

MGE 100% Renewable Energy Report Resolution

RESOLVED: MGE shareholders request MGE prepare a public report within 18 months of the Annual Meeting, describing how they can provide a secure, low cost energy future for their customers and shareholders by eliminating coal and moving to 100% renewable energy by 2050 or sooner. The report should be produced at reasonable cost and omit proprietary information.

SUPPORTING STATEMENT:

To limit global warming to the 2 degrees Celsius from the 2015 Paris Climate Accord, the U.N. estimates that over 80% of all fossil fuel reserves must remain unburned, increasing the risk fossil fuel infrastructure will be stranded or devalued, creating losses.

Coal and other fossil fuels are on the way out as clean energy is increasingly competitive:

- Madison, the largest community in MGE's service territory, is moving to 100% renewable energy.
- Climate change is driving low carbon energy alternatives, like energy efficiency and renewable energy, which now effectively out-competes coal in many electricity markets.
- Customers are demanding clean energy. As of November 2016, 83 major companies, including Apple, GM, and Walmart, have committed to 100% renewable energy, creating pressure on utilities to adapt or lose customers.
- MGE's Saratoga wind farm in Iowa will produce energy at prices competitive with its Columbia coal power plant.
- Solar costs dropped 75% in the last 7 years, with projections it will drop another 25% by 2022. Wind dropped 65% in the last 8 years, with projections to drop another 50% by 2030, and will likely be cheaper than natural gas everywhere by 2030, even without subsidies.
- The energy efficiencies of both wind turbines and solar panels continue to improve, allowing them to be economically viable in locations previously thought unsuitable.

MGE's part ownership in the Columbia and Elm Road coal plants commits MGE to nearly 70% of their power production capacity coming from coal, creating a financial risk for the Company. Despite the poor financial outlook for coal-based electricity due to climate change, competitive renewable energy costs and many utilities significantly reducing coal use, MGE reports a 5% increased use of coal from about 910,000 tons in 2014 to about 960,000 tons in 2016.

Other utilities have reported major losses from their reliance on coal. In 2016, FirstEnergy posted a \$1.1 billion loss, and AEP a \$2.3 billion write down on uneconomic coal plants. Dominion's Brayton Point Plant sold at a loss despite investments exceeding \$1 billion. These developments are making banks and investment firms increasingly concerned about fossil fuel investment risks.

In 2016, 37 of the world's largest banks decreased fossil fuel project investments by 22% from 2015. In 2017, due to concerns of reliance on fossil fuels, shareholders of Exxon Mobil and Occidental Petroleum passed resolutions asking their companies to report how climate change will impact their operations. With a major utility, MidAmerican in Iowa, moving to 100% renewable energy (90% in 2019), MGE should likewise prepare for a future based on clean energy.