ENERGY & ELECTRICITY

MARQUETTE 2049 CLIMATE CHANGE LEARNING CIRCLE
Wednesday, November 6, 2024
Northern Center, Ballroom III
10:00 - 11:30 a.m.

Circle Overview

The Marquette 2049 Learning Circle series is intended to encourage people in our community to engage in proactive planning in anticipation of the likely consequences of climate change. During this learning circle, we will examine critical electrical energy needs, identify key individuals and organizations necessary to continuing conversation, and lay plans for a long-term planning process to deal with energy-related issues. Two of Marquette County's coal-fired power plants were replaced by natural gas power plants, however, as the requirements for clean electricity increase these gas-fired plants will eventually need to be powered by renewable fuels (or be replaced by other renewable energy sources). In November 2023, Governor Whitmer signed legislation mandating that Michigan get 100% of its electricity from non-carbon-based sources by 2040.

Long-term planning by the organizations that generate and distribute our power is based on long-term projections of customer usage, federal and state regulations, and the state of the electrical grid. The “grid” is dependent upon many of these variables as their engineers and planners map out the projected future energy needs for the U.P. Additionally, national and worldwide reliance on green technology will increase the demand for U.P. minerals (eg., copper and nickel). This transformation may create additional environmental concerns that may need to be discussed and proactively addressed. As we look to the future of electric generation and distribution we will need to address dependability, reliability, capacity, affordability, and flexibility.

Pre-Circle Reading:

Michigan Poised to Join States Requiring 100 Percent Clean Electricity
https://insideclimatenews.org/news/07112023/michigan-clean-energy-laws-whitmer/?gad_source=1&gclid=EAIaIQobChMIns_ihea6hgMVeDQIBR2U1Q26EAAYBCAAEgIia_D_BwE

EV transition a slow go in Michigan. It needs 100,000 chargers, has 3,300
https://www.bridgemi.com/michigan-environment-watch/ev-transition-slow-go-michigan-it-needs-100000-chargers-has-3300?

Driving the green revolution: The use of copper in EVs
https://www.innovationnewsnetwork.com/green-revolution-use-of-copper-in-evs/22503/

How will our electricity supply change in the future (UK Power Grid)
https://www.nationalgrid.com/stories/energy-explained/how-will-our-electricity-supply-change-future

How Electric Car Batteries Might Aid the Grid (and Win Over Drivers) - The New York Times
https://www.nytimes.com/2024/06/05/business/energy-environment/electric-car-batteries-grid.html?smid=url-share

Learning Circle Questions

1. What is your ideal vision for our area’s electric generation and distribution over the next 25 years?
2. What problems do you see that would then need to be overcome to reach that ideal vision?
3. What can we do today to help insure that we overcome those problems and meet your table's ideal vision?