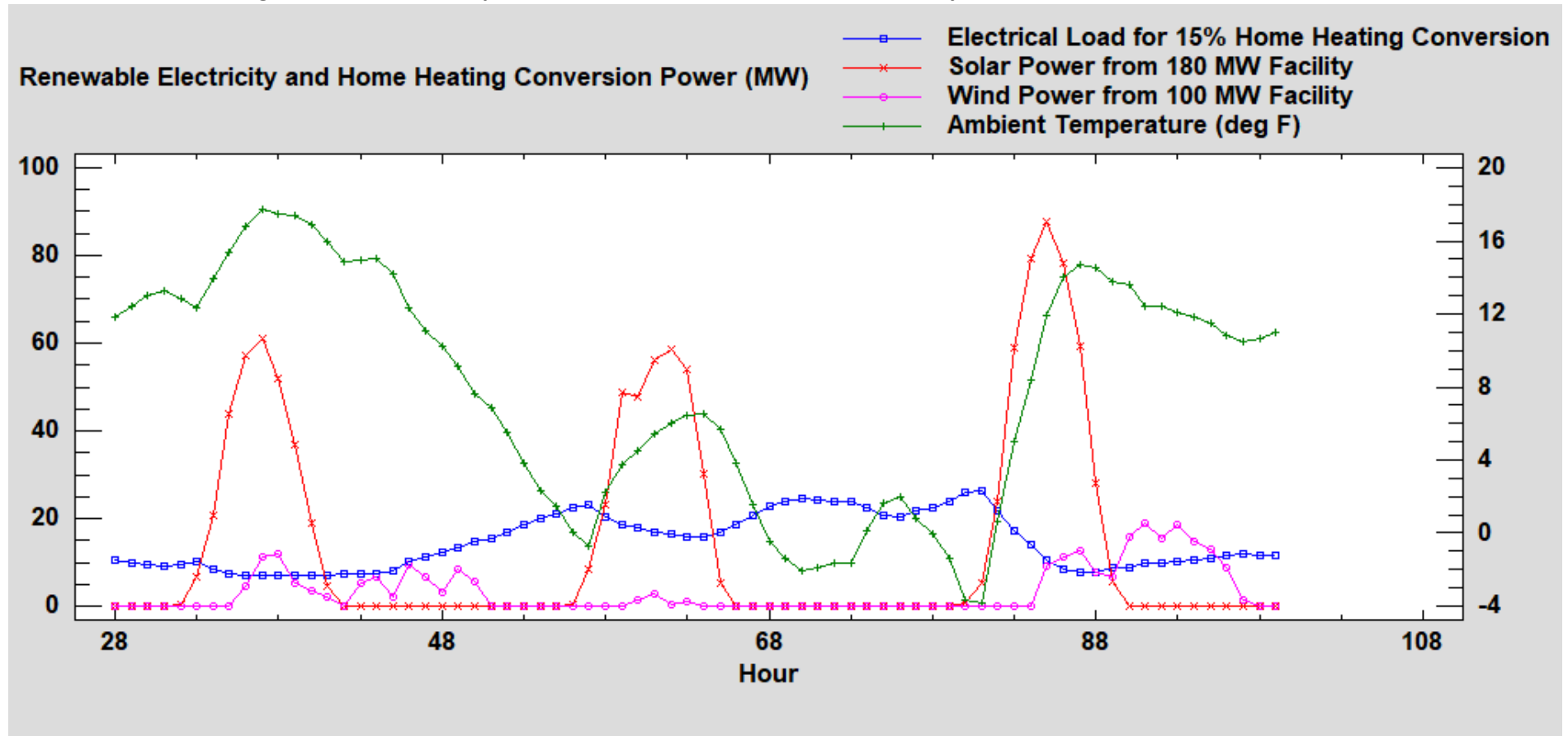


Residential Home Heating Air Source Heat Pump Conversion and Renewable Power Case Study



Case Study: Hourly Data 30 December 2017 0000hr to 1 January 2018 2300hr. Meteorological data indicate a high pressure system with light winds and clear skies so wind power is negligible and solar power is about as good as it will get for the winter. Electrical load is based on conversion of 15% of homes (2,737 occupied housing units) currently using liquefied propane, fuel oil or kerosene for space heating in Livingston and Monroe counties are converted to air source heat pumps with backup radiant electric heat.