UPPCO Overview

• Providing safe and reliable energy to ~52,000 customers throughout 10 Upper Peninsula counties

• Service territory represents:
  – 4,460 square miles
  – 4,469 miles of lines
  – 58 substations

• Owner/operator of 7 hydroelectric generation stations and 2 combustion turbines providing 80 megawatts of capacity
UPPCO Service Territory
Providing Reliable Service

SAIDI = Total duration of sustained interruptions in a year/total number of consumers. State goal is <150 minutes/year.
• UPPCO has relied on clean, renewable generation resources to serve its customers for more than 100 years

• Additional generation resources have been proposed within UPPCO’s Integrated Resource Plan in Case No. U-20350

<table>
<thead>
<tr>
<th>Station</th>
<th>Type</th>
<th>Units</th>
<th>Date Built</th>
<th>Capacity (kW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hoist</td>
<td>Hydroelectric</td>
<td>2</td>
<td>1916</td>
<td>3,400</td>
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<tr>
<td>McClure</td>
<td>Hydroelectric</td>
<td>2</td>
<td>1919</td>
<td>8,480</td>
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<td>Prickett</td>
<td>Hydroelectric</td>
<td>2</td>
<td>1931</td>
<td>2,000</td>
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<tr>
<td>Victoria</td>
<td>Hydroelectric</td>
<td>2</td>
<td>1930</td>
<td>12,200</td>
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<td>Boney Falls</td>
<td>Hydroelectric</td>
<td>3</td>
<td>1921</td>
<td>4,100</td>
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<td>Escanaba 3</td>
<td>Hydroelectric</td>
<td>2</td>
<td>1914</td>
<td>2,500</td>
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<td>Escanaba 1</td>
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<td>1907/1920</td>
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<td>Gladstone</td>
<td>Combustion Turbine</td>
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<td>1975/1987</td>
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<td>Portage</td>
<td>Combustion Turbine</td>
<td>1</td>
<td>1971</td>
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</table>
Integrated Resource Plan (IRP) was filed in February 2019

- Utility-Scale Solar Array
- 20 MW of new natural gas-fired Reciprocating Internal Combustion Engine (RICE) generation

Provides an increase in renewables, enhanced reliability and price stability

Currently under MPSC review in Case No. U-20350
Michigan's Upper Peninsula has some of the best solar resources in the State.

Why Solar?

This data provides annual average daily total solar resource averaged over surface cells of 0.038 degrees in both latitude and longitude, or, nominally, 4 km in size. The insolation values represent the resource available to concentrating systems, and were created using the PATMOS-X algorithms for cloud identification and properties, the MMAC radiative transfer model for clear sky calculations, and the SASRAB model for cloud sky calculations. The data are averaged from hourly model output over 8 years (2005-2012).

This map was produced by the National Renewable Energy Laboratory for the U.S. Department of Energy. Nicholas Gilroy, April 4, 2017.
2019 Tax/Rate Case Outcome

- UPPCO has successfully lowered customers’ energy costs by ~$11 Million since the last general rate case in 2016

- The Tax Cut and Jobs Act created $3.1 Million in savings during 2018

- On May 23rd, the MPSC approved the settlement that was reached in the case
  - Incorporates the tax cut credits and reduced power supply costs into general rates
  - Decreases rates for most residential customers
  - Increases rates for many Commercial and Industrial customers
  - Establishes the Distributed Generation program and increases the cap to 2%
  - Phases out the Net Metering subsidy (10 year grandfather period)
  - Approves UPPCO’s Smart Energy advanced metering infrastructure project

- Overall revenue requirement is 4% lower under current ownership and 9% lower than the 2016 rate case
Annual Revenue Requirement Trend

Total Revenue Requirement

- **U-17274:** $92,000,000
- **U-17895:** $108,000,000
- **U-20276:** $98,000,000

- **January 2014:** $102,000,000
- **October 2016:** $110,000,000
- **June 2019:** $108,000,000
Rates Have Been Trending Downward

UPPCO has some of the lowest Industrial rates of investor owned utilities in the State
How do we compare?

- On average, UPPCO’s residential customers only consume ~58% of the energy that is consumed by Michigan’s residential customers (statewide average) and ~43% of the national average.

- This equates to an average residential bill that is ~20% lower than the statewide average.

- Low energy consumption (kWh/month) drives up the volumetric pricing ($0.00/kWh) equating to higher rates.
**UPPCO Smart Energy**

- **Benefits**
  - Eliminates estimated meter reads
  - More efficient outage management
  - Reduced O&M for meter reading
  - Improved customer service
- **June 2020 completion**
Lack of Synergy in the Upper Peninsula?
For more information

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