Renewable Operating Permit. (R336.1213(1)(b))
10. This Renewable Operating Permit may be modified, revised, or revoked for cause. The filing of a request by the permittee for a permit modification, revision, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. Pursuant to R 336.1215 and R 336.1216 the permittee may make changes at a stationary source at his/her own risk. (R336.1213(1)(c))
11. The permittee shall furnish to the department, within a reasonable time, any information the department may request, in writing, to determine whether cause exists for modifying, revising, or revoking the Renewable Operating Permit or to determine compliance with this Renewable Operating Permit. Upon request, a person shall also furnish to the department copies of any records that are required to be kept as a term or condition of this Renewable Operating Permit. (R336.1213(1)(e))
12. The permittee shall allow the department, or an authorized representative of the department, upon presentation of credentials or other documents as may be required by law and upon stating the authority for and purpose of the investigation, to perform any of the following activities: (R336.1213(1)(d))
- a) Enter, at reasonable times, a stationary source or other premises where emissions-related activity is conducted or where records must be kept under the conditions of the permit.
  - b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit.
  - c) Inspect, at reasonable times, any of the following:
    - i) Any stationary source.
    - ii) Any process.
    - iii) Any process equipment, including monitoring and air pollution control equipment.
    - iv) Any work practices or operations regulated or required under the Renewable Operating Permit.
  - d) As authorized by Section 5526 of the Act, sample and monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.
13. The permittee shall pay fees consistent with the fee schedule and requirements pursuant to Part 5522 of Act 451, P.A. 1994. (R336.1213(1)(g))
14. This Renewable Operating Permit does not convey any property rights or any exclusive privilege. (R336.1213(1)(h))
15. For renewal of this Renewable Operating Permit, an administratively complete application shall be considered timely if it is received by the department not more than 18 months, but not less than 6 months, before the expiration date of the Renewable Operating Permit. (R336.1210(7))
16. For modifications to this Renewable Operating Permit, an administratively complete application shall be considered timely if it is received by the department in accordance with the time frames specified in R 336.1216. (R336.1210(9))
17. For changes to any process or process equipment covered by this Renewable Operating Permit that do not require a revision of the Renewable Operating Permit pursuant to R 336.1216, the permittee must comply with R 336.1215. (R336.1215 and R336.1216)

18. A Renewable Operating Permit shall be reopened by the department prior to the expiration date and revised by the department under any of the following circumstances:

- a) If additional requirements become applicable to this stationary source with three or more years remaining in the term of the permit, but not if the effective date of the new applicable requirement is later than the Renewable Operating Permit expiration date. (R336.1217(2)(a)(i))
- b) If additional requirements pursuant to Title IV of the CAA become applicable to this stationary source. (R336.1217(2)(a)(ii))
- c) If the department determines the permit contains a material mistake, that information required by any applicable requirement was omitted, or that inaccurate statements were made in establishing emission limits or the terms or conditions of the permit. (R336.1217(2)(a)(iii))
- d) If the department determines the permit must be revised to ensure compliance with the applicable requirements. (R336.1217(2)(a)(iv))

19. Any required performance testing shall be conducted in accordance with Rule 1001(2), Rule 1001(3), and Rule 1003. (R336.2001(2), R336.2001(3), and R336.2003(1))

20. Any required test results shall be submitted to the AQD in the format prescribed by the applicable reference test method within 60 days following the last date of the test. (R336.2001(4))

<b>Table E-2</b> <b>EUBOILER#1 - Boiler #1</b> <b>EMISSION UNIT / PROCESS GROUP REQUIREMENTS</b>				
<b>EMISSION UNIT / PROCESS GROUP</b>	EUBOILER#1 – Spreader stoker coal-fired Boiler #1 rated at 125,000 pounds of steam per hour, and used for electric power generation. Boiler #1 has a heat input capacity of approximately 178 million BTU per hour, and serves an electrical generator with a nameplate rating of 12.5 megawatts.			
<b>Flexible Grouping ID</b>	N/A			
I. DESIGN PARAMETERS				
<b>Pollution Control Equipment</b>	Multicyclone dust collector and electrostatic precipitator on Boiler #1; Primary and secondary cyclonic separators and air washer on ash conveying system; Baghouse on ash silo; Water spray on ash wetting drum.			
<b>Stack or Vent Parameters</b>	Exhaust gases shall be discharged unobstructed vertically upwards unless otherwise noted.			
	<b>Stack or Vent ID</b>	<b>Minimum Height</b>	<b>Maximum Exhaust Diameter</b>	<b>Applicable Requirement</b>
	SVSTACK1	150 feet	79 inches	R336.1201
<b>Other Design Parameters</b>	N/A			
II. MATERIAL USAGE AND EMISSION LIMITS				
<b>Material</b>	<b>Material Limitation</b>			
Coal	1) The coal burned in Boiler #1 shall not exceed a maximum sulfur content of 1.5% by weight, calculated on the basis of 12,000 BTU per pound for coal. (R336.1401)			
<b>Pollutant</b>	<b>Emission Limit</b>			
Particulate	1) The particulate emission from Boiler #1 shall not exceed 0.30 pounds per 1000 pounds of exhaust gases, corrected to 50% excess air. (R336.1201, R336.1331)			
III. COMPLIANCE EVALUATION				
Records of all of the following shall be maintained on file for a period of 5 years. (R.336.1213(3)(b)(ii))				
MONITORING AND RECORDKEEPING (R 336.1213(3))				
In Addition To General Requirements in Part A				
<b>Continuous Emission Monitoring and Recordkeeping</b>	1) Whenever Boiler #1 is operating, the permittee shall operate, calibrate, and maintain a Continuous Opacity Monitoring System on Boiler #1, including a daily calibration and an annual calibration error test. The permittee shall keep a summary record of all six-minute averages of opacity greater than 20 percent, except for one 6-minute average per hour of not more than 27 percent opacity, including cause if known and corrective action taken. Also, the permittee shall keep a summary record of opacity monitor downtime. The permittee shall submit these summary records with the semiannual reports required under Reporting and Compliance Certification below. (R336.1213(3), 40 CFR Part 64, 40 CFR 64.6(c)(2), 40 CFR 64.7, 40 CFR 64.9)			
<b>Process Monitoring and Recordkeeping</b>	N/A			
<b>Other Monitoring and/or Recordkeeping</b>	1) The permittee shall obtain and keep records of the sulfur and ash content of the coal burned in Boiler #1, as detailed in Appendix 4. The permittee shall submit these records with the semiannual reports required under Reporting and Compliance Certification below. (R336.1213(3))			

<b>Table E-2</b> <b>EUBOILER #1 – Boiler #1</b> <b>EMISSION UNIT / PROCESS GROUP REQUIREMENTS</b>	
<b>TESTING AND RECORDKEEPING (R 336.1213(3))</b> <b>In Addition to General Requirements in Part A</b>	
Parameter to be Tested/Recorded	1) Particulate
Method/Analysis	1) Performance tests shall be conducted according to procedures and test methods specified or approved by the Air Quality Division. Not less than 30 days prior to testing, a testing plan shall be submitted to the Air Quality Division for review. (R336.2001, R336.2003)
Frequency and Schedule of Testing/Recordkeeping	1) The permittee shall conduct testing of particulate emissions from Boiler #1 within three years after the issue date of this permit. (R336.1213(3))
<b>IV. REPORTING AND COMPLIANCE CERTIFICATION</b>	
Reports and Schedules	1) Prompt reporting of deviations pursuant to Condition 24 of Part A. See Appendix 8. (R336.1213(3)(c)(ii))  2) Semiannual reporting of required monitoring, recordkeeping, and deviations from permit requirements pursuant to Condition 23 of Part A. See Appendix 8. Due March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R336.1213(3)(c)(i))  3) Annual certification of compliance pursuant to Conditions 28 and 29 of Part A. See Appendix 8. Due annually by March 15 for the previous calendar year. (R336.1213(4)(c))
<b>V. OPERATIONAL PARAMETERS</b>	
1) The permittee shall equip and maintain each transformer-rectifier set of the electrostatic precipitator with a saturable core reactor, silicon-controlled rectifier linear reactor, or equivalent type automatic control system approved by the Air Quality Division. Each automatic controller shall be set to provide maximum power, or optimal power if operating in a sparking mode from its respective transformer-rectifier set. (R336.1213(2), R336.1330)  2) Upon detection of a 6-minute average opacity in excess of 20%, except for one 6-minute average per hour of not more than 27 percent opacity, the permittee shall restore operation of Boiler #1 and associated dust collection equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practice for minimizing emissions. (R336.1213(2), R336.1301, R336.1331, R336.1910, 40 CFR 64.1, 40 CFR 64.7(d))	
<b>VI. OTHER REQUIREMENTS</b>	
1) The air cleaning devices shall be maintained and operated in a satisfactory manner and in accordance with the Michigan Air Pollution Control Rules and existing law. The permittee shall carry out an Inspection and Maintenance Program including keeping of records of inspections done, problems found, repairs done, and/or corrective action taken. (R336.1213(3), R336.1910)	

\* This requirement is state enforceable only

<b>Table E-3</b> <b>EUBOILER#2 – Boiler #2</b> <b>EMISSION UNIT / PROCESS GROUP REQUIREMENTS</b>				
<b>EMISSION UNIT / PROCESS GROUP</b>	EUBOILER#2 – Spreader stoker coal-fired Boiler #2 rated at 125,000 pounds of steam per hour, and used for electric power generation. Boiler #2 has a heat input capacity of approximately 178 million BTU per hour, and serves an electrical generator with a nameplate rating of 12.5 megawatts.			
<b>Flexible Grouping ID</b>	N/A			
I. DESIGN PARAMETERS				
<b>Pollution Control Equipment</b>	Multicyclone dust collector and electrostatic precipitator on Boiler #2; Primary and secondary cyclonic separators and air washer on ash conveying system; Baghouse on ash silo; Water spray on ash wetting drum.			
<b>Stack or Vent Parameters</b>	Exhaust gases shall be discharged unobstructed vertically upwards unless otherwise noted.			
	<b>Stack or Vent ID</b>	<b>Minimum Height</b>	<b>Maximum Exhaust Diameter</b>	<b>Applicable Requirement</b>
	SVSTACK2	150 feet	79 inches	R336.1201
<b>Other Design Parameters</b>	N/A			
II. MATERIAL USAGE AND EMISSION LIMITS				
<b>Material</b>	<b>Material Limitation</b>			
Coal	1) The coal burned in Boiler #2 shall not exceed a maximum sulfur content of 1.5% by weight, calculated on the basis of 12,000 BTU per pound for coal. (R336.1401)			
<b>Pollutant</b>	<b>Emission Limit</b>			
Particulate	1) The particulate emission from Boiler #2 shall not exceed 0.30 pounds per 1000 pounds of exhaust gases, corrected to 50% excess air. (R336.1201, R336.1331)			
III. COMPLIANCE EVALUATION				
Records of all of the following shall be maintained on file for a period of 5 years. (R 336.1213(3)(b)(ii))				
MONITORING AND RECORDKEEPING (R 336.1213(3))				
In Addition To General Requirements in Part A				
<b>Continuous Emission Monitoring and Recordkeeping</b>	1) Whenever Boiler #2 is operating, the permittee shall operate, calibrate, and maintain a Continuous Opacity Monitoring System on Boiler #2, including a daily calibration and an annual calibration error test. The permittee shall keep a summary record of all six-minute averages of opacity greater than 20 percent, except for one 6-minute average per hour of not more than 27 percent opacity, including cause if known and corrective action taken. Also, the permittee shall keep a summary record of opacity monitor downtime. The permittee shall submit these summary records with the semiannual reports required under Reporting and Compliance Certification below. (R336.1213(3), 40 CFR Part 64, 40 CFR 64.6(e)(2), 40 CFR 64.7, 40 CFR 64.9)			
<b>Process Monitoring and Recordkeeping</b>	N/A			
<b>Other Monitoring and/or Recordkeeping</b>	1) The permittee shall obtain and keep records of the sulfur and ash content of the coal burned in Boiler #2, as detailed in Appendix 4. The permittee shall submit these records with the semiannual reports required under Reporting and Compliance Certification below. (R336.1213(3))			

<b>Table E-3</b> <b>EUBOILER#2 – Boiler #2</b> <b>EMISSION UNIT / PROCESS GROUP REQUIREMENTS</b>	
<b>TESTING AND RECORDKEEPING (R 336.1213(3))</b> <b>In Addition to General Requirements in Part A</b>	
Parameter to be Tested/Recorded	N/A
Method/Analysis	N/A
Frequency and Schedule of Testing/Recordkeeping	N/A
<b>IV. REPORTING AND COMPLIANCE CERTIFICATION</b>	
Reports and Schedules	1) Prompt reporting of deviations pursuant to Condition 24 of Part A. See Appendix 8. (R336.1213(3)(e)(ii))  2) Semiannual reporting of required monitoring, recordkeeping, and deviations from permit requirements pursuant to Condition 23 of Part A. See Appendix 8. Due March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R336.1213(3)(e)(i))  3) Annual certification of compliance pursuant to Conditions 28 and 29 of Part A. See Appendix 8. Due annually by March 15 for the previous calendar year. (R336.1213(4)(e))
<b>V. OPERATIONAL PARAMETERS</b>	
1) The permittee shall equip and maintain each transformer-rectifier set of the electrostatic precipitator with a saturable core reactor, silicon-controlled rectifier linear reactor, or equivalent type automatic control system approved by the Air Quality Division. Each automatic controller shall be set to provide maximum power, or optimal power if operating in a sparking mode from its respective transformer-rectifier set. (R336.1213(2), R336.1330)  2) Upon detection of a 6-minute average opacity in excess of 20%, except for one 6-minute average per hour of not more than 27 percent opacity, the permittee shall restore operation of Boiler #2 and associated dust collection equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practice for minimizing emissions. (R336.1213(2), R336.1301, R336.1331, R336.1910, 40 CFR 64.1, 40 CFR 64.7(d))	
<b>VI. OTHER REQUIREMENTS</b>	
1) The air cleaning devices shall be maintained and operated in a satisfactory manner and in accordance with the Michigan Air Pollution Control Rules and existing law. The permittee shall carry out an Inspection and Maintenance Program including keeping of records of inspections done, problems found, repairs done, and/or corrective action taken. (R336.1213(3), R336.1910)	

\* This requirement is state enforceable only

the power to help you succeed.

NB# 4  
CC/EAC  
2/9/11

*Request for Proposal*  
City of Escanaba, Michigan

for  
**Sale of Steam and/or  
Combustion Turbine  
Generation Facilities**

January 18, 2011

Contact: Thomas Butz  
10710 Town Square Drive, NE, Suite 201  
Minneapolis, MN 55449  
Office: 763-783-5354  
Mobile: 612-961-9495  
Fax: 763-755-7028  
Email: [butzt@powersystem.org](mailto:butzt@powersystem.org)  
Web Site: [www.powersystem.org](http://www.powersystem.org)

Project Website: [www.escanabaenergy.com](http://www.escanabaenergy.com)

**Power System  
Engineering, Inc.**

Madison, WI · Minneapolis, MN · Marietta, OH · Indianapolis, IN



# City of Escanaba Michigan

## Request for Proposal

### Sale of Steam and/or Combustion Turbine Generation Facilities

#### Background

This issuance of the Request for Proposal (RFP) for the City of Escanaba, Michigan (City) follows a series of events starting from the point when the plant sale RFPs were sent in the fourth quarter of 2008 and again in September 2009:

- Power System Engineering, Inc. (PSE) issued an RFP for the sale of Escanaba Generation facilities on November 14, 2008, requesting parties provide proposals by January 16, 2009.
- Proposals were reviewed and screened to a select number of proposals.
- Prospective parties that passed screening participated in Escanaba Electric Advisory Committee meetings.
- Citizens of the City narrowly defeated a referendum on May 5, 2009 thereby not allowing the City Electric utility to sell the generation facilities.
- Additional clarification was made to the ballot language by utilizing input from numerous public forums.
- The language for the August 4, 2009 referendum read as follows:
  - “Shall the Escanaba City Council have the authority to sell the electric utility plant, equipment, and assets including up to 40 acres of real property where said assets are located to another entity for continued plant operations?”
- Citizens voted on the referendum on August 4, 2009. It passed, granting the City Administration authorization to enter into negotiations with a party to sell the power plant facilities.
- The City selected a final party to begin negotiations in early December, 2009.
- Phase I and Phase II Environmental Studies have been completed.
- Negotiations continued through mid December, 2010 when the parties determined the deal could not be negotiated by December 31, 2010.
- The City decided in January, 2011 to issue an RFP seeking an operator of the Plant by June 6, 2011, and also to issue this RFP seeking a buyer for the generation facilities.

#### Introduction

Escanaba, Michigan is located 120 miles north and east of Green Bay, Wisconsin on the shores of Lake Michigan. The City is responsible for providing electricity to the residents of Escanaba,

Michigan. The City provides electricity by purchasing from MISO and offering generation into the market. Generation includes two 12.5 MW coal-fired steam generation facilities and a 15 MW oil-fired combustion turbine (CT) unit. The City is considering the sale of the coal-fired steam generation plant and the CT. The City has issued a separate RFP seeking an entity to operate the generation plant including the CT (O&M RFP), and will coordinate the responses of this RFP with the O&M RFP.

The City is seeking proposals to purchase the plant with the interest of continuing the operation of generation facilities with as much continuity in the current operations as possible. The purchase of the generation facilities is expected to occur on or after June 6, 2011.

See Appendix I for the one-line diagram of the current substation, Appendix II for the plant survey, Appendix III for more information on the steam generation facilities and Appendix IV for more information on the CT unit.

### **Transmission and Delivery Point(s)**

Escanaba has defined MISO generation nodes for each steam unit (UPPC.ESCST1 and UPPC.ESCST2) and the CT plant (UPPC.ESCCT). The current transmission and distribution configuration is shown in Appendix I and indicates that the plants are connected to the 12.5 kV distribution system, with two step-up transformers to two 69 kV lines. Future plans are to move the distribution feeders, protection equipment, and the capacitor bank to a new substation outside of the generation plant site. Timing of this plan is for the second quarter 2012, and there will be a period where the current substation is used for the new generation owner and for load serving for the city before the new substation is developed. This will allow the plant generation asset(s) to have a direct connection to the transmission system. Substation facilities include the 12.47 kV generator breakers and two 12.47 kV to 69 kV transformers (12/16/20 MVA).

### **MISO Membership**

The City of Escanaba became a MISO Market Participant on December 1, 2009, and has contracted with a third party to offer in generation resources, and bid the load requirements. Generation resources have been dispatched according to MISO directives and the current plant operating staff has become accustomed to operating in the MISO environment.

### **Generation Interconnection and Deliverability**

Escanaba generation facilities are certified as deliverable into MISO for a total of 46.9 MW, and Escanaba has a Generation – Transmission Interconnection Agreement that may be assigned to the new owner. The expected assignment of the Generation – Transmission Interconnection Agreement avoids the need to conduct a generation interconnection study, and will continue the status of the generation being deliverable into the MISO system.

### **Prospective Use of the Generation Facilities**

Escanaba generation facilities have historically been economical for the City, until the price of eastern coal escalated dramatically in the 2003 timeframe. The prospect of converting the boiler to biomass for the purpose of selling renewable energy has been considered by entities who have converted other facilities to biomass. The conversion allows the facility to be developed to produce renewable energy in the Michigan market that has a need for Michigan generated Renewable Energy Credits as driven by the Michigan Public Act 295 of 2008 requirements.

### **Ash Disposal, Water Supply, Air Permit, and Fuel Handling**

Escanaba has a contract for ash disposal with the Delta Solid Waste Management Authority, the current contract cannot be assigned to a new owner of the plant. Discussions with the Authority have led the City to believe that a new contract can be negotiated, in order to provide a cost effective means of disposing of the ash. Ash disposal for both coal and wood are expected to be viable, as the discussions have included the prospect of disposing both types of ash.

Water supply for once through cooling is obtained from Lake Michigan and boiler water is obtained from the City water system. PH monitoring is required for outlet water flows, and the current operating permit that is assignable allows for continued water supply from Lake Michigan.

Escanaba has a contract with the C. Reiss Coal Company allowing coal to be stored on their dock, adjacent to the plant property. It is expected that if additional coal is needed to fuel the plant, shipments could be unloaded at the dock and delivered to the plant. Fuel handling for a future biomass conversion is expected to be possible, as it appears that there is adequate space to construct fuel handling facilities adjacent to the current generation facilities. Additional City owned property adjacent to the plant may be available for sale if more land is needed.

### **Regional Transmission Capacity**

The American Transmission Company (ATC) is in the process of increasing transmission capacity into the Upper Peninsula and specifically in the Delta County area serving Escanaba. Recent planning studies and discussions with ATC have provided descriptions of plans and support for developing necessary facilities. Escanaba has Network Integrated Transmission Service (NITS) from MISO and has a Generation - Transmission Interconnection Agreement that may be assigned to the new owner of the generation facilities.

### **Response Package and Pricing**

All applicable Response Package(s) must be included as part of each submittal. If more than one submittal is made, separate packages, clearly marked, must be prepared for each submittal.

All price quotes must be communicated in the attached Response Package. Prices quoted shall be clearly stated as indicative based on stated assumptions or firm without any provision for variance. Indication should be clear as to how the facilities are to be operated in the future.

**It is important to note that City will evaluate the Proposals with a strong emphasis on a party's demonstrated ability of continuing the Escanaba plant operation. Local employment is a high priority in order to provide as much continuity to the current operation as possible. The referendum states that the City has the authority to sell the plant to a party intending to continue operation of the plant.**

**Bidding Process**

If a party is interested in submitting a Proposal, notice must be made by February 8, 2011. On-site facility tours will be available anytime after the RFP is issued by making arrangements with the City Contact. Generation Purchase Proposals must be submitted by March 1, 2011. The proposals will be evaluated and information will be presented to the Electric Advisory Committee and the City Council.

**Reservation of Rights**

City reserves the right to accept or reject any proposals at its sole discretion. In addition, City reserves the right to consider other alternatives outside of this request to satisfy its requirements.

## **Schedule**

The following schedule and deadlines apply to this RFP:

<b>Activity</b>	<b>Date</b>
Issue RFP	January 18, 2011
Notice of Intent to Bid	February 8, 2011
RFP Response Package Due (5 PM Eastern Time)	March 1, 2011
Short-list Selection	March 7, 2011
Electric Advisory Committee Meeting to Provide Recommendation to City Council	March 9, 2011
Seek Escanaba City Council Approval on Vender Selection	March 17, 2011

City reserves the right to unilaterally revise or suspend the schedule.

## **Proposal Responses and Inquiries**

Please direct any questions and send proposals to the City Contact. City is requesting that questions from bidders be submitted through the Contact via email.

City Contact:

Thomas Butz  
Power System Engineering, Inc.  
10710 Town Square Drive, NE, Suite 201  
Minneapolis, MN 55449  
Phone: (763) 783-5343  
Fax: (763) 755-5122





# Appendix III - Steam Plant Description

## General Description

The Escanaba Generating Station consists of two coal-fired generating units and an oil-fired combustion turbine (CT) generator. (CT is located adjacent to the coal-fired generating units.) The City owns a parcel of land on the north side of the City of Escanaba, Michigan on the shores of Lake Michigan that is approximately 37 acres in area. This description relates solely to the coal-fired units. The station has access to Lake Michigan, railroad facilities and roads, allowing a range of fuel delivery alternatives.

The coal-fired units were designed by Black and Veatch and began commercial operation in 1958. The units are basically identical. Each includes a top supported two-drum boiler supplied by Babcock and Wilcox. The units are rated for 125,000 lbs. per hour of steam at 600 psig and 825°F. Steam temperature control is accomplished by balancing boiler overfire air. The boiler may be operated at 140,000 lbs. per hour of steam flow for up to two hours.

The coal is fed to the boiler by Alstom stokers and burned on a Detroit Stoker Rotograte traveling grate. Each grate is 15'-4-½" wide by 18' net length for a surface area of 276.7 square feet. Each boiler has an economizer for preheating feedwater to the boiler, but does not have a combustion air preheater. At rated capacity, boiler performance data states the efficiency of the boiler at 84.3 percent. The average annual net heat rate of the steam generation plant is 14,500 Btu/kWh. The design grate heat release at 125,000 lbs. per hour steam flow burning coal is an extremely conservative 592,477 Btu/hr.-square foot. If this boiler were converted to burning wood even as high as 55 percent moisture content, the grate heat release appears to be adequately sized.

The boilers are balanced draft units, each with a single forced draft fan providing combustion air from the ground floor elevation and a single induced draft fan located after the mechanical collectors and the electrostatic precipitators. Flue gas cleaning consists of centrifugal mechanical collectors followed by a three-field electrostatic precipitator installed in 1979. Steam from the boiler in each unit is piped to a turbine generator that was supplied by Allis Chalmers and has a nameplate rating of 12,650 kW gross. Steam is extracted to four feedwater heaters, and the turbine exhausts to a surface condenser utilizing circulating water from Lake Michigan. The steam turbine drives a Allis Chalmers generator operating at 3,600 rpm.

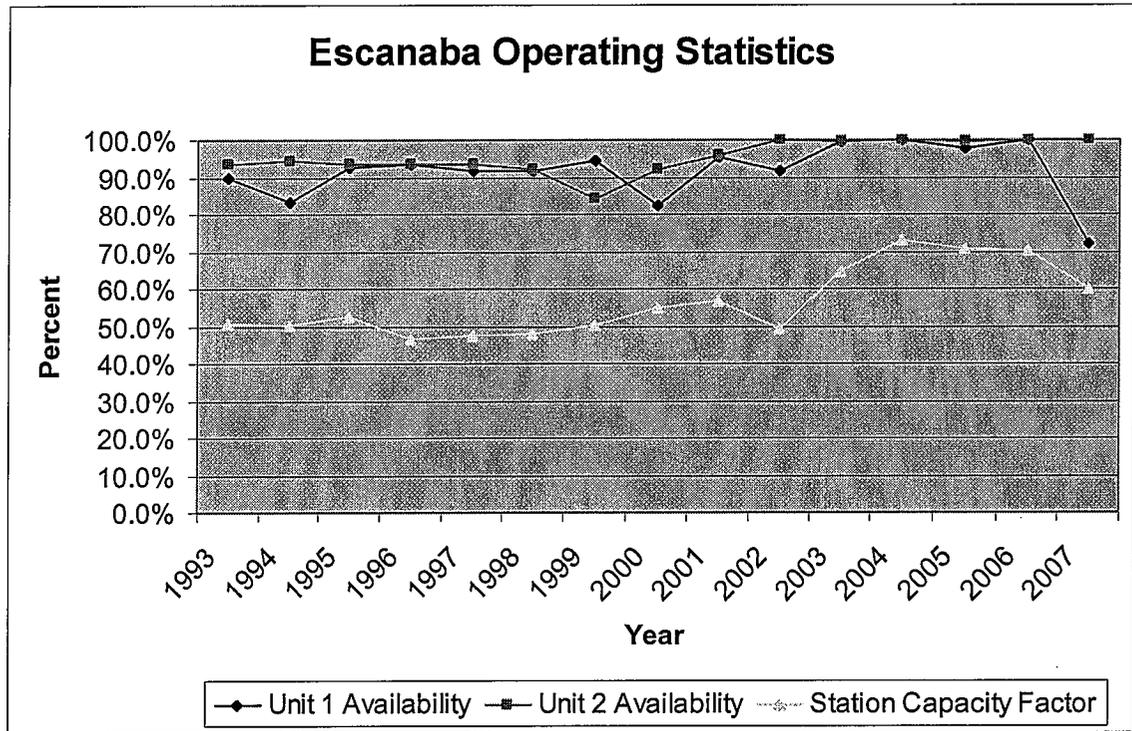
## Operation

The coal-fired units operate continuously whenever they are available. Typically, during the day, they are operating at high loads, as much as 13 MW gross for each unit. Considering the station service requirements of 500 kW for each unit, the net output is approximately 12.5 MW. The current State of Michigan Operating Permit references a nameplate rating of 12.5 MW.

During the night, the units are typically ramped down as directed by MISO. The minimum load for each unit is 4 MW gross. Operating the units at minimum load during the off-peak hours as

opposed to shutting them down and restarting has most probably helped the availability of the units.

The historical equivalent availability and capacity factor of the coal-fired units at Escanaba have been excellent as summarized graphically below:



The Upper Peninsula Power Company (UPPCO), under contract by the City of Escanaba, has operated the station since 1958. UPPCO has been acquired by the Wisconsin Public Service Corporation. The plant is currently operated and maintained by a staff of 28 people, as follows (three Full-Time Equivalents are currently used for UPPCO hydro operations):

- 4 - Shift Engineers (1 per operating shift).
- 4 - Boiler Turbine Engineers (1 per operating shift).
- 4 - Oilers (1 per operating shift).
- 1 - Electrical and Controls Technician.
- 2 - Generation Technologists.
- 2 - Coal Handling Personnel.
- 3 - Relief Operators.
- 1 - Station Clerk.
- 1 - Environmental Consultant.
- 1 - Station Supervisor.
- 1 - Station Superintendent.
- 4 - Maintenance Generation Specialists.

## **Fuel**

Escanaba Units 1 and 2 are solely fueled by coal. There is no auxiliary fuel capability. Startup is accomplished by using waste wood on the boiler grates. Given the infrequency of plant startups, this works quite adequately.

Annually, the City requests proposals from potential coal suppliers. Coal is requested to be sized 2"x 0". The coal typically has a calorific value of 12,500 Btu/lb. and must contain less than 1.5 percent sulfur in accordance with the current operating permit. Coal is currently transported by ship and stored on a dock immediately north of the plant. There are also rail facilities adjacent to the property that could be developed for fuel delivery. This dock is not owned by Escanaba, but leased from C. Reiss Coal Company. There is adequate draft next to the coal pile, so that the ship can unload directly to the storage pile. Generally, the plant purchases sufficient coal to operate the plant for one year. Annual coal requirements vary between 60,000 and 80,000 tons. Coal is loaded into a dump truck from the storage pile using a front-end loader and transported to the in feed hopper at the station.

## **Permit Requirements**

The Escanaba Generating Units operate under a renewable operating permit issued by the State of Michigan. The current operating permit is valid from January 1, 2011 through December 31, 2015. The permit is transferable to any prospective buyer for the approved fuel usage.

The coal units are limited to 1.5 percent sulfur coal and a stack opacity of 20 percent based on a 6-minute average, except for one 6-minute average of not more than 27 percent opacity. The particulate emissions must not exceed 0.30 pounds per million Btus of heat input to the boiler. The plant has a very good operating history of permit compliance.

Historic operating costs are available for parties submitting notice of intent to bid.

The plant is in a fugitive dust non-attainment zone. This fugitive dust issue is primarily related to the operation of the Canadian National ore dock operations located just south of the Escanaba Generation Units.

The Michigan Department of Environmental Quality (MDEQ) made allegations against the City of Escanaba regarding the operation of the Continuous Opacity Monitoring System (COMS). The proceeding was settled in a civil Consent Order and has requirements that apply to any future owners of the plant. Details of the Consent Order are found in the attached PDF document.

# Appendix IV - Combustion Turbine Unit Description

## General Description

The Escanaba Generating Station consists of two coal-fired generating units and an oil-fired combustion turbine (CT) generator. The site is located on the north side of Escanaba, Michigan on the shores of Lake Michigan.

The CT is a General Electric Frame 5 unit that was manufactured in 1968. The unit was originally installed in New Hampshire and then in Ecuador. The air-cooled generator has a nameplate of 21,176 kVA at 0.85 power factor which equates to 18 MW output. Prior to being shipped to Escanaba in 2002, the purchase contract required the unit to be completely overhauled. It is uncertain how many operating hours were on the unit prior to purchase by Escanaba, but since that time the turbine has operated for 2,689 hours and been started 280 times. The unit is equipped with an evaporative cooler for the combustion air to improve capacity and efficiency in hot weather, and water injection for capacity enhancement as well as NOx reduction. Water for the NOx reduction is provided by the coal-fired generation facilities. A 100,000-gallon tank for number 2 fuel oil is located adjacent to the CT. The unit has black start capability. While this unit is currently fueled only with number two fuel oil, it could be adapted to use fuel oil and/or natural gas fuel.

## Operation

The CT typically operates between 350 to 500 hours annually. Operation is typically driven by the need for transmission support. For the period from 2003 through 2007, the CT had a 2.7 percent capacity factor and a 99.72 percent equivalent availability factor.

## Fuel Oil

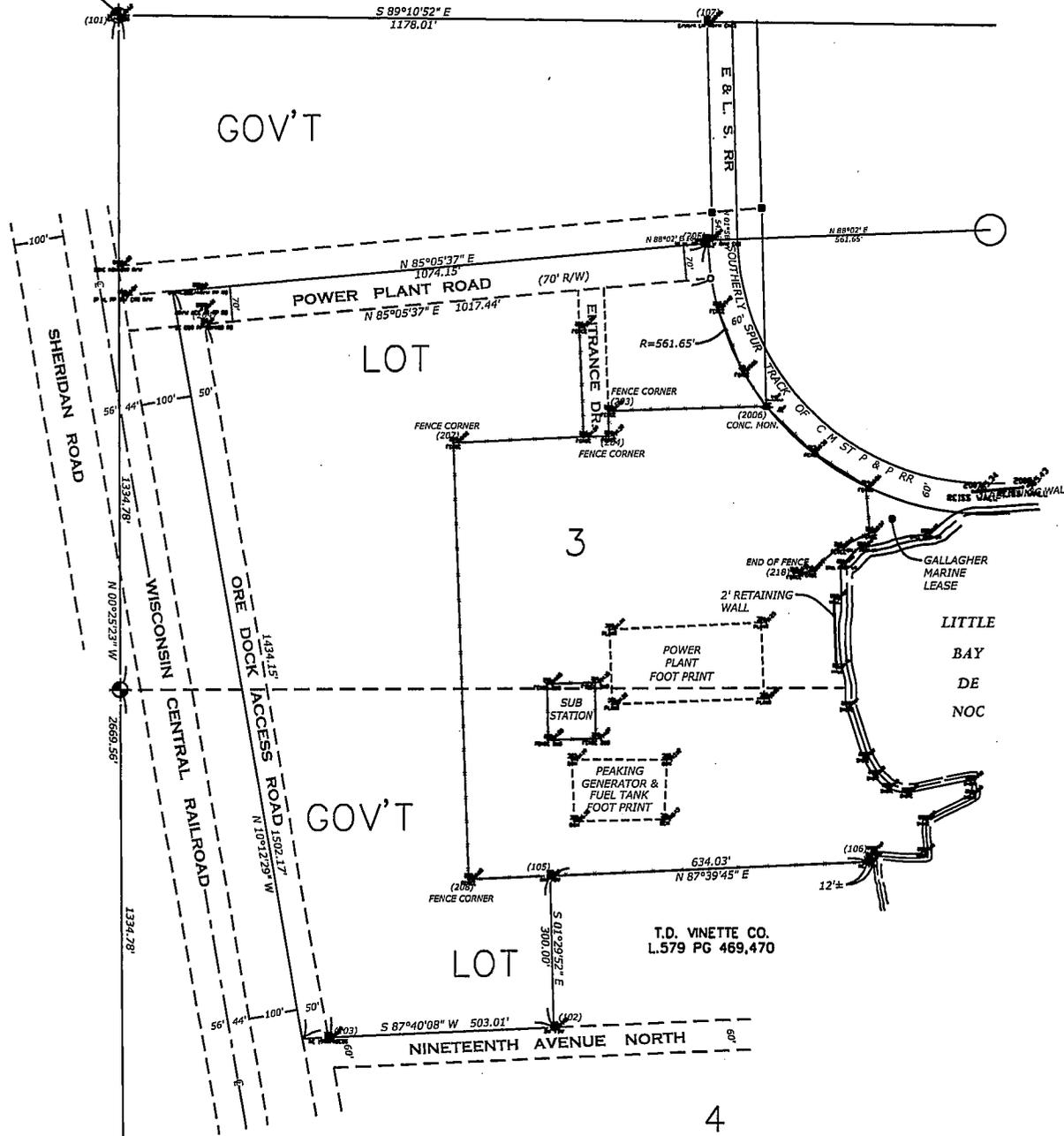
Fuel for this unit is delivered by truck and must be less than 0.2 percent sulfur content.

## Permit Requirements

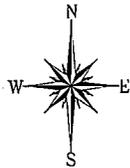
The current Renewable Operating Permit limits this unit to emit 35.9 tons of nitrogen oxide emissions annually. This is equivalent to approximately 1,360 hours of operation at full load.

Plat of Survey of  
**Part of Gov't Lots 3 & 4**  
**Section 18 T.39N., R.22W.**  
 City of Escanaba  
 Delta County, Michigan

C1/4 CORNER OF  
 SEC. 18 T.39N., R.22W.



(000) INDICATES OPS POINT NUMBERS  
 SEE ATTACHED SHEET FOR  
 COORDINATE VALUES  
 --- INDICATES AN EXISTING FENCE LINE



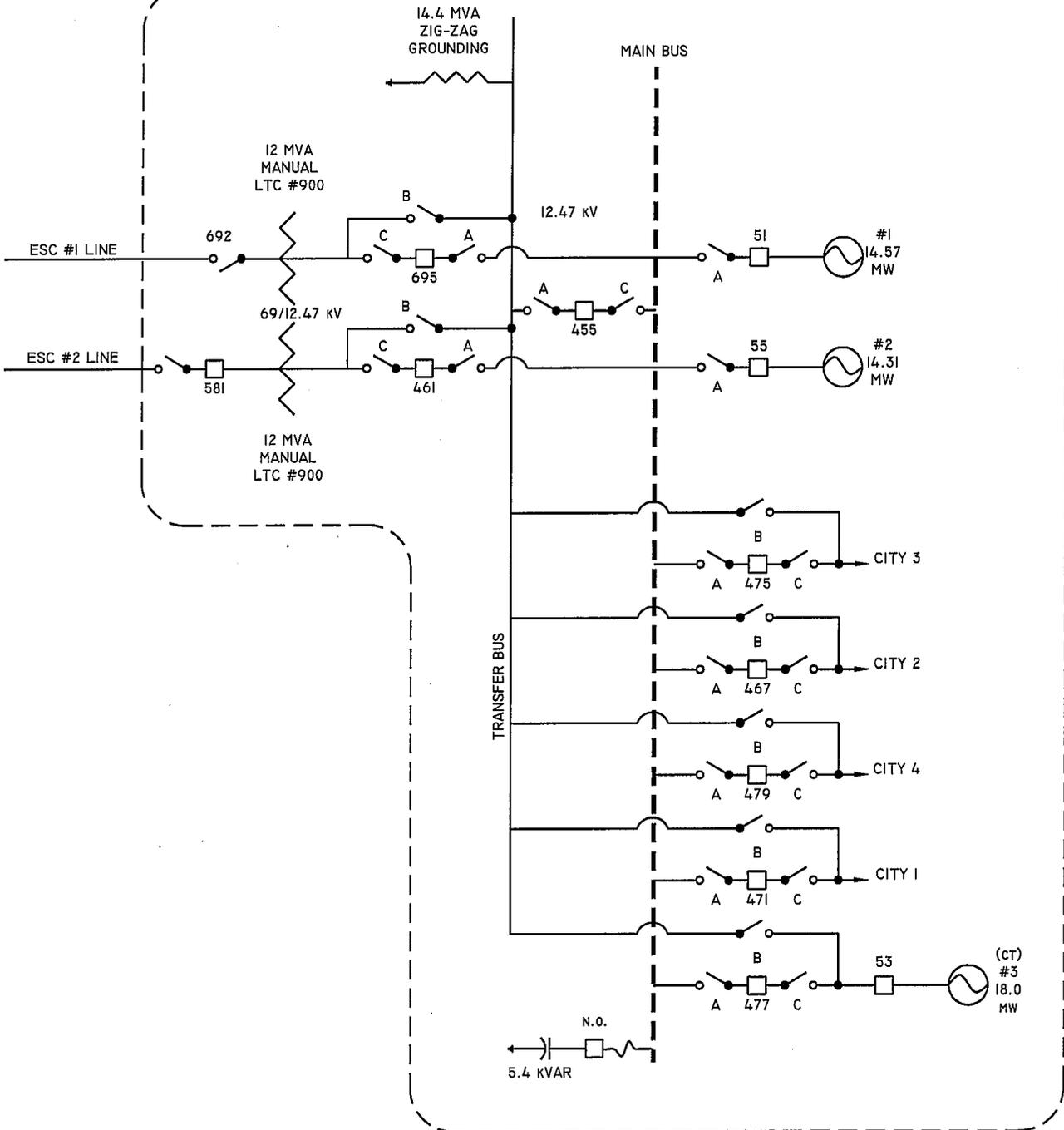
SCALE: 1"=150'

BEARINGS AND COORDINATES ARE  
 BASED ON AEROMETRICS 1998  
 PHOTOGRAMMETRIC CONTROL POINTS  
 ESTABLISHED FOR THE  
 CITY OF ESCANABA

S1/4 CORNER OF  
 SEC. 18 T.39N., R.22W.  
 AND  
 SW CORNER GOV'T LOT 4

SURVEY FOR	CITY OF ESCANABA	JOB NUMBER	08283-08J
SUBJECT	BOUNDARY SURVEY		
DATE OF SURVEY	NOVEMBER, 2008		
DATE OF MAPPING	NOVEMBER, 2008		
CERTIFICATE OF SURVEY TO:			
CITY OF ESCANABA			
I, M.P. DAVIS, A REGISTERED LAND SURVEYOR IN THE STATE OF MICHIGAN, HEREBY CERTIFY THAT I HAVE MADE A SURVEY OF THE ABOVE DESCRIBED LANDS, THAT IRON MONUMENTS, SO FAR AS THOSE FOUND HAVE BEEN PLACED OR LOCATED AT THE POSITIONS INDICATED HEREON, THAT THERE ARE NO VISIBLE PHYSICAL ENCROACHMENTS EITHER WAY ACROSS PROPERTY LINES, EXCEPT AS SHOWN, THAT THE RELATIVE ERROR OR CLOSURE OF THE UNADJUSTED FIELD MEASUREMENTS OF THE SURVEY IS LESS THAN THE RATIO OF 1 PART IN 10,000.			
M.P. DAVIS, Registered Land Surveyor No. 19928			
		<p><b>LEGEND</b></p> <ul style="list-style-type: none"> <li>--- INDICATES A LINE NOT DRAWN TO SCALE</li> <li>○ IRON MONUMENTS SET</li> <li>● IRON MONUMENTS FOUND</li> <li>□ CONC. MONUMENTS SET</li> <li>■ CONC. MONUMENTS FOUND</li> <li>⊕ CHISELED CROSS IN CONCRETE</li> <li>(M) MEASURED DISTANCE AND/OR BEARINGS</li> <li>(R) RECORDED DISTANCE AND/OR BEARINGS</li> <li>◆ SECTION CONTROL CORNERS</li> </ul>	
		<p>1410 Livingston Street                  Escanaba, Michigan 49829                  Phone (900)758-1755,                  Fax 758-9487</p> <p>LAND SURVEYORS, P.C.</p>	

**ESCANABA  
STEAM PLANT  
(ESCANABA)**



<b>PSE</b>	<b>Power System Engineering Inc.</b>
	<small>OFFICES IN: MADISON, WI MINNEAPOLIS, MN INDIANAPOLIS, IN COLUMBUS, OH</small>

12301 Central Ave, N.E., Suite 250  
Blaine, MN 55434  
Fax 763-755-7028  
Telephone 763-755-5122

**ESCANABA  
STEAM PLANT**

ENGR:	DATE	CHK'D/ APP'D	PAGE:
DWN BY:	PROJECT NO.	SCALE:	

DRAWING NO.

**City of Escanaba**

**Power Plant**

**Request For Proposal**

**Response Package**

**January 18, 2011**

# Escanaba 2011 Power Plant RFP Response Package

## I. RESPONDENT INFORMATION

Corporate Name: \_\_\_\_\_

Corporate Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Parent's Corporate Name: \_\_\_\_\_

Parent's Corporate Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Authorized Representative:

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Phone: \_\_\_\_\_

Fax: \_\_\_\_\_

E-mail: \_\_\_\_\_

Signature: \_\_\_\_\_

Primary Contact:

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Phone: \_\_\_\_\_

Fax: \_\_\_\_\_

E-mail: \_\_\_\_\_

Signature: \_\_\_\_\_

**Please check one of the following:**

Electric Utility

Power Marketer or Broker

Independent Power Producer (IPP)

Other (please specify below):

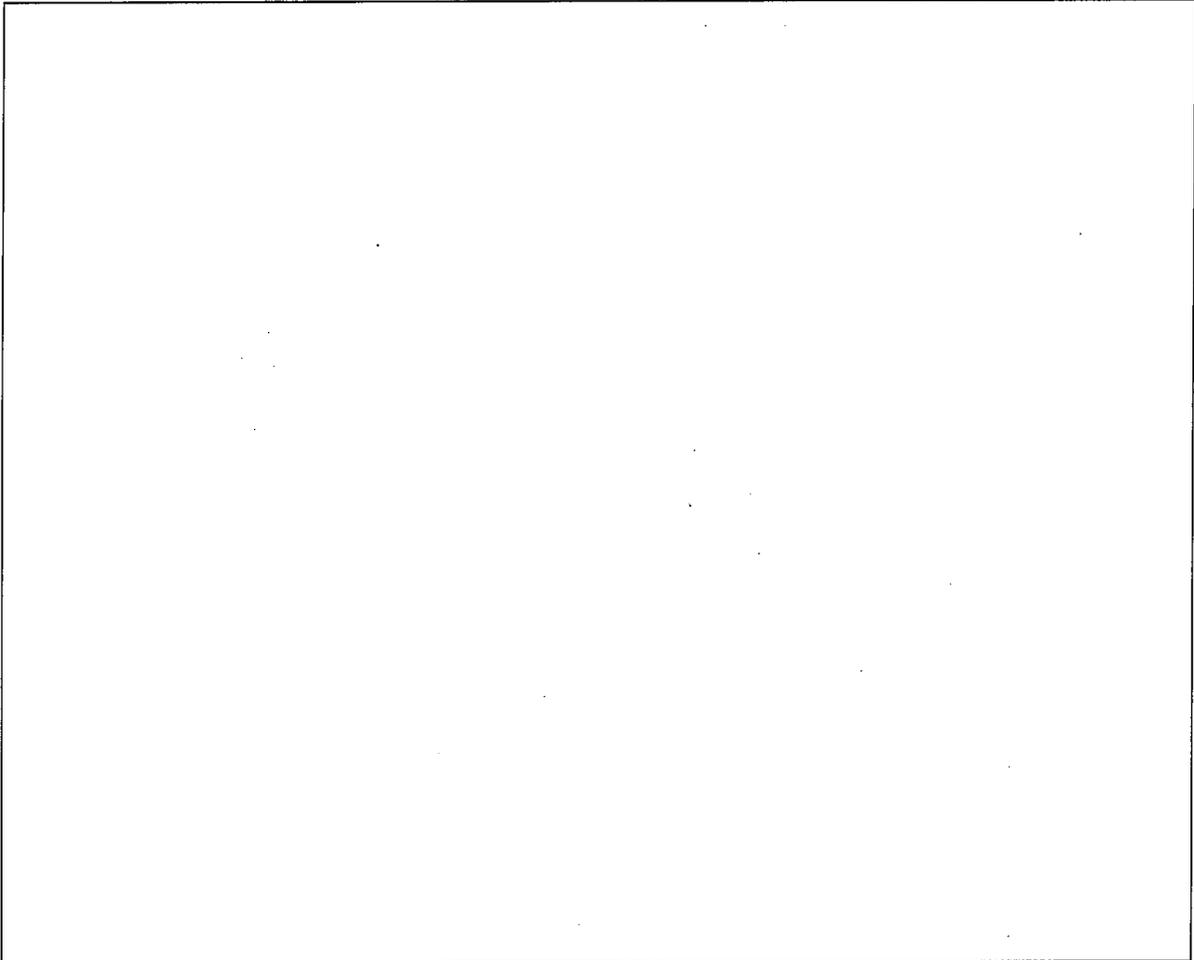
# Escanaba 2011 Power Plant RFP Response Package

Please indicate days interested in site tour:

\_\_\_\_\_

## II. EXECUTIVE SUMMARY

Please give a brief description of the proposal:



## Escanaba 2011 Power Plant RFP Response Package

### III. PURPOSE OF PURCHASING GENERATION FACILITIES (Check all that Apply)

A. Interest in Power Generation Facilities

- Ownership of Steam Generation and Combustion Turbine Facilities (required)
- Operation of Steam Generation and Combustion Turbine Facilities by June 6, 2011 (plant operator needed due to termination of existing contract)

B. If entity is not interested in operating steam generation facilities, please describe the proposed arrangement for operating the facilities:

C. Respondent is expecting to utilize Escanaba Generation Resource to supply power resources for:

- Load Serving Requirements
- Renewable Energy Requirements
- Market Sales of Energy and Capacity
- Other (please specify below):

## Escanaba 2011 Power Plant RFP Response Package

### IV. EXPECTED TIME FRAME OF OWNERSHIP AND OPERATION OF FACILITIES

A. Expected time frame of operating the generation facilities:

- 1-5 years
- 6-10 years
- 11-15 years
- 16-20 years
- Other (please specify below):

B. Describe the level of commitment to operate the facilities for the expected time frame and any foreseeable events that would alter this decision, including changes in laws and regulation, required plant improvements due to either failure or other incident that would require capital investment:

## Escanaba 2011 Power Plant RFP Response Package

### V. PRICING

#### A. Proposed Payment for Plant Facilities

Description \_\_\_\_\_ Payment \$ \_\_\_\_\_

Description \_\_\_\_\_ Payment \$ \_\_\_\_\_

The costs for site clean up is the responsibility of the seller and the costs of any required permitting of the facilities are the responsibility of the buyer.

### VI. EXPECTED FUEL MIX

Please provide the expected fuel mix that will be used to supply the steam generation facilities:

Year	Coal 1 Type: ( )	Coal 2 Type: ( )	New Fuel 1	New Fuel 2	New Fuel 3	New Fuel 4	New Fuel 5
	(%)	(%)	(%)	(%)	(%)	(%)	(%)
2011							
2012							
2013							
2014							
2015							
2016							
2017							
2018							
2019							
2020							
2021							
2022							
2022							

# Escanaba 2011 Power Plant RFP Response Package

## VII. PLANT OWNERSHIP AND OPERATION EXPERIENCE

Please provide a description of other facilities that are owned and operated by the respondent and describe how this experience qualifies the respondent to assume ownership and operation of the Escanaba Generation Facilities:

## VIII. PLANT STAFFING

1. Is the staffing envisioned to be Union Employees?  
Yes \_\_\_\_\_ No \_\_\_\_\_

2. Provide Description of Operating Plans

## IX. PLANT STAFFING (Continued)

1. Provide description of how existing UPPCO plant employees will be considered for future employment.

## Escanaba 2011 Power Plant RFP Response Package

### X. FINANCIAL INFORMATION

Please provide the following financial/credit information:

If company is rated by S&P, Moody's, and/or Fitch, please provide latest credit report (if responding company is not rated, then please provide for parent company and/or other guarantor):

\_\_\_\_\_ S&P    \_\_\_\_\_ Moody's    \_\_\_\_\_ Fitch

\_\_\_\_\_ Most recent SEC Form 10K and most recent SEC Form 10Q Report  
\_\_\_\_\_ Three most recent Annual Reports

### XI. FINANCING REQUIREMENTS

Is new financing required to provide capital for generation facilities?

Yes \_\_\_\_\_ No \_\_\_\_\_

If yes, have financing arrangements been made prior to submitting this proposal?

Yes \_\_\_\_\_ No \_\_\_\_\_

Please briefly describe proposed financing arrangements.

# Escanaba 2011 Power Plant RFP Response Package

## **XII. REGULATORY APPROVALS**

The proposed arrangements (including the addition of any new transmission or generation facilities) will require approval by the following regulatory agencies: (Please give name of agency, jurisdiction of agency, relevant statute under which approval is required, and responsibility for obtaining approvals.)

## **XIII. REFERENCES**

Please provide contact information from relevant business transactions.

STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
OFFICE OF THE DIRECTOR

---

In the matter of administrative proceedings )  
against the CITY OF ESCANABA, a )  
corporation organized under the laws of the )  
State of Michigan and doing business at 2000 )  
Power Plant Road, in the City of Escanaba, )  
County of Delta, State of Michigan. )  
)

---

AQD No. \_\_-2009

SRN: B1573

STIPULATION FOR ENTRY OF FINAL ORDER  
BY CONSENT

This proceeding resulted from allegations by the Michigan Department of Environmental Quality ("MDEQ") Air Quality Division ("AQD") against the City of Escanaba, ("City"), a Michigan corporation with an electric power generation unit ("Facility") located at 2000 Power Plant Road in the City of Escanaba, County of Delta, State of Michigan, with State Registration Number ("SRN") B1573. The MDEQ alleges that at the Facility the City failed to properly operate, perform acceptable daily calibrations, conduct and submit annual calibration error tests, maintain the Continuous Opacity Monitoring System ("COMS") and report COMS downtime for the EUBOILER No. 1 and for the EUBOILER No. 2 in violation of Title 40 of the Code of Federal Regulations ("CFR"), Part 64.7(b), 64.7(c), 64.9(a)(ii), which are also violations of the Michigan Administrative Code ("MAC"), 2001 AACS R 336.1213 (Rule 213) and Renewable Operating Permit (ROP) No. MI-ROP-B1573-2004 General Condition Nos. 25 and 27, Tables E2 and E3, Section III. The MDEQ also alleges that at the Facility, for EUBOILER No. 1 and the EUBOILER No. 2, the City failed to submit complete accurate semi-annual and annual ROP certifications of compliance regarding deviations, as cited herein and in the January 25, 2008 Letter of Violation ("LOV") and June 20, 2008 Notice. The City and MDEQ stipulate to the termination of this proceeding by entry of a Stipulation for Entry of a Final Order by Consent ("Consent Order").

The City and MDEQ stipulate as follows:

1. The Natural Resources and Environmental Protection Act, 1994 PA 451, ("Act 451"), MCL 324.101 et seq. is an act that controls pollution to protect the environment and natural resources in the State.

2. Article II, Pollution Control, Part 55 of Act 451 ("Part 55"), MCL 324.5501 et seq. provides for air pollution control regulations in this State.

3. The Michigan Department of Natural Resources ("MDNR") is authorized pursuant to Section 5503 of Part 55 to administer and enforce all provisions of Part 55. Section 301 of Part 3 provides the authority to the Director of the MDNR to delegate powers and duties.

4. The MDEQ was created as a principal department within the Executive Branch of the State of Michigan pursuant to Executive Order 1995-18. All statutory authority, powers, duties, functions and responsibilities of the MDNR AQD were transferred to the Director of the MDEQ ("Director").

5. The Director has delegated authority to the Chief of the AQD ("AQD Chief") to enter into this Consent Order.

6. The termination of this matter by a Consent Order pursuant to Section 5528 of Part 55 is proper and acceptable.

7. The City and the MDEQ agree that the signing of this Consent Order is for settlement purposes only and does not constitute an admission by the City that the law has been violated.

8. This Consent Order becomes effective on the date of execution ("effective date of this Consent Order") by the AQD Chief.

9. The City shall achieve compliance with the aforementioned regulations in accordance with the requirements contained in this Consent Order.

#### COMPLIANCE PROGRAM AND IMPLEMENTATION SCHEDULE

##### 10. A. Permit

1. On and after the effective date of this Consent Order, the City shall fully comply with the terms and conditions of Renewable Operating Permit No. MI-ROP-B1573-2004 (ROP) General Conditions Nos. 25 and 27; and Table E-2 (EUBOILER #1) and Table E-3 (EUBOILER #2). The General Conditions, Table E-2 and Table E-3 of the ROP are attached as Exhibit A, incorporated by reference, and made an enforceable part of this Consent Order.

##### B. Emission Limitations

On and after the effective date of this Consent Order, emissions of opacity from the EUBOILER No. 1 and from the EUBOILER No. 2 shall not continue for more than two hours in excess of 20 percent opacity based upon 6-minute averages, excepting one 6-minute average per hour of not

more than 27 percent opacity as set forth in Rule 301(a) (R336.1301(a)), as specified in General Condition No. 2 of Exhibit A.

C. Operating Conditions

On and after the effective date of this Consent Order, the City shall not start up the EUBOILER No. 1 or the EUBOILER No. 2 unless the COMS is operating as specified in paragraph 11 of this Consent Order. In the event that the City becomes aware of a COMS failure while either EUBOILER No. 1 or EUBOILER No. 2 is operating, the City shall promptly investigate the malfunction and repair it expeditiously.

RECORDKEEPING, REPORTING, AND PERFORMANCE AUDITS

11. On and after the effective date of this Consent Order, except for routine maintenance and for malfunctions as defined in MAC R 336.1113(d), the City shall calibrate, operate and maintain a COMS on both the EUBOILER No. 1 and on the EUBOILER No. 2. These COMS shall be designed and installed in compliance with Performance Specification 1 of 40 CFR Part 60, Appendix B and calibrated, operated and maintained according to the procedures specified in 40 CFR Part 60, Section 60.13. The City shall also maintain accurate records of all COMS maintenance activities. This information shall be kept on file at the Facility for a period of at least five (5) years, and shall be made available to the MDEQ upon written or verbal request.

12. On and after the effective date of this Consent Order, the City shall perform an annual performance audit of the EUBOILER No. 1 and the EUBOILER No. 2 continuous opacity monitoring system using the procedures set forth in U.S. EPA Proposed Procedure 3—Quality Assurance Requirements for Continuous Opacity Monitoring Systems at Stationary Sources, Federal Register, May 2, 2003, Pages 24692-24700. The City shall notify the AQD Upper Peninsula District Supervisor and the AQD Technical Programs Unit Supervisor of the date and time of the annual audit, in writing, no less than 30 days prior. By August 15 annually, and within 60 days of completion, the City shall submit the results of the annual performance audit to the AQD Upper Peninsula District Supervisor and to the AQD Technical Programs Unit Chief, at the address listed in paragraph 15 below, as specified in Table E-2, Section IV.(3) and E-3 Section IV.(3) of Exhibit A.

13. On and after the effective date of this Consent Order, the City shall perform monitoring, recordkeeping, and reporting of deviations from permit requirements for the EUBOILER No. 1 and the EUBOILER No. 2, and submit semiannual reporting, by March 15 and September 15, to the AQD Upper

Peninsula District Supervisor and to the AQD Technical Programs Unit Chief, at the address listed in paragraph 15 below, as specified in Table E-2, Section IV.(2) and E-3 Section IV.(2) of Exhibit A.

14. On and after the effective date of this Consent Order, within 30 days following the end of each calendar quarter, the City shall submit quarterly excess emission reports ("EER") and a summary of the COMS for the EUBOILER No. 1 and for the EUBOILER No. 2 using the format and procedures set forth in 40 CFR 60.7(c) and (d). The EER shall include the magnitude, in actual percent opacity, of each six minute average of opacity greater than the permit limit and the time period represented by such averages. It shall also include the cause of the excess emission, if known, periods of COMS downtime, any corrective action taken, and total operating time of the source(s). If no exceedances or COMS downtime occurred during the time period, the City shall report that fact. The quarterly excess emission reports shall be submitted to the AQD Upper Peninsula District Supervisor and to the AQD Technical Programs Unit Chief, at the address listed in paragraph 15 below. This information shall be kept on file at the Facility for a period of at least five (5) years, and shall be made available to the MDEQ upon written or verbal request.

15. Reports required to be submitted under this Consent Order shall be sent to the AQD Upper Peninsula District Supervisor, Department of Environmental Quality, 420 Fifth Street, Gwinn, Michigan 49841-3004; and to the AQD Technical Programs Unit Chief, Department of Environmental Quality, Constitution Hall, 3rd Floor North, 525 Allegan Street, Lansing MI 48933. Prior to termination of this Consent Order the continuing requirement to generate, and submit, these reports shall be incorporated in the Renewable Operating Permit.

#### GENERAL PROVISIONS

16. This Consent Order in no way affects the City's responsibility to comply with any other applicable state and federal, or local laws or regulations, including without limitation, any amendments to the federal Clean Air Act, 42 USC 7401 *et seq.*, Act 451, Part 55 or their rules and regulations, or to the State Implementation Plan.

17. This Consent Order constitutes a civil settlement and satisfaction as to the resolution of the violations specifically addressed herein; however, it does not resolve any criminal action that may result from these same violations.

18. Within thirty (30) days after the effective date of this Consent Order, the City shall pay to the General Fund of the State of Michigan, in the form of a check made payable to the "State of

Michigan" and delivered to the Michigan Department of Environmental Quality, Financial and Business Services Division, Revenue Control, P.O. Box 30657, Lansing, Michigan 48909-8157, a settlement amount of \$45,500.00, which includes AQD costs for investigation and enforcement. This total settlement amount shall be paid within thirty (30) days of the effective date of this Consent Order. To ensure proper credit, all payments made pursuant to this Consent Order shall include the Agreement Identification No. AQD3312 on the face of the check. This settlement amount is in addition to any fees, taxes, or other fines that may be imposed on the City by law.

19. On and after the effective date of this Consent Order, if the City fails to comply with paragraph 10.B. of this Consent Order, the City is subject to stipulated fines of up to \$1,500.00 per day of violation. On and after the effective date of this Consent Order, if the City fails to comply with paragraphs 11, 12, 13 or 14 of this Consent Order, the City is subject to stipulated fines of up to \$2,000.00 per day of violation. On and after the effective date of this Consent Order, if the City fails to comply with any other provision of Exhibit A or this Consent Order, the City is subject to a stipulated fine of up to \$500.00 per violation. The amount of the stipulated fines imposed pursuant to this paragraph shall be within the discretion of the MDEQ. Stipulated fines submitted under this Consent Order shall be by check, payable to the State of Michigan within thirty (30) days of written demand and shall be delivered to the Michigan Department of Environmental Quality, Financial and Business Services Division, Revenue Control, P.O. Box 30657, Lansing, Michigan 48909-8157. To ensure proper credit, all payments shall include the Agreement Identification No. AQD3312S on the face of the check. Payment of stipulated fines shall not alter or modify in any way the City's obligation to comply with the terms and conditions of this Consent Order.

20. The AQD, at its discretion, may seek stipulated fines or statutory fines for any violation of this Consent Order which is also a violation of any provision of applicable federal and state law, rule, regulation, permit, or MDEQ administrative order. However, the AQD is precluded from seeking both a stipulated fine under this Consent Order and a statutory fine for the same violation.

21. To ensure timely payment of the settlement amount assessed in paragraph 18 and any stipulated fines assessed pursuant to paragraph 19 of this Consent Order, the City shall pay an interest payment to the State of Michigan each time it fails to make a complete or timely payment under this Consent Order. The interest payment shall be determined at a rate of interest that is equal to one percent (1%) plus the average interest rate paid at auctions of 5-year United States treasury notes during the six months immediately preceding July 1 and January 1, as certified by the state treasurer, compounded

annually, and using the full increment of amount due as principal, calculated from the due date specified in this Consent Order until the date that delinquent payment is finally paid in full. Payment of an interest payment by the City shall be made to the State of Michigan in accordance with paragraph 18 of this Consent Order. Interest payments shall be applied first towards the most overdue amount or outstanding interest payment owed by the City before any remaining balance is applied to a subsequent payment amount or interest penalty.

22. The City agrees not to contest the legal basis for the settlement amount assessed pursuant to paragraph 18. The City also agrees not to contest the legal basis for any stipulated fines assessed pursuant to paragraph 19 of this Consent Order, but reserves the right to dispute in a court of competent jurisdiction the factual basis upon which a demand by MDEQ of stipulated fines is made. In addition, the City agrees that said fines have not been assessed by the MDEQ pursuant to Section 5529 of Part 55 and therefore are not reviewable under Section 5529 of Part 55.

23. This compliance program is not a variance subject to the 12 month limitation specified in Section 5538 of Part 55.

24. This Consent Order shall remain in full force and effect for a period of at least two (2) years. Thereafter, the Consent Order shall terminate only upon written notice of termination issued by the AQD Chief. Prior to issuance of a written notice of termination, the City shall submit a request, to the AQD Chief at the Michigan Department of Environmental Quality, Air Quality Division, P.O. Box 30260, Lansing, Michigan 48909-7760, consisting of a written certification that the City has fully complied with all the requirements of this Consent Order and has made all payments including all stipulated fines required by this Consent Order. Specifically, this certification shall include: (i) the date of compliance with each provision of the compliance program and the date any payments or stipulated fines were paid; (ii) a statement that all required information has been reported to the AQD Upper Peninsula District Supervisor; (iii) confirmation that all records required to be maintained pursuant to this Consent Order are being maintained at the Facility; and, (iv) such information as may be requested by the AQD Chief.

25. In the event the City sells or transfers the Facility, with SRN B1573, it shall advise any purchaser or transferee of the existence of this Consent Order in connection with such sale or transfer. Within thirty (30) calendar days, the City shall also notify the AQD Upper Peninsula District Supervisor, in writing, of such sale or transfer, the identity and address of any purchaser or transferee, and confirm the fact that notice of this Consent Order has been given to the purchaser and/or transferee. As a condition of the sale, the City must obtain the consent of the purchaser and/or transferee, in writing, to assume all of

the obligations of this Consent Order. A copy of that agreement shall be forwarded to the AQD Upper Peninsula District Supervisor within thirty (30) days of assuming the obligations of this Consent Order.

26. Prior to the effective date of this Consent Order and pursuant to the requirements of Sections 5511 and 5528(3) of Part 55, the public was notified of a 30-day public comment period and was provided the opportunity for a public hearing.

27. Section 5530 of Part 55 may serve as a source of authority but not a limitation under which the Consent Order may be enforced. Further, Part 17 of Act 451 and all other applicable laws and any other legal basis or applicable statute may be used to enforce this Consent Order.

28. The City hereby stipulates that entry of this Consent Order is a result of an action by MDEQ to resolve alleged violations of the Facility located at 2000 Power Plant Road, in the City of Escanaba, Michigan. The City further stipulates that it will take all lawful actions necessary to fully comply with this Consent Order, even if the City files for bankruptcy in the future. The City will not seek discharge of the settlement amount and any stipulated fines imposed hereunder in any future bankruptcy proceedings, and the City will take necessary steps to ensure that the settlement amount and any future stipulated fines are not discharged, including requesting an order from the pertinent U.S. Bankruptcy Court designating the settlement amount and any future stipulated fines as exceptions to discharge pursuant to 11 U.S. Code Section 523(a)(7). The City, during and after any future bankruptcy

proceedings, will ensure that the settlement amount and any future stipulated fines remain an obligation to be paid in full by the City to the extent allowed by applicable bankruptcy law.

The undersigned certifies that he/she is fully authorized by the City to enter into this Consent Order and to execute and legally bind the City to it.

CITY OF ESCANABA

\_\_\_\_\_  
Print Name and Title

\_\_\_\_\_  
Signature

Date: \_\_\_\_\_

The above signatory subscribed and sworn to before me this \_\_\_ day of \_\_\_\_\_, 2009.

\_\_\_\_\_  
Notary Public

Approved as to Content:

Approved as to Form:

\_\_\_\_\_  
G. Vinson Hellwig, Chief  
AIR QUALITY DIVISION  
DEPARTMENT OF  
ENVIRONMENTAL QUALITY

\_\_\_\_\_  
Alan F. Hoffman, Section Head  
ENVIRONMENTAL REGULATION SECTION  
ENVIRONMENT, NATURAL RESOURCES,  
AND AGRICULTURE DIVISION  
DEPARTMENT OF ATTORNEY GENERAL

Dated: \_\_\_\_\_

Dated: \_\_\_\_\_

FINAL ORDER

The Chief of the Air Quality Division having had opportunity to review the Consent Order and having been delegated authority to enter into Consent Orders by the Director of the Michigan Department of Environmental Quality pursuant to the provisions of Part 55 of Act 451 and otherwise being fully advised on the premises,

HAS HEREBY ORDERED that the Consent Order is approved and shall be entered in the record of the MDEQ as a Final Order.

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

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G. Vinson Hellwig, Chief  
Air Quality Division

Dated: \_\_\_\_\_

**STATE OF MICHIGAN  
RENEWABLE OPERATING PERMIT**

Is Hereby Issued To:

***City of Escanaba Generating Station***

SRN: B1573

Located At:

***2000 Power Plant Road  
Escanaba, Michigan 49829***

Application Number: 200200066

Permit Number: MI-ROP-B1573-2004

Effective Date: July 1, 2004

Expiration Date: June 30, 2009

This permit is issued in accordance with and subject to Part 5506(3) of Article II, Chapter 1, Part 55 (Air Pollution Control) of P.A. 451 of 1994. Pursuant to Air Pollution Control Rule 210(1), this permit constitutes the permittee's authority to operate the major source identified above in accordance with the general conditions, special conditions and attachments contained herein. Operation of the major stationary source and all emission unit/process groups listed in the permit are subject to all applicable future or amended rules and regulations pursuant to P.A. 451 and the Clean Air Act.

This permit does not relieve the permittee from the responsibility to obtain the necessary permits to install pursuant to Air Pollution Control Rule 201 for new or modified process or process equipment. In addition, issuance of this Renewable Operating Permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.

Michigan Department of Environmental Quality

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Brian D. Brady, District Supervisor  
Air Quality Division

## A. General Requirements

For the purpose of this Renewable Operating Permit, the permittee is defined as any person who owns or operates a process or process equipment at a stationary source for which a Renewable Operating Permit has been issued. This permit is issued to the **City of Escanaba Generating Station**, hereinafter the permittee for this Renewable Operating Permit. The department is defined in R336.1104(d) as the Director of the Department of Environmental Quality or his or her designee.

### Enforceability

All conditions in this permit are both federally enforceable and state enforceable unless otherwise noted. Those requirements which are enforceable by the state only are designated by an asterisk. (R336.1213(5))

### General Conditions

1. A challenge by any person, the Administrator of the EPA, or the department to a particular condition or a part of this Renewable Operating Permit shall not set aside, delay, stay, or in any way affect the applicability or enforceability of any other condition or part of this Renewable Operating Permit. (R336.1213(1)(f))
2. Except as provided in subrules 2, 3, and 4 of R 336.1301, a person shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of a density greater than the most stringent of R 336.1301(1)(a) or (b) unless otherwise specified in this Renewable Operating Permit. The grading of visible emissions shall be determined in accordance with R 336.1303. (R336.1301(1) in pertinent part, 40 CFR 52.21(j))
  - a) A 6-minute average of 20% opacity, except for one 6-minute average per hour of not more than 27% opacity.
  - b) A limit specified by an applicable federal new source performance standard.
3. Any collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in R 336.1370(2). (R336.1370)
4. Any air cleaning device shall be installed, maintained, and operated in a satisfactory manner and in accordance with the Michigan Air Pollution Control rules and existing law. (R336.1910)
5. The department may require the owner or operator of any source of an air contaminant to conduct acceptable performance tests, at the owner's or operator's expense, in accordance with R 336.2001 and R 336.2003, under any of the conditions listed in R 336.2001(1). (R336.2001)
6. A change in ownership or operational control of a stationary source covered by a Renewable Operating Permit shall be made pursuant to R 336.1216(1). (R336.1219(3))
7. The permittee shall not cause or permit the emission of an air contaminant or water vapor in quantities that cause, alone or in reaction with other air contaminants, either of the following:
  - a) Injurious effects to human health or safety, animal life, plant life of significant economic value, or property.\* (R336.1901(a))  
\* This requirement is state enforceable only.
  - b) Unreasonable interference with the comfortable enjoyment of life and property.\* (R336.1901(b))  
\* This requirement is state enforceable only.

8. The permittee shall comply with all conditions of this Renewable Operating Permit. Any permit noncompliance constitutes a violation of Act 451 of 1994, as amended, Part 55, (Air Pollution Control) and is grounds for enforcement action, for permit revocation or revision, or for denial of the renewal of the Renewable Operating Permit. All terms and conditions of this Renewable Operating Permit that are designated as federally enforceable are enforceable by the Administrator of the EPA and by citizens under the provisions of the CAA. Any terms and conditions based on applicable requirements which are defined as "state only" are not enforceable by the EPA or citizens pursuant to the CAA. (R336.1213(1)(a))
9. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Renewable Operating Permit. (R336.1213(1)(b))
10. This Renewable Operating Permit may be modified, revised, or revoked for cause. The filing of a request by the permittee for a permit modification, revision, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. Pursuant to R 336.1215 and R 336.1216 the permittee may make changes at a stationary source at his/her own risk. (R336.1213(1)(c))
11. The permittee shall furnish to the department, within a reasonable time, any information the department may request, in writing, to determine whether cause exists for modifying, revising, or revoking the Renewable Operating Permit or to determine compliance with this Renewable Operating Permit. Upon request, a person shall also furnish to the department copies of any records that are required to be kept as a term or condition of this Renewable Operating Permit. (R336.1213(1)(e))
12. The permittee shall allow the department, or an authorized representative of the department, upon presentation of credentials or other documents as may be required by law and upon stating the authority for and purpose of the investigation, to perform any of the following activities: (R336.1213(1)(d))
- a) Enter, at reasonable times, a stationary source or other premises where emissions-related activity is conducted or where records must be kept under the conditions of the permit.
  - b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit.
  - c) Inspect, at reasonable times, any of the following:
    - i) Any stationary source.
    - ii) Any process.
    - iii) Any process equipment, including monitoring and air pollution control equipment.
    - iv) Any work practices or operations regulated or required under the Renewable Operating Permit.
  - d) As authorized by Section 5526 of the Act, sample and monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.
13. The permittee shall pay fees consistent with the fee schedule and requirements pursuant to Part 5522 of Act 451, P.A. 1994. (R336.1213(1)(g))
14. This Renewable Operating Permit does not convey any property rights or any exclusive privilege. (R336.1213(1)(h))
15. For renewal of this Renewable Operating Permit, an administratively complete application shall be considered timely if it is received by the department not more than 18 months, but not less than 6 months, before the expiration date of the Renewable Operating Permit. (R336.1210(7))
16. For modifications to this Renewable Operating Permit, an administratively complete application shall be considered timely if it is received by the department in accordance with the time frames specified in R 336.1216. (R336.1210(9))
17. For changes to any process or process equipment covered by this Renewable Operating Permit that do not require a revision of the Renewable Operating Permit pursuant to R 336.1216, the permittee must comply with R 336.1215. (R336.1215 and R336.1216)

18. A Renewable Operating Permit shall be reopened by the department prior to the expiration date and revised by the department under any of the following circumstances:

- a) If additional requirements become applicable to this stationary source with three or more years remaining in the term of the permit, but not if the effective date of the new applicable requirement is later than the Renewable Operating Permit expiration date. (R336.1217(2)(a)(i))
- b) If additional requirements pursuant to Title IV of the CAA become applicable to this stationary source. (R336.1217(2)(a)(ii))
- c) If the department determines the permit contains a material mistake, that information required by any applicable requirement was omitted, or that inaccurate statements were made in establishing emission limits or the terms or conditions of the permit. (R336.1217(2)(a)(iii))
- d) If the department determines the permit must be revised to ensure compliance with the applicable requirements. (R336.1217(2)(a)(iv))

19. Any required performance testing shall be conducted in accordance with Rule 1001(2), Rule 1001(3), and Rule 1003. (R336.2001(2), R336.2001(3), and R336.2003(1))

20. Any required test results shall be submitted to the AQD in the format prescribed by the applicable reference test method within 60 days following the last date of the test. (R336.2001(4))

<b>Table E-2</b> <b>EUBOILER#1 - Boiler #1</b> <b>EMISSION UNIT / PROCESS GROUP REQUIREMENTS</b>				
<b>EMISSION UNIT / PROCESS GROUP</b>		EUBOILER#1 – Spreader stoker coal-fired Boiler #1 rated at 125,000 pounds of steam per hour, and used for electric power generation. Boiler #1 has a heat input capacity of approximately 178 million BTU per hour, and serves an electrical generator with a nameplate rating of 12.5 megawatts.		
<b>Flexible Grouping ID</b>		N/A		
I. DESIGN PARAMETERS				
<b>Pollution Control Equipment</b>		Multicyclone dust collector and electrostatic precipitator on Boiler #1; Primary and secondary cyclonic separators and air washer on ash conveying system; Baghouse on ash silo; Water spray on ash wetting drum.		
<b>Stack or Vent Parameters</b>		Exhaust gases shall be discharged unobstructed vertically upwards unless otherwise noted.		
		<b>Stack or Vent ID</b>	<b>Minimum Height</b>	<b>Maximum Exhaust Diameter</b>
		SVSTACK1	150 feet	79 inches
<b>Other Design Parameters</b>		N/A		
II. MATERIAL USAGE AND EMISSION LIMITS				
<b>Material</b>		<b>Material Limitation</b>		
Coal		1) The coal burned in Boiler #1 shall not exceed a maximum sulfur content of 1.5% by weight, calculated on the basis of 12,000 BTU per pound for coal. (R336.1401)		
<b>Pollutant</b>		<b>Emission Limit</b>		
Particulate		1) The particulate emission from Boiler #1 shall not exceed 0.30 pounds per 1000 pounds of exhaust gases, corrected to 50% excess air. (R336.1201, R336.1331)		
III. COMPLIANCE EVALUATION				
Records of all of the following shall be maintained on file for a period of 5 years: (R 336.1213(3)(b)(ii))				
MONITORING AND RECORDKEEPING (R 336.1213(3))				
In Addition To General Requirements in Part A				
<b>Continuous Emission Monitoring and Recordkeeping</b>		1) Whenever Boiler #1 is operating, the permittee shall operate, calibrate, and maintain a Continuous Opacity Monitoring System on Boiler #1, including a daily calibration and an annual calibration error test. The permittee shall keep a summary record of all six-minute averages of opacity greater than 20 percent, except for one 6-minute average per hour of not more than 27 percent opacity, including cause if known and corrective action taken: Also, the permittee shall keep a summary record of opacity monitor downtime. The permittee shall submit these summary records with the semiannual reports required under Reporting and Compliance Certification below. (R336.1213(3), 40 CFR Part 64, 40 CFR 64.6(c)(2), 40 CFR 64.7, 40 CFR 64.9)		
<b>Process Monitoring and Recordkeeping</b>		N/A		
<b>Other Monitoring and/or Recordkeeping</b>		1) The permittee shall obtain and keep records of the sulfur and ash content of the coal burned in Boiler #1, as detailed in Appendix 4. The permittee shall submit these records with the semiannual reports required under Reporting and Compliance Certification below. (R336.1213(3))		

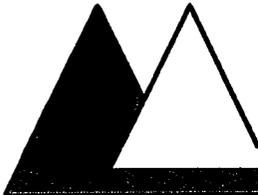
<b>Table E-2</b> <b>EUBOILER #1 - Boiler #1</b> <b>EMISSION UNIT / PROCESS GROUP REQUIREMENTS</b>	
<b>TESTING AND RECORDKEEPING (R 336.1213(3))</b> <b>In Addition to General Requirements in Part A</b>	
<b>Parameter to be Tested/Recorded</b>	1) Particulate
<b>Method/Analysis</b>	1) Performance tests shall be conducted according to procedures and test methods specified or approved by the Air Quality Division. Not less than 30 days prior to testing, a testing plan shall be submitted to the Air Quality Division for review. (R336.2001, R336.2003)
<b>Frequency and Schedule of Testing/Recordkeeping</b>	1) The permittee shall conduct testing of particulate emissions from Boiler #1 within three years after the issue date of this permit. (R336.1213(3))
<b>IV. REPORTING AND COMPLIANCE CERTIFICATION</b>	
<b>Reports and Schedules</b>	1) Prompt reporting of deviations pursuant to Condition 24 of Part A. See Appendix 8. (R336.1213(3)(c)(ii))  2) Semiannual reporting of required monitoring, recordkeeping, and deviations from permit requirements pursuant to Condition 23 of Part A. See Appendix 8. Due March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R336.1213(3)(c)(i))  3) Annual certification of compliance pursuant to Conditions 28 and 29 of Part A. See Appendix 8. Due annually by March 15 for the previous calendar year. (R336.1213(4)(e))
<b>V. OPERATIONAL PARAMETERS</b>	
1) The permittee shall equip and maintain each transformer-rectifier set of the electrostatic precipitator with a saturable core reactor, silicon-controlled rectifier linear reactor, or equivalent type automatic control system approved by the Air Quality Division. Each automatic controller shall be set to provide maximum power, or optimal power if operating in a sparking mode from its respective transformer-rectifier set. (R336.1213(2), R336.1330)  2) Upon detection of a 6-minute average opacity in excess of 20%, except for one 6-minute average per hour of not more than 27 percent opacity, the permittee shall restore operation of Boiler #1 and associated dust collection equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practice for minimizing emissions. (R336.1213(2), R336.1301, R336.1331, R336.1910, 40 CFR 64.1, 40 CFR 64.7(d))	
<b>VI. OTHER REQUIREMENTS</b>	
1) The air cleaning devices shall be maintained and operated in a satisfactory manner and in accordance with the Michigan Air Pollution Control Rules and existing law. The permittee shall carry out an Inspection and Maintenance Program including keeping of records of inspections done, problems found, repairs done, and/or corrective action taken. (R336.1213(3), R336.1910)	

\* This requirement is state enforceable only

<b>Table E-3</b> <b>EUBOILER#2 – Boiler #2</b> <b>EMISSION UNIT / PROCESS GROUP REQUIREMENTS</b>				
<b>EMISSION UNIT / PROCESS GROUP</b>		EUBOILER#2 – Spreader stoker coal-fired Boiler #2 rated at 125,000 pounds of steam per hour, and used for electric power generation. Boiler #2 has a heat input capacity of approximately 178 million BTU per hour, and serves an electrical generator with a nameplate rating of 12.5 megawatts.		
<b>Flexible Grouping ID</b>		N/A		
I. DESIGN PARAMETERS				
<b>Pollution Control Equipment</b>		Multicyclone dust collector and electrostatic precipitator on Boiler #2; Primary and secondary cyclonic separators and air washer on ash conveying system; Baghouse on ash silo; Water spray on ash wetting drum.		
<b>Stack or Vent Parameters</b>		Exhaust gases shall be discharged unobstructed vertically upwards unless otherwise noted.		
		<b>Stack or Vent ID</b>	<b>Minimum Height</b>	<b>Maximum Exhaust Diameter</b>
		SVSTACK2	150 feet	79 inches
<b>Other Design Parameters</b>		N/A		
II. MATERIAL USAGE AND EMISSION LIMITS				
<b>Material</b>		<b>Material Limitation</b>		
Coal		1) The coal burned in Boiler #2 shall not exceed a maximum sulfur content of 1.5% by weight, calculated on the basis of 12,000 BTU per pound for coal. (R336.1401)		
<b>Pollutant</b>		<b>Emission Limit</b>		
Particulate		1) The particulate emission from Boiler #2 shall not exceed 0.30 pounds per 1000 pounds of exhaust gases, corrected to 50% excess air. (R336.1201, R336.1331)		
III. COMPLIANCE EVALUATION				
Records of all of the following shall be maintained on file for a period of 5 years. (R 336.1213(3)(b)(ii))				
MONITORING AND RECORDKEEPING (R 336.1213(3))				
In Addition To General Requirements in Part A				
<b>Continuous Emission Monitoring and Recordkeeping</b>		1) Whenever Boiler #2 is operating, the permittee shall operate, calibrate, and maintain a Continuous Opacity Monitoring System on Boiler #2, including a daily calibration and an annual calibration error test. The permittee shall keep a summary record of all six-minute averages of opacity greater than 20 percent, except for one 6-minute average per hour of not more than 27 percent opacity, including cause if known and corrective action taken. Also, the permittee shall keep a summary record of opacity monitor downtime. The permittee shall submit these summary records with the semiannual reports required under Reporting and Compliance Certification below. (R336.1213(3), 40 CFR Part 64, 40 CFR 64.6(c)(2), 40 CFR 64.7, 40 CFR 64.9)		
<b>Process Monitoring and Recordkeeping</b>		N/A		
<b>Other Monitoring and/or Recordkeeping</b>		1) The permittee shall obtain and keep records of the sulfur and ash content of the coal burned in Boiler #2, as detailed in Appendix 4. The permittee shall submit these records with the semiannual reports required under Reporting and Compliance Certification below. (R336.1213(3))		

<b>Table E-3</b>	
<b>EUBOILER#2 – Boiler #2</b>	
<b>EMISSION UNIT / PROCESS GROUP REQUIREMENTS</b>	
<b>TESTING AND RECORDKEEPING (R.336.1213(3))</b> <b>In Addition to General Requirements in Part A</b>	
<b>Parameter to be Tested/Recorded</b>	N/A
<b>Method/Analysis</b>	N/A
<b>Frequency and Schedule of Testing/Recordkeeping</b>	N/A
<b>IV. REPORTING AND COMPLIANCE CERTIFICATION</b>	
<b>Reports and Schedules</b>	<p>1) Prompt reporting of deviations pursuant to Condition 24 of Part A. See Appendix 8. (R336.1213(3)(c)(ii))</p> <p>2) Semiannual reporting of required monitoring, recordkeeping, and deviations from permit requirements pursuant to Condition 23 of Part A. See Appendix 8. Due March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R336.1213(3)(c)(i))</p> <p>3) Annual certification of compliance pursuant to Conditions 28 and 29 of Part A. See Appendix 8. Due annually by March 15 for the previous calendar year. (R336.1213(4)(c))</p>
<b>V. OPERATIONAL PARAMETERS</b>	
<p>1) The permittee shall equip and maintain each transformer-rectifier set of the electrostatic precipitator with a saturable core reactor, silicon-controlled rectifier linear reactor, or equivalent type automatic control system approved by the Air Quality Division. Each automatic controller shall be set to provide maximum power, or optimal power if operating in a sparking mode from its respective transformer-rectifier set. (R336.1213(2), R336.1330)</p> <p>2) Upon detection of a 6-minute average opacity in excess of 20%, except for one 6-minute average per hour of not more than 27 percent opacity, the permittee shall restore operation of Boiler #2 and associated dust collection equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practice for minimizing emissions. (R336.1213(2), R336.1301, R336.1331, R336.1910, 40 CFR 64.1, 40 CFR 64.7(d))</p>	
<b>VI. OTHER REQUIREMENTS</b>	
<p>1) The air cleaning devices shall be maintained and operated in a satisfactory manner and in accordance with the Michigan Air Pollution Control Rules and existing law. The permittee shall carry out an Inspection and Maintenance Program including keeping of records of inspections done, problems found, repairs done, and/or corrective action taken. (R336.1213(3), R336.1910)</p>	

\* This requirement is state enforceable only



# MOUNTAIN ENGINEERING, INC.

NB # 5  
CC/EAC  
2/9/11

January 28, 2011

Mike Furmanski, Electrical Inspector  
City of Escanaba  
410 Ludington Street  
PO Box 948  
Escanaba, Michigan 49829

RE: Request for Proposal  
Abatement Requirements Assessment  
Power Generating Station

Mr. Furmanski:

Thank you for the opportunity to present this proposal to evaluate the Abatement Requirements at the City of Escanaba Power Station. My understanding is that the City is in the process of preparing the City power station and the associated 30 plus acre site for sale, and has determined the site meets the Michigan Department of Natural Resources Environment definition of a "Facility" under Michigan Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, Part 201. Since the property meets that definition, a Baseline Environmental Assessment could be performed to protect a purchaser from liability under Michigan environmental law. But, that would leave liability for the contamination with the City.

Our understanding is that the City of Escanaba is evaluating the cost of abating or mitigating on site contamination identified in the Phase II Environmental Site Assessment dated July 2010 prepared by Weston Solutions, Inc. Based on a preliminary review of the Phase II, there are seven areas where soil or groundwater samples exceeded the Part 201 Cleanup Criteria:

- Settling Basin
- Railroad Unloading/Loading Area
- Former Coal Storage Area
- Former Ash Spreading Area
- Utility Pole Storage Area
- Above Ground Storage Tank Area
- Drainage Channel

Defining the extent of that contamination was beyond the scope of a Phase II Environmental Site Assessment. In order to determine the cost of abatement or

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N 2960 N Hwy US 2  
Iron Mountain, Michigan 49801

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(906) 779-5789 (fax)  
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January 28, 2011

Page 2 of 3

mitigation of this contamination, some delineation of the extents will be required.

In order to determine the cost associated with implementing "Due Care" at this site, the following scope of services is proposed:

- 1 Using push probe technology, advance borings in the following areas:
  - a. The Former Ash Spreading Area and Iron Pellet Storage Area to delineate the extent of the fill material which was identified.
  - b. In the Utility Pole Storage Area to identify the stratigraphy and to collect deeper soil samples for analysis.
  - c. South of the Railroad Unloading/Loading Area and Former Coal Storage Area to determine the extent of the associated contamination and collect soil samples.
- 2 Collect one (1) sample from the Drainage Channel and from the Settling Basin and submit to Whitewater Associates Analytical Laboratory for analysis using the Toxic Characteristics Leaching Procedure (TCLP) for metals to determine disposal options.
- 3 Soils samples collected by the probes in the former Railroad Loading/Unloading area, and the former Ash Spreading area will be submitted for analysis for the metals identified as present in each area during the Phase II Environmental Site Assessment.
- 4 Options for Due Care procedures for each of the areas will be developed along with cost estimates.
- 5 A report will be prepared and submitted presenting the investigation results, discussing the potential Due Care Procedures, and presenting the estimated cost for the recommended options.

The estimated cost for providing the services to complete the scope of services listed above is Eight Thousand Four Hundred Dollars (\$8,400). Service will be provided on a time and material basis, based on the attached Fee Schedule. This estimated cost includes one day on site with a push probe and analysis of up to sixteen (16) samples for metals using standard analysis and two (2) samples for metals using the Toxic Characteristic Leach Procedure.

If desired, cleanup cost estimates can be available to the City within six (6) weeks from the time permission to proceed is received. This is based on a quick turnaround of the analytical samples by laboratory and weather permitting field work. The estimated cost for a quick turnaround is Nine Thousand Nine Hundred Dollars (\$9,900).

January 28, 2011  
Page 3 of 3

The estimated cost approved will not be exceeded without a written change order from the City of Escanaba. Should circumstances arise which will change this estimate, the City of Escanaba Representative will be notified. In 27 years of service, I have developed the tools and understandings necessary to complete services on time and budget.

A Professional Services Agreement is included with this Proposal. If the Proposal and Agreement are acceptable, please execute the Professional Service Agreement and this Proposal in the spaces provided and return a copy to our office. A copy has been included for your files. The signed proposal will be considered notice to proceed.

I appreciate the opportunity to present this proposal and look forward to providing services to the City of Escanaba. Should any questions arise, please feel free to contact me at (906) 779-5762 or at Myron.Berry@BerryEng.com.

Sincerely  
Mountain Engineering, Inc.

Myron H Berry, PE, PG

C:\Users\mberry\Documents\Proposals\10006 City of escanaba\Due Care\Abatement cost Proposal quick turn 110128.doc

PROPOSED Mountain Engineering Inc

ACCEPTED: City of Escanaba

  
\_\_\_\_\_  
Myron H Berry

\_\_\_\_\_  
Name \_\_\_\_\_

Vice President

Title \_\_\_\_\_

August 20, 2010

Date: \_\_\_\_\_

Mountain Engineering, Inc.  
N 2960 N Hwy US 2  
Iron Mountain, Michigan 49801

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(906) 282-1906 (cell)

# **MOUNTAIN ENGINEERING, INC.**

## **PROFESSIONAL SERVICES AGREEMENT**

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### **GENERAL TERMS AND CONDITIONS**

This Agreement is a contract for professional services between Mountain Engineering Inc, a Michigan corporation, hereinafter referred to as "Engineer", with an address for service or communication at N2960 North Highway US 2, Michigan, 49801 phone number (906) 779-5762, which is contracting to provide professional services to the "Client" with an address for service and communication as listed below. This agreement is intended to apply to each instance in which the Engineer provides services to the Client, as specified and described and authorized from time to time by a fully executed Proposal. Each Proposal shall define an individual project, shall be dated and upon execution by the Engineer and the Client shall become part of this agreement as Exhibit A. All services authorized by a Proposal(s) shall be subject to and specifically governed by the terms of this agreement unless the parties include an additional separate agreement, signed by both parties, modifying this Agreement.

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#### **WITNESSETH**

In consideration of the mutual covenants and agreements contained herein, the parties agree as follows:

#### **1. Services**

The Engineer shall provide professional services through employees, agents, affiliates, independent professional associates, consultants and subcontractors or other persons licensed and able to perform the specific services described and authorized from time to time by a fully executed Proposal or Work Order by the Client. Each Proposal or Work Order for the Client shall be dated and shall become part of Exhibit A to this agreement. The Client shall designate a person able and authorized to enter into binding legal agreements on behalf of the Client, hereafter known as the "representative". The Engineer shall prepare a Proposal or Work Order to be submitted to the Client's designated representative for review and approval prior to initiation of Services on each. The Client representative may change the services sought as part of a Proposal or Work Order by providing a written Field Order Work Change Directive to the

Engineer. No additional services shall be provided without a written request by the representative and written acceptance by the Engineer.

#### **2. Compensation for Services**

(a) Services shall be invoiced in accordance with the provisions of the individual Proposal(s) and/or Work Order(s) and the referenced Engineer standard rate schedule. Any estimate of compensation cost provided by the Engineer is for budgetary purposes only and is not binding. The Engineer shall inform the Client when it is apparent the budgetary estimate is not sufficient to complete the project in a satisfactory manner. All cost incurred in pursuit of completing a project, whether lesser or greater than the cost estimate, shall be invoiced unless prior written notification is received to stop work. (b) The Engineer reserves the right, upon fourteen (14) days written notice, to adjust the rates on reimbursable time and material contracts. This rate adjustment usually occurs, annually, at the beginning of the calendar year. The amount of any excise, value added tax, sales or gross receipts tax that may be imposed shall be added to the total compensation for Services as determined herein.

(c) The Engineer believes and the Client believes the exchange of the Client's goods for the Engineer's services to be full, fair and adequate consideration for this Agreement.

#### **3. Invoices and Payments**

The Engineer shall submit an invoice for services rendered once a month or upon completion of Services, whichever occurs earlier. Payment is due upon receipt of the invoice. A service charge of one and one-half percent (1.5%) per month shall be added to all accounts which are not paid by Client within thirty (30) days of date of mailing an invoice by the Engineer.

#### **4. Confidentiality**

(a) Each Party shall retain as confidential all information and data delivered to it by the other party, which (i) relate to technologies, formulae, procedures, processes, methods, trade secrets, ideas, improvements, computer programs, fee schedules, and similar information; or (ii) are designated in writing as confidential at the time of delivery. Confidential information shall not be disclosed to any third party, unless required by law or regulation.

(b) However, nothing herein is meant to preclude either party from disclosing and/or otherwise using confidential information or data (i) when the information or data are actually known to the receiving party before being obtained or derived from the transmitting party; or (ii) when information or data are generally available to the public without the receiving party's fault at any time before or after it is acquired from the transmitting party; or (iii) where the information or data are obtained or acquired in good faith at any time by the receiving party from a third party who has the same in good faith and who is not under any obligation to the transmitting party in respect thereof; or (iv) where a written release is obtained by the receiving party from the transmitting party.

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#### **5. Maintenance of Professional Standards and Ethics**

Engineer must perform its Services in accordance with prevailing professional standards and ethics, as well as applicable laws or regulations. If Engineer believes that compliance with the Client's directions could violate applicable professional standards or ethics, laws or regulations, then Engineer shall so advise the Client. The Client and Engineer shall immediately enter into discussions to arrive at a mutually satisfactory professional, ethical, legal, and proper solution. Failing a solution, either party may terminate this Agreement in accordance with Paragraph 17.

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#### **6. Representations, Warranties and Covenants of Engineer**

Engineer shall apply present Engineering and scientific judgment and use a level of effort consistent with the standard of professional practice as measured on the date hereof and in the locale of the Project in performing its Services for Client. The Engineer makes no warranty, guarantee, covenant or other representation, expressed or

implied, in fact or by law, as to the merchantability, fitness for any particular purpose or otherwise, concerning any of the materials or services which may be furnished by the Engineer to Client.

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#### **7. Deliverables**

(a) All Project deliverables (the "Deliverables"), including, but not limited to, any and all reports, drawings, plans, designs and specifications prepared by Engineer pursuant to this Agreement are part of the Services contracted for by Client and shall become Client's property upon final payment due Engineer for Engineer's Services under this Agreement. Engineer shall retain one (1) set of all Deliverables for its files.

(b) Deliverables are not suitable for use or reuse by Client, its employees, agents or subcontractors on any extension of the Project or on any other project without the prior written authorization of Engineer. Such authorization is essential because it requires Engineer to evaluate the Deliverables' applicability given new circumstances, not the least of which is the passage of time.

(c) Client shall indemnify and hold harmless Engineer from and against any and all claims, damages, losses, and expenses arising out of or resulting from the unauthorized reuse of any Deliverables.

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#### **8. Recognition of Risk**

(a) Client acknowledges the risks that (i) investigations may disclose the presence of existing, uncontrolled hazardous or toxic substances, hazardous or toxic wastes, pollutants and contaminants, or other waste materials (the "Waste Materials"); (ii) the presence of such uncontrolled Waste Materials at the Project site may require disclosure to appropriate regulatory agencies by the Client; (iii) data on site conditions, such as geological, geotechnical, and groundwater characteristics, as well as Waste Material properties, can vary from

those encountered at the times and locations where such data were first obtained during the initial site investigations and this limitation on the available surveys, borings, logs, field notes, laboratory test data, etc., as the case may be, can cause uncertainty with respect to the interpretation of conditions at the Project site; (iv) governmental regulations relating to control of Waste Materials may purport to require achievement of results which cannot be accomplished in an absolute sense (e.g., the construction of impermeable liners); (v) projects, such as hazardous substances, waste or sanitary landfill sites may not perform as anticipated by Client, over time, even if Engineer's Services are performed in accordance with Paragraph 6; and (vi) commonly used exploration methods, (e.g., drilling, boring, or trench excavating) involve an inherent risk of contamination of previously uncontaminated soils and water by existing, uncontrolled Waste Materials. The Client agrees to assume the risks by contracting for services in this Agreement, including all costs related to clean up litigation and other costs, and to hold the Engineer harmless from any cost or liability relating to such risks.

(b) The Engineer's application of its present Engineering judgment will be subject to such factors as outlined in 8.(a)(i) through 8.(a)(vi), above.

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#### **9. Limitation on the Scope of Services**

Client acknowledges that (i) Engineer has had no role in generating, treating, storing or disposing of Waste Materials which may be present at Project site; and (ii) Engineer has not benefited from the processes that produced such Waste Materials. Any Waste Materials encountered by or associated with Services provided by Engineer on the Project shall at no time be or become the property of Engineer. Arrangements for the treatment, storage, transport or disposal of any Waste Materials, which shall be made by Engineer,

shall be construed as being made solely and exclusively on Client's behalf for Client's benefit and Client shall indemnify and hold harmless Engineer from and against any and all liability which arises out of the treatment, storage, transport or disposal of Waste Materials. Nothing contained within this Agreement shall be construed or interpreted as requiring Engineer to assume the status of a generator, storer, treater or disposal facility as those appear within any federal, state or local statute, regulation or rule governing treatment, storage, transport and/or disposal of Waste Materials.

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#### 10. Insurance

Upon request, Engineer shall furnish copies of insurance certificates evidencing that it maintains General Liability and Workers Compensation insurance.

If Client requires further insurance coverage, Engineer will obtain said coverage (if procurable), at Client's expense.

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#### 11. Limitation of Engineer's Liability to Client

(a) Except for (i) claims covered under the policies of insurance and policy limits listed in Paragraph 10; and (ii) for circumstances caused by the willful misconduct of Engineer, any and all liability or claim for damages levied against Engineer by Client, whether based upon contract, tort, breach of warranty, professional negligence (including errors, omissions or other professional acts) or otherwise, including claims against Engineer's directors, officers, shareholders, employees, agents, affiliates, professional associates, consultants and subcontractors, shall be limited to the amount of Engineer's total compensation on the affected Project less amounts paid to its independent professional associates, consultants and subcontractors.

(b) In no event shall Engineer be responsible for any incidental, indirect, impact, or consequential damages (including loss of profits),

incurred by Client as a result of Engineer's performance or non-performance of Services.

(c) Any claim, whether based upon contract, tort, breach of warranty, professional negligence (including errors, omissions or other professional acts), or otherwise, shall be deemed waived unless made by Client in writing and received by Engineer within one (1) year after Client reasonably knew or should have known of its existence but, in no event, shall such claim be asserted by Client later than six (6) years after Engineer's completion of the Services with respect to which the claim is made.

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#### 12. Engineer's Indemnification of Client

Subject to Engineer's Limitation of Liability as set forth in Paragraphs 9 and 11 of this Agreement, Engineer shall, to the maximum extent permitted by law, indemnify and hold harmless Client and its directors, officers, shareholders, employees, and agents from and against any and all losses, damages and fines which (i) are made against Client by unrelated third parties; and (ii) arise from the proven negligent acts or willful misconduct of Engineer.

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#### 13. Client's Indemnification of Engineer

Client shall, to the maximum extent permitted by law, indemnify and hold harmless Engineer from and against any and all claims, liability, losses, damages, costs and/or fines which (a) exceed the limitation of Engineer's liability provided for in Paragraph 11; (b) exceed the limit of Engineer's insurance coverage; or (c) arise out of or are in any way connected with (i) any release or threatened release of Waste Materials, or any other generation, treatment, storage, transport or disposal of Waste Materials, provided that such was not caused by conduct of Engineer which was proven negligent or which constitutes willful misconduct; or (ii) the acts or omissions of Client,

Client's employees, agents and subcontractors and their employees and agents.

---

#### 14. Modifications to the Agreement

Client or Engineer may, from time to time, request modifications or changes in the scope of Services to be performed hereunder. Such changes, including any increase or decrease in the amount of Engineer's compensation, which are mutually agreed by and between Engineer and Client, shall be incorporated in writing into this Agreement.

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#### 15. Force Majeure

Neither the Client nor Engineer shall hold the other responsible for damages or delays in performance caused by Force Majeure or other events beyond the control of the other party and which could not reasonably have been anticipated or prevented. For this purpose, Force Majeure shall include, but not necessarily be limited to, unusually severe weather, floods, epidemics, war, riot, strikes, lockouts and other industrial disturbances, unanticipated site conditions, acts of God, acts of the Government of the United States or the several states, or any foreign country, or any of them acting in their sovereign capacity. Should such acts or events occur, the parties to this Agreement shall mutually agree on the terms and conditions upon which the Services may be continued. Failing achievement of such an agreement, either party may terminate this Agreement in accordance with Paragraph 17.

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#### 16. Project Delays

(a) If Engineer is delayed at any time in the progress of Services for any specific activity (i) by an act, failure to act, or neglect of Client or Client's employees or any other party; (ii) by changes in the scope of Services; or (iii) by delay authorized by Client and agreed to by Engineer; then the time for completion shall be extended.

Additionally, Engineer shall receive an equitable compensation adjustment if delays caused by any of the above events result in additional costs to Engineer.

(b) In order to effectuate such modifications to Engineer's Project duration and/or compensation for Services, Engineer shall notify Client, in writing, within fourteen (14) days of when Engineer reasonably knew or should have known of the impact of the occurrence of such event upon its Services to Client. Thereafter, Client and Engineer shall immediately enter into discussions to arrive at a mutually satisfactory revision to Engineer's Project duration and/or compensation for Services. Failing achievement of such a revision, either party may terminate this Agreement in accordance with Paragraph 17.

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#### 17. Termination, Suspension or Abandonment

(a) This Agreement may be terminated by either party upon fourteen (14) days written notice (i) should the other party fail substantially to perform in accordance with the terms of this Agreement through no fault of the terminating party; or (ii) whenever the right to terminate is otherwise provided in these terms and conditions.

(b) If the Project is suspended by Client, Engineer shall be compensated for Services performed prior to notice of such suspension. When the Project is resumed, Engineer's compensation shall be equitably adjusted to provide for expenses incurred in the interruption and resumption of Engineer's Services.

(c) If the Project is suspended by Client for more than ninety (90) consecutive days, Engineer may immediately terminate the Agreement by giving written notice.

(d) If Client fails to make payment when due Engineer for Services, Engineer may, upon fourteen (14) days written notice to Client, suspend performance of Services under this Agreement. Unless payment is received in full by Engineer within ten (10) days of

date of notice, the suspension shall take place without further notice. In the event of suspension of Services, Engineer shall have no liability to Client for delay or damage caused by Client because of such suspension of Services.

(e) Irrespective of which party shall effect termination or the cause thereof, Client shall, within thirty (30) calendar days of termination, pay Engineer for Services rendered and costs incurred, in accordance with Engineer's then-prevailing standard rate schedule and expense reimbursement policy. Services and their associated costs shall include those rendered up to the time of termination, as well as those associated with termination and post-termination activities, such as demobilization, modifying schedules, reassigning personnel, decontaminating and/or disposing of equipment, disposal and replacement of contaminated consumables, and so on.

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#### 18. Recovery of Dispute Resolution Costs

(a) In the event that legal action is brought by either party against the other for liability or claim for damages or otherwise, including but not limited to (i) non-payment of invoices; (ii) enforcement of the terms and conditions of this Agreement; or (iii) enjoining any party from violating the terms and conditions of this Agreement; then the successful party shall be entitled to recover, as part of its damages, its reasonable legal costs and expenses for bringing and maintaining any such action.

(b) Client shall be responsible for and pay Engineer at its prevailing rates for all time spent by its personnel in connection with any court, administrative or other legal proceedings arising from or relating to Services provided under this Agreement, regardless of whether or not Engineer is subpoenaed to appear at such proceedings by Client or any third party (Client shall be entitled to a credit against such fees for any statutory witness fees paid to Engineer by Client or any third party)

(c) Dickinson County Michigan, shall be the venue and have jurisdiction over any litigation regarding this agreement, any project or any other matter between the Client and the Engineer or other persons for either party and at any time.

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#### 19. Term of the Agreement

This Agreement shall remain in full force and effect until (i) Engineer's completion of the Services; or (ii) termination by either party in accordance with Paragraph 17. Completion of Services for any given Project shall be defined as occurring at the earlier of (i) thirty (30) days after the date when required Deliverables are delivered for final review to Client and/or the applicable regulatory agency or agencies; or (ii) thirty (30) days after substantial completion of the Services in accordance with the terms and conditions of this Agreement and/or the applicable, Proposal or Work Order.

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#### 20. Information Provided by Client or Others

(a) Engineer shall indicate to Client the information needed for rendering the Services described in each Proposal or Work Order, as well as, likely sources of this information, with such sources to include but not be limited to Client. Engineer shall review existing information provided by others and shall give Client its opinion as to the risks associated with reliance on such information. Client understands that it is impossible to eliminate all risks because of inherent limitations on the techniques available to develop the information, and/or because of errors, omissions or inaccuracies which may exist in the information.

(b) To the extent that Client expects Engineer to rely solely upon existing information, without the opportunity for Engineer, in its professional and/or scientific judgment, to appropriately validate the accuracy and reliability of such information, the Client agrees to waive any claim against Engineer and to indemnify and hold harmless

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Engineer from and against any and all claims, losses, damages, costs and/or fines, or liability for injury or loss or legal or administrative proceedings allegedly arising from errors, omissions or inaccuracies in existing information provided to Engineer by Client or others.

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#### 21. Right of Entry

Client shall provide for Engineer's right to enter, from time to time, Project site and/or adjacent properties, owned by Client and/or other(s), in order for Engineer to complete its Services. Client understands that use of exploration equipment may cause some property damage, the correction of which is not part of this Agreement. Client also understands that the discovery of certain conditions and/or taking preventive measures relative to these conditions may result in a reduction of the property's value. Accordingly, Client waives any claim against Engineer and agrees to indemnify and hold harmless Engineer from and against any and all claims, damages, losses and expenses arising from procedures associated with subsurface exploration activities or discovery of uncontrolled Waste Materials.

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#### 22. Utilities

Client and/or his designee shall be responsible for identifying the location of all utility lines and subterranean structures within the property lines of the Project site and/or adjacent properties, as the case may be. Engineer shall request responsible utilities and/or other appropriate public agencies to locate any utility lines known to exist within the public rights-of-way. Client agrees to indemnify and hold harmless Engineer from and against any and all damage to utilities or subterranean structures which are not correctly located within the property lines of the Project site and/or adjacent properties, as the case may be.

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#### 23. Samples

Samples shall be returned to Client for final disposition, or at Client's direction shall be disposed of in the proper manner according to the applicable regulations for the handling, storage, transport, and disposal of such materials at Client's cost. Under no circumstances shall this Agreement be construed or interpreted to create any right, title, interest or responsibility for such samples by Engineer.

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#### 24. Continuity of Services

(a) Client acknowledges that it is customary for the design professional who is responsible for the preparation of contract drawings and specifications or other Project deliverables to be employed to provide Services during the bidding and construction and/or field work phases of the Project including, but not limited to, (i) interpretation, clarification and modification of the Deliverables during bidding, construction and/or field work; (ii) accepting substitute or or-equal items of materials and equipment proposed by bidders and contractor(s); (iii) approving shop drawings and sample submittals; and (iv) detecting, in advance of performance of affected work, inconsistencies or irregularities in such contract drawings and specifications or other Project deliverables. Client agrees that if Engineer is not employed to provide such Services during the bidding (if the work is put out for bids) and construction and/or field work phases of the Project, Engineer shall not be responsible for, and Client shall indemnify and hold harmless Engineer from and against any and all claims, damages, losses and expenses arising out of, or resulting from any interpretation, clarification, substitution acceptance, shop drawing or sample approval or modification of such Project deliverables issued or carried out by Client or others.

(c) Nothing contained in this Paragraph shall be construed to release Engineer from liability for

failure to perform, in accordance with professional standards, any duty or responsibility which Engineer has undertaken or assumed under this Agreement.

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#### 25. Opinions of Cost

Engineer's opinion of probable construction costs and/or operations and maintenance costs provided for herein are to be made on the basis of Engineer's judgment as an experienced and qualified design professional, familiar with the construction industry. But, Engineer cannot and does not guarantee that proposals, bids, or total construction costs will not vary from opinions of probable cost prepared by Engineer.

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#### 26. Shop Drawings

Engineer shall review and approve (or take other appropriate action in respect of) shop drawings, samples and other data which Client's contractor(s) (collectively, the "General Contractor") are required to submit but only for conformance with the design concept of the Project and compliance with the information given in the contract drawings and specifications or other Project deliverables. Such reviews and approvals or other action shall not extend to means, methods, techniques, sequences or procedures of construction or to safety precautions and programs incident thereto. Client agrees that if Engineer is not employed to provide such Services, the Engineer shall not be responsible for, and Client shall indemnify and hold harmless Engineer from and against any and all claims, damages, losses and expenses arising out of shop drawing or sample approval carried out by Client or others.

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#### 27. Field Observation, Monitoring and Testing

The purpose of Engineer's presence at the Project site during construction is to (i) enable Engineer to better carry out the duties and responsibilities assigned

to and undertaken by Engineer; and (ii) exercise Engineer's efforts as an experienced and qualified design professional to provide Client with a greater degree of confidence that the completed work of General Contractor will conform generally to the Project's contract drawings and specifications or other Project deliverables. Engineer shall not, during such visits or as a result of such field observations, monitoring and testing of General Contractor's work in progress, (i) supervise, direct or have control over General Contractor's work; (ii) have authority over or responsibility for the means, methods, techniques, sequences or procedures selected by the General Contractor for safety precautions and programs incident to the work of General Contractor; or (iii) be responsible for any failure of General Contractor to comply with laws, rules, regulations, ordinances, codes or orders applicable to General Contractor's furnishing and performing his work. Accordingly,

Engineer can neither guarantee the performance of the General Contractor's finished project nor assume responsibility for General Contractor's failure to furnish and perform his work in accordance with the Project requirements.

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### 28. Safety

Any construction review of General Contractor's performance conducted by Engineer is not intended to include review of the adequacy of the General Contractor's safety measures in, on, or near the Project site. The General Contractor shall be solely and completely responsible for working conditions at the Project site, including safety of all persons and property during performance of his work. These requirements shall apply continuously and not be limited to normal working hours. This applies to all contractors not under contract with Engineer to perform Services under this Agreement.

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### 29. Notice of Lien Rights

As required by law, Engineer hereby notifies Client that persons, companies or consultants furnishing labor, materials or professional services involving construction on Client's land may have lien rights on the Client's land and buildings, if not paid. Those entitled to lien rights, in addition to Engineer and its subcontractors and suppliers on this project, are those who contract directly with the Client or those who give the Client notice within the statutory time after they first furnish labor, materials or professional services for the construction. Accordingly, Client probably will receive notices from those who furnish labor, materials, or professional services for the construction, and should give a copy of each notice received to its mortgage lender, if any. Engineer agrees to cooperate with the Client and the Client's lender, if any, to see that all potential lien claimants who separately contract with Engineer are duly paid.

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### 30. Client Representative

Client shall designate in writing a person to act as Client's representative with respect to the Services to be rendered under this Agreement. Such person shall have complete authority to transmit instructions, receive information, interpret and define Client's policies and decisions with respect to Engineer's Services for the Project.

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### 31. Independent Contractor

Engineer shall not act as Client's agent or employee, but rather, as an independent contractor. Engineer shall be solely responsible for the compensation, benefits, contributions and taxes, if any, of its employees and agents.

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### 32. Equal Employment Opportunity

In the performance of Services under this Agreement, Engineer agrees not to discriminate against

any employee or applicant because of race, religion, marital status, age, color, sex, handicap, national origin or ancestry.

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### 33. Assignment

This Agreement is to be binding on the heirs, successors and assigns of the parties hereto and is not to be assigned by either party without first obtaining the written consent of the other; which such consent (i) shall not be unreasonably withheld; and (ii) shall be provided in a timely manner.

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### 34. Notices

Any notices required or permitted to be sent may be delivered personally, or by telegram or certified mail, return receipt requested, to the signatories of this Agreement at the addresses set forth herein or such other addresses as the parties may designate.

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### 35. Entire Agreement

The terms and conditions set forth herein constitute the entire understanding of the parties relating to the provision of Services by Engineer to Client and shall be incorporated in all Work Orders and authorizations unless otherwise stated therein. This Agreement may be amended only by a written instrument signed by each party.

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### 36. Precedence

These General Terms and Conditions shall take precedence over any inconsistent or contradictory provisions contained in any Client-issued purchase order, requisition, notice to proceed, or like document regarding Engineer's Services.

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### 37. Severability

If any of these General Terms and Conditions shall be finally determined to be invalid or unenforceable, in whole or in part, the remaining provisions hereof shall remain in full force and effect

and be binding upon the parties hereto. The parties agree to reform this Agreement to replace any such invalid or unenforceable provision with a valid and enforceable provision that comes as close as possible to the intentions of the stricken provision.

**38. Survival**

All obligations arising prior to the termination of this Agreement and all provisions of this Agreement allocating responsibility or liability between Client and Engineer shall survive the completion of Services hereunder and the termination of this Agreement.

**39. Governing Law**

This Agreement shall be governed by and interpreted pursuant to the

rules of the State in which the Project site is located.

**40. Willing Agreement**

The Engineer and the Client have each had adequate chance to read, review and examine this agreement and to seek council of others and each party enters into this agreement willingly and with the intent to be bound by this Agreement.

**41. Completeness**

Both the Engineer and the Client agree this is a fully integrated Contract, there being no other or further agreement, contract, promise, representation or consideration, written or oral.

**42. Recommendations**

The Engineer from time to time shall make recommendations to the Client with respect to any proposed services to be provided and the Client shall have the right to make the final decision to accept or reject any recommendation.

**43. Interpretation**

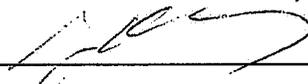
Anything in this contract which is a violation of law, court rule, binding legal precedent affecting this contract, rule or rule of law shall be null and void, serving as an indication of the agreement between and the intent of the parties, but having no effect on the rest of this Agreement in part or in whole, so far as possible.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement by their duly authorized agents.

**CLIENT – CITY OF ESCANABA**

**MOUNTAIN ENGINEERING, INC.**

Signature: \_\_\_\_\_

Signature:  \_\_\_\_\_

By: \_\_\_\_\_

By: Myron H Berry

Title: \_\_\_\_\_

Title: Vice President

Phone: \_\_\_\_\_

Phone: 906-779-5762

Address: \_\_\_\_\_

Address: N2960 North US Hwy.2

\_\_\_\_\_

Iron Mountain, MI 49801

Site Address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

NB #6  
CC/EAC  
2/9/11

**BILL OF SALE**  
**AND INDEMNIFICATION**

Upper Peninsula Power Company, a Michigan Public utility ("Seller"), conveys to the City of Escanaba, a Michigan municipality ("Buyer"), for good and valuable consideration the personal property identified on the attached Exhibit A ("Equipment").

Seller Warrants and represents to Buyer that Seller owns the aforementioned personal property free and clear of all liens and encumbrances, that Seller has good right and title to sell the same, and further that Seller will warrant and defend title to such personal property against the lawful claims and demands of all persons.

The Buyer has inspected the Equipment and accepts the Equipment in its present condition. Accordingly, EXCEPT FOR THE REPRESENTATIONS AND WARRANTIES EXPRESSLY SET FORTH ABOVE, THE AFOREMENTIONED EQUIPMENT IS BEING CONVEYED "AS IS, WHERE IS," AND SELLER IS NOT MAKING ANY OTHER REPRESENTATIONS OR WARRANTIES, WRITTEN OR ORAL, STATUTORY, EXPRESS OR IMPLIED, CONCERNING SUCH PERSONAL PROPERTY, INCLUDING, IN PARTICULAR, A WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ALL OF WHICH ARE HEREBY EXPRESSLY EXCLUDED AND DISCLAIMED.

Buyer hereby agrees to indemnify and completely hold harmless Seller, its agents, insurers, customers, and employees from any and all actions, claims, demands, damages, losses, injuries, costs, and expenses (including but not limited to attorneys' fees) arising out of or in any manner connected with the Equipment including its disposal, whether such injury, loss or damage shall be caused by Buyer, its employees or agents, volunteers, or any third party, or by a combination of the negligence of Seller, its employees, or agents with that of Buyer or a third party, or by the sole negligence of Seller, its employees, or agents. This specifically includes any damages resulting from injuries incurred by Buyer, its employees, contractors, or any third parties in conjunction with the Equipment.

Further, Buyer hereby releases and forever discharges Seller, its agents, insurers, and employees from any and all actions, claims, demands, damages, losses, costs, and expenses (including but not limited to attorneys' fees) that Buyer may now have or incur in the future arising out of or in any manner connected with Seller's prior ownership or installation of the Equipment. This release applies even for any loss or damage caused by the negligence of Seller, its employees, or agents.

The Bill of Sale and Indemnification is made as of the \_\_\_ day of \_\_\_\_\_, 2011.

**SELLER:  
UPPER PENINSULA POWER COMPANY**

By: \_\_\_\_\_  
Name: Charles W. Severance  
Title: General Manager-Wholesale Electric & Renewable Energy

**ACKNOWLEDGEMENT**

STATE OF WISCONSIN        )  
  ) SS.  
COUNTY OF BROWN        )

Personally came before me this \_\_\_\_ day of \_\_\_\_\_, 2011, the above-named Charles W. Severance, as General Manager-Wholesale Electric & Renewable Energy of the Upper Peninsula Power Company, a Michigan public utility, to me known to be the person who executed the foregoing instrument in such capacity and acknowledged the same.

\_\_\_\_\_  
Name: Sandra L. Dax  
Notary Public, Wisconsin  
My Commission Expires March 18, 2012

**BUYER:  
CITY OF ESCANABA**

By: \_\_\_\_\_  
Name: James V. O'Toole  
Title: City Manager

**ACKNOWLEDGEMENT**

STATE OF MICHIGAN        )  
  ) SS.  
COUNTY OF DELTA        )

Personally came before me this \_\_\_\_ day of \_\_\_\_\_, 2011, the above-named James V. O'Toole, as City Manager of the City of Escanaba, a Michigan municipality, to me known to be the person who executed the foregoing instrument in such capacity and acknowledged the same.

\_\_\_\_\_  
Name: Kimberly Ann Peterson  
Notary Public, Michigan  
My Commission Expires August 10, 2013

## Exhibit A

### Section 1 - Escanaba 69 Sub UPPCO Assets

<u>Location</u>	<u>Vintage</u>	<u>Description</u>	<u>UPPCO Net Book Value</u>
Escanaba 69 Substation - 418000 - 670	1974	Audio Tone - Lot Unit Control, Telemetering & Audio Tone Equipment*	\$1,582.65
Escanaba 69 Substation - 418000 - 670	1973	Audio Tone - Unit Control, Telemetering & Audio Tone Equipment*	\$506.58
Escanaba 69 Substation - 418000 - 670	1958	Bus & Conductors	\$71.19
Escanaba 69 Substation - 418000 - 670	1989	Cable & Connections	\$1,691.17
Escanaba 69 Substation - 418000 - 670	1958	Feet of Control Cable	\$108.44
Escanaba 69 Substation - 418000 - 670	1958	Foundation - Transformer Base and Piers	\$119.77
Escanaba 69 Substation - 418000 - 670	1996	RTU - SCADA : MPR-7050B RTU with Associated Equipment	\$11,936.41
Escanaba 69 Substation - 418000 - 670	1996	RTU Addition	\$6,374.65
Escanaba 69 Substation - 418000 - 670	1958	Steel Structures - 1 Lot	\$90.12
Escanaba 69 Substation - 418000 - 670	1958	Switch - Control	\$1.35
Escanaba 69 Substation - 418000 - 670	1997	Transducers	\$3,231.19
Escanaba 69 Substation - 418000 - 670	1996	Transducers	\$7,468.63
Escanaba 69 Substation - 418000 - 671	1971	Wave Trap	\$10.24
Escanaba 69 Substation - 418000 - 672	1958	Wave Trap	\$17.49
<b>Subtotal Section 1</b>			<b>\$33,209.88</b>

### Section 2 - Escanaba 69 Sub - UPPCO - ATC Joint Assets

<u>Location</u>	<u>Vintage</u>	<u>Description</u>	<u>UPPCO Net Book Value</u>
Escanaba 69 Substation - 418000 - 670	1976	Relay & Control Panel OCB 695	\$74.41
Escanaba 69 Substation - 418000 - 670	1958	Relay & Control Panel OCB 695	\$517.98
Escanaba 69 Substation - 418000 - 670	1962	Relay & Control Panel OCB 695	\$3.26
Escanaba 69 Substation - 418000 - 670	1965	Relay & Control Panel OCB 695	\$0.98
Escanaba 69 Substation - 418000 - 670	1989	Relay : Westinghouse IRD-8	\$1,678.32
<b>Subtotal Section 2</b>			<b>\$2,274.95</b>

<b>Total Sale = Section 1 and Section 2</b>	<b>\$35,484.83</b>
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# Michigan Sales and Use Tax Certificate of Exemption

TO BE RETAINED IN THE SELLER'S RECORDS - DO NOT SEND TO TREASURY.

This certificate is invalid unless all four sections are completed by the purchaser.

## SECTION 1 - CHECK ONE OF THE FOLLOWING

- One time purchase                       Blanket certificate (Note: A blanket certificate is valid for four years from the date of signature unless an earlier expiration date is listed below)  
Expiration date, if less than four years: \_\_\_\_\_

The purchaser hereby claims exemption on the purchase of tangible personal property and selected services made under this certificate from Upper Peninsula Power Company and certifies  
(Vendor's Name)  
that this claim is based upon the purchaser's proposed use of the items or services, or the status of the purchaser.

## SECTION 2: ITEMS COVERED BY THIS CERTIFICATE

- All items purchased  
 Limited to the following items: \_\_\_\_\_

## SECTION 3: BASIS FOR EXEMPTION CLAIM

- For Resale at Retail - Sales Tax Registration Number: \_\_\_\_\_  
 For Resale at Wholesale - No Number Required \_\_\_\_\_  
 For Lease - Use Tax Registration Number: \_\_\_\_\_  
 Agricultural Production - No Number Required (Describe) \_\_\_\_\_  
 Industrial Processing - No Number Required \_\_\_\_\_  
 Government Entity Nonprofit School, Nonprofit Hospital, and Church (Circle type of organization.)  
 Nonprofit Internal Revenue Code Section 501(c)(3) and 501(c)(4) Exempt Organizations (Attach copy of IRS letter ruling).  
 Nonprofit Organizations with an Exempt letter from the State of Michigan (Attach a copy of State's letter)  
 Other (explain): \_\_\_\_\_

## SECTION 4: CERTIFICATION

*I declare, under penalty of perjury, that the information on this certificate is true, that I have consulted the statutes, administrative rules and other sources of law applicable to my exemption, and that I have exercised reasonable care in assuring that my claim of exemption is valid under Michigan law. In the event this claim is disallowed, I accept full responsibility for the payment of tax, penalty and any accrued interest, including, if necessary, reimbursement to the vendor for tax and accrued interest.*

Purchaser \_\_\_\_\_ Street Address \_\_\_\_\_

Area Code / Telephone No. \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

Signature and Title \_\_\_\_\_ Date Signed \_\_\_\_\_

Name (Print or Type) \_\_\_\_\_ Social Security No. or FEIN \_\_\_\_\_