



**ELECTRICAL ADVISORY
COMMITTEE**
Meeting Agenda
August 2, 2023 – 4:00 p.m.

ELECTRICAL ADVISORY COMMITTEE

Glendon Brown, Chairperson
Tim Wilson, Vice Chairperson
John Anthony, Committee Member
Ann Bissell, Committee Member
John Mellinger, Committee Member

ADMINISTRATION

Gerald Pirkola, Electric Utility Director

City Council Chambers: City Hall – 410 Ludington Street – Room C101 – Escanaba, MI 49829

Regular Meeting

Wednesday, August 2, 2023, at 4:00pm

CALL TO ORDER

ROLL CALL

APPROVAL OF MINUTES – January 11, 2023

APPROVAL/ADJUSTMENTS TO THE AGENDA

CONFLICT OF INTEREST DECLARATION

NEW BUSINESS

1. Update - Electric Department –General Operations.

Explanation: Electric Utility Director Gerald Pirkola will update the Electrical Advisory Committee and Citizens of Escanaba on the current departmental activities.

2. Update – Escanaba Solar Project Performance.

Explanation: Administration will update the Electrical Advisory Committee and the Citizens of Escanaba on the performance of the Escanaba Solar Project.

3. Recommendation – Westside Substation Improvements.

Explanation: Administration will discuss the details of the planned Westside Substation Improvements and seek a recommendation to bring the project to the City Council for approval.

4. Recommendation – SCADA Upgrade.

Explanation: Administration will discuss the details of the planned SCADA Upgrade and seek a recommendation to bring the project to the City Council for approval.

GENERAL PUBLIC COMMENT

COMMISSION/STAFF COMMENT AND ANNOUNCEMENTS

ADJOURNMENT

Agenda - August 2, 2023

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,

Gerald Pirkola
Electric Utility Director

ELECTRIC ADVISORY COMMITTEE

01/11/2023

The regular meeting of the Electric Advisory Committee was called to order at 3:58 p.m. by Chairman, Ann Bissell

Present: Committee Members Ann Bissell, Glendon Brown, John Mellinger, John Anthony

Absent: Committee Member Tim Wilson

Also Present: Electric Utility Director Gerald Pirkola, & City Council Liaison Ron Beauchamp

Approval of Minutes:

Bissell asked members if there were any corrections to be made to the minutes. None being heard, she asked for a motion to be made. Brown made a motion to approve the minutes as presented. The motion was seconded by Mellinger. All Ayes, minutes were approved.

Approval/Adjustments to the Agenda:

Bissell asked members if there were any adjustments to the agenda; hearing none the agenda was approved as presented.

CONFLICT OF INTEREST Declaration- None

NEW BUSINESS

#1: Election of Officers.

Discussion among members resulted in them moving forward as they had last discussed and agreed upon with 1 year term as Chairman and Vice-Chairman going in alphabetical order. Vice –Chairman Glendon Brown then agreed to take over for the one year term as Chairman. Brown then took over the Chairman position for the remainder of the meeting. The Vice-Chairman position then went

to John Mellinger who declined the position. Anthony then made a motion to give the Vice-Chairman position to Tim Wilson upon his acceptance of the position when he returns. The motion was seconded by Bissell and a roll call vote was done with all ayes. Wilson will be the Vice-Chair upon his acceptance.

#2: Update-Electric Department-General Operations.

Electric Utility Director, Gerald Pirkola provided members with a handout (Attachment NB #2-Department Update) and went over it with them. There was discussion on the following points:

- poles put up on Jenkins Drive and if there were going to be more installed. Plans at this time are to put in more and go to the bridge on Aronson Island. The council wanted more streetlights in the city and Public Safety requested more in Ludington Park.
- Pirkola reported that we are just about at 100% on all LED streetlights in the City.
- The purple lights throughout the city are being changed out as we get in the replacement fixtures. The company we purchased them from is going good for all the new replacement fixtures as it was a factory defect. We did not go after them for the labor for replacing them.
- AMI meters up and running and working great. Some being sent back to the company for a firmware update. Hoping to get the service truck involved in the installs if the Utility Office is able to handle it.
- Further discussion on the National Electric Vehicle Infrastructure Program (NEVI) included how the addition of DC Fast Chargers will increase our demand more so than our load. Bissell questioned if the NEVI program would tell an individual where the next charging station is. Pirkola pointed out that a website would provide the information.
- Member Anthony asked that with the upcoming budget sessions if Jerry could keep the EAC informed as to how or if it affects any of our projects that we have. Jerry said he would keep all informed.

#3: Update-Escanaba Solar Project Performance:

Pirkola turned over this portion of the meeting to Glendon Brown who had provided members with a handout (Attachment NB#3-Solar Project Update through 12/31/2022) and went over it with members who discussed portions of the report.

Bissell questioned whether or not the City was near the top of the amount that we could produce to not interfere with the NextEra contract. Brown pointed out that in the current contract with NextEra there is still some room for us to produce.

#4: Recommendation-Energy Optimization Program

Pirkola provided members with a handout (Attachment: NB#4-Energy Optimization Notes) and went over it with members. Included in the handout was the new forms for customers to fill out for Residential and Commercial/Industrial. Forms can be submitted in person or on line. Payments will be mailed to them from the Controller's Office.

GENERAL PUBLIC COMMENT: None

COMMISSION/STAFF COMMENT & ANNOUNCEMENTS: None

Next meeting date April 11, 2023

Meeting adjourned 5:17pm.

APPROVED:

Ann Bissell, EAC Chairman

Gerald Pirkola, Electric Utility Director

EAC Meeting – August 2, 2023

Department Update

- Energy Optimization Update
 - 8 Residential Rebates have been issued totaling \$1,174, with one more pending.
 - 6 Commercial Rebates have been issues totaling \$5,029, with three more pending.
- Distribution Upgrade Projects:
 - N 30th Street Project is complete
 - Added 6 poles on M35 north of S 18th St for an overhead line extension.
- Streetlight Poles
 - Completed the Jenkin’s Drive Streetlighting Project – 31 lights total.
 - Currently working on Ludington Street, goal is to complete 4 blocks this summer.
- Purple LED Streetlights
 - 100 Purple Streetlights have been replaced so far.
 - Have identified about a dozen more to be replaced.
- AMI Update
 - 1800 TuNet meters installed.
 - 2500 Electric Meters and 3500 Water Meters being read
 - 2335 meters are being sent back for a firmware update due to low transmission power
- National Electric Vehicle Infrastructure Program (NEVI)
 - Three or four customers have applied for the NEVI Grant for EV charging stations.

- Grants
 - AMI Grant submitted in March – no word yet.
 - 40101d Grant applications opening soon for routine utility work.
- Services
 - Completed the underground primary run to Riverside Chevrolet.
 - Conduit installed for the primary run to the Tribal Community Building on Jingob.
- MISO Services
 - Canceled the MISO services agreement with Great Lakes Utilities and signed a new agreement with Manitowoc Public Utilities.
- MIRECs
 - Municipal Utilities are no longer required to participate in the MIRECs program for renewable energy credits. The City decided to not voluntarily participate in the program. This will provide approximately \$50,000 in annual savings.
- Wood Poles
 - 535 Poles were inspected.
 - 20 Poles were found defective and need to be replaced.
 - 208 Poles were treated.
 - 13 defective poles have been changed out so far this year.
 - There are 38 wood poles left to be changed.

2023-08-02 EAC Solar Project Update Through 6-30-23

1. Solar generation by year is summarized in the Table below:

Calendar Year	Original Project Generation, kWh	Expansion Project Generation, kWh	Total Generation, kWh
2018	335,775 (1)		335,775
2019	1,405,352		1,405,352
2020	1,488,203	314,517 (2)	1,802,720
2021	1,503,958	599,826	2,103,784
2022	1,452,203	604,822	2,057,025
2023 (thru 6/30)	749,335	333,160	1,082,495
TOTAL	6,934,826	1,852,325	8,787,151
	(1) Original Project (1.16 MW DC) generation started 8/24/2018	(2) Expansion Project (0.51 MW DC) generation started 5/21/2020	(3) Total Generation through 6/30//2023

2. Solar generation has avoided \$429,986 in purchased energy costs for the City of Escanaba through 6/30/2023.

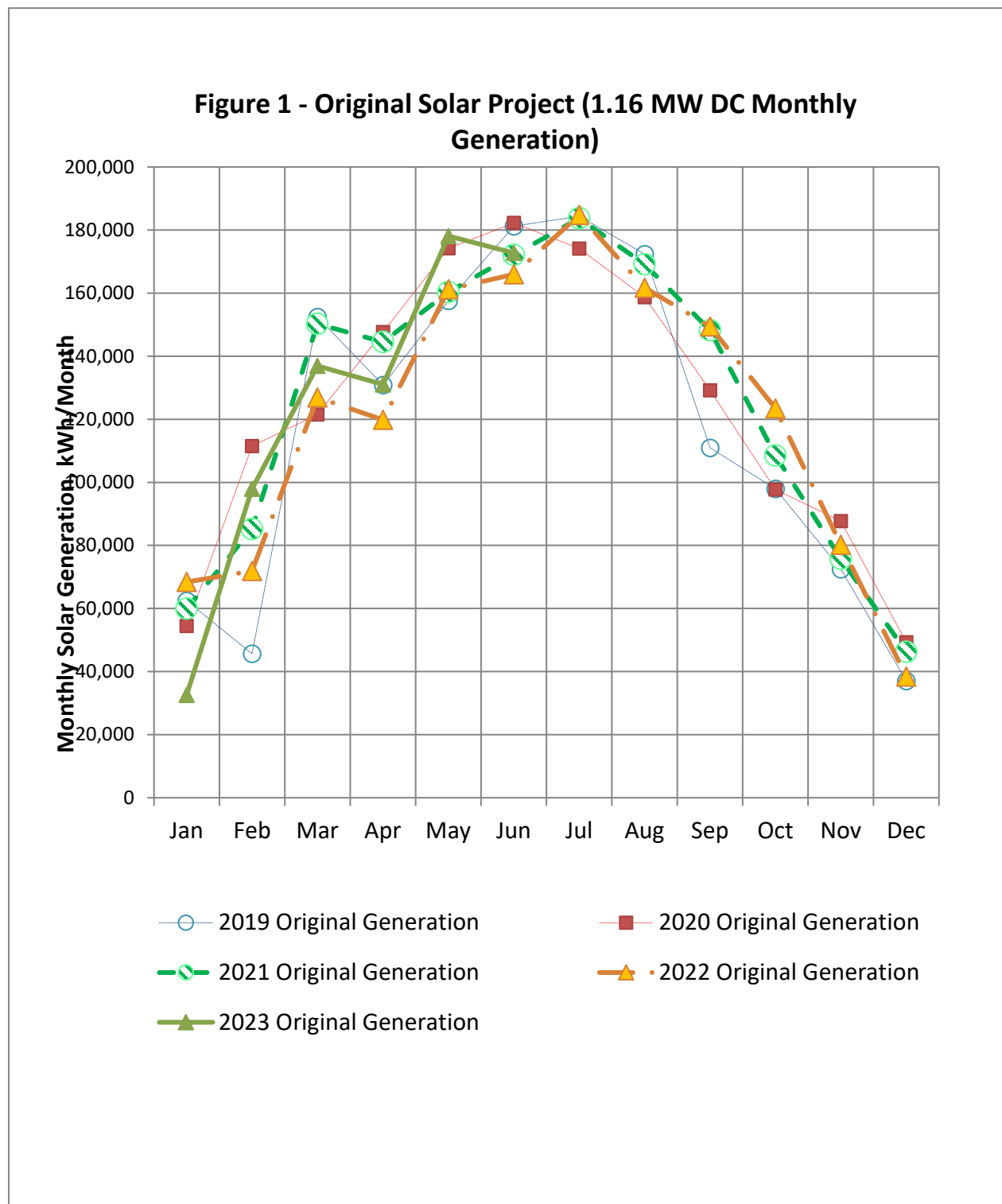
3. Solar generation has avoided \$111,812 in transmission costs through 6/30/2023 by reducing the City of Escanaba monthly co-incident load during the monthly ATC transmission system peak load. As summarized in the following Table, the monthly ATC system peak load occurs during daylight hours with resulting solar generation during 7 to 8 months of each year.

Calendar Year	Solar Generation During Monthly ATC Peak Load	
	Number of Months	Months
2019	8	Feb, Apr – Oct
2020	8	Mar – Oct
2021	7	Apr – Oct
2022	8	Feb, April-Oct
2023 (thru June)	5	Feb -June

The ATC system monthly peak loads follow a consistent recurring pattern:

- On Non-holiday workdays (Monday – Friday)
- In a narrow time range

4. As shown in Figure 1 below, the monthly solar generation for the Original Project follows a consistent monthly pattern.



5. Solar Project operations update:

a. No significant operating problems have been experienced with the Original project equipment in 2022, and 2023 YTD.

b. The only operating problems experienced in 2022 and 2023 YTD with the Expansion Project relate to the periodic brief shutdowns of Inverter #16. Six new inverters were added in the Expansion versus 15 inverters in the Original project. The #16 inverter shutdowns typically occur during periods of high generation (i.e., mid-day and early afternoons) and high wind velocities. The #16 Inverter wiring box was replaced in April, 2022. Yaskawa has supplied a replacement the Inverter upper powerhead which arrived in January, 2023. The Inverter powerhead replacement was initially delayed for warmer weather to arrive.

With the apparent correlation of the #16 inverter shutdowns on the higher wind velocities (e.g., in excess of 15 mph), the GRNE Solar technical staff are being contacted for technical support on proper techniques to inspect the DC distribution components (e.g., field made DC string connectors) supplying the #16 Inverter. Movement in one of the DC malfunctioning string distribution connectors (up to 950 VDC) may be causing the inverter trips.