## JOINT VENTURE 2





## PARTICIPANTS

The Ohio Municipal Electric Generation Agency Joint Venture 2 (OMEGA JV2) provided significant transmission and capacity savings to participating AMP members in 2016.

The three JV2 gas turbines ran for a total of 325 hours in 2016, compared to 161 hours in 2015 and the 10-year average of 146 hours. The 10 diesel sites ran for an average of 55 hours, compared to 39 hours in 2015 and the 10-year average of 31 hours.

This effort provided transmission savings to project participants of approximately \$5.4 million, with planned 2017-2018 capacity savings of approximately \$8 million due to the peak shaving success during the summer of 2016.

The Versailles Unit 2 diesel generator was restored and returned to service on July 15, 2016, following a generator fire that took place in September 2015. Ohio CAT helped with this service and AMP staff restored communications with the generator's remote terminal unit.

During summer diesel generator operations, AMP staff investigated diesel oxidation catalyst high differential pressures. The differential was determined to be due to either a failed/out of calibration pressure sensor or a plugged catalyst. In response, staff sent five catalysts to the manufacturer for cleaning.

Staff, along with Air New Zealand Field Services (ANZ), conducted a vibration analysis on both LM5000 gas turbines in June. ANZ recommended verifying the engine to generator alignment on both units which was completed in November, after which a second vibration analysis was conducted.

The mandate removing the U.S. Environmental Protection Agency's 100-hour Demand Response provision, which allowed diesel units to run up to 100 hours annually for demand purposes, took effect in May 2016. This impacted only one unit in JV2 that had not been upgraded to comply with reciprocating internal combustion engine national emission standards for hazardous air pollutants (RICE NESHAP) rules. This unit remains available for emergency use.

## FINANCIAL OPERATIONS

Participating communities in JV2 paid \$3.17 per kilowatt-month (kW-month) as a fixed rate for operations and maintenance (O&M) costs. The financing participants in the project were charged a rate of \$3.17/kW-month for the debt service component of the project. Debt service remained unchanged from 2015 and is scheduled to be retired in early 2018.







OMEGA JV2 is a cooperative project composed of 36 AMP member communities. The joint venture owns three gas turbine peaking generation units and 35 diesel units. The project has a subscribed capacity of 134.096 megawatts. Thirty four of the diesel units were upgraded in 2015 with Diesel Oxidation Catalysts to meet the new RICE NESHAP rules. AMP manages the project on behalf of participants and can operate the diesel units remotely from its Energy Control Center to provide participating communities with reduced capacity costs, energy and transmission charges, and distributed generation during times of high market energy prices.



