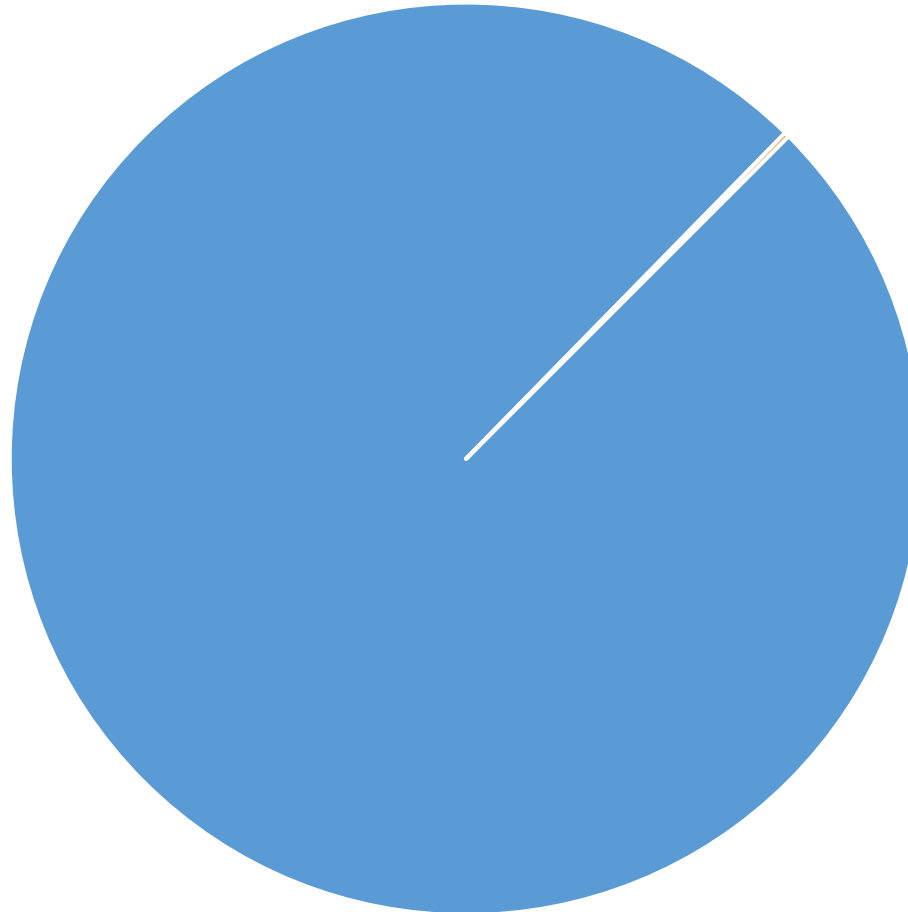


Electrification of Thermal Loads in Juneau

Alec Mesdag, VP & Director of Energy Services
Alaska Electric Light & Power Co.

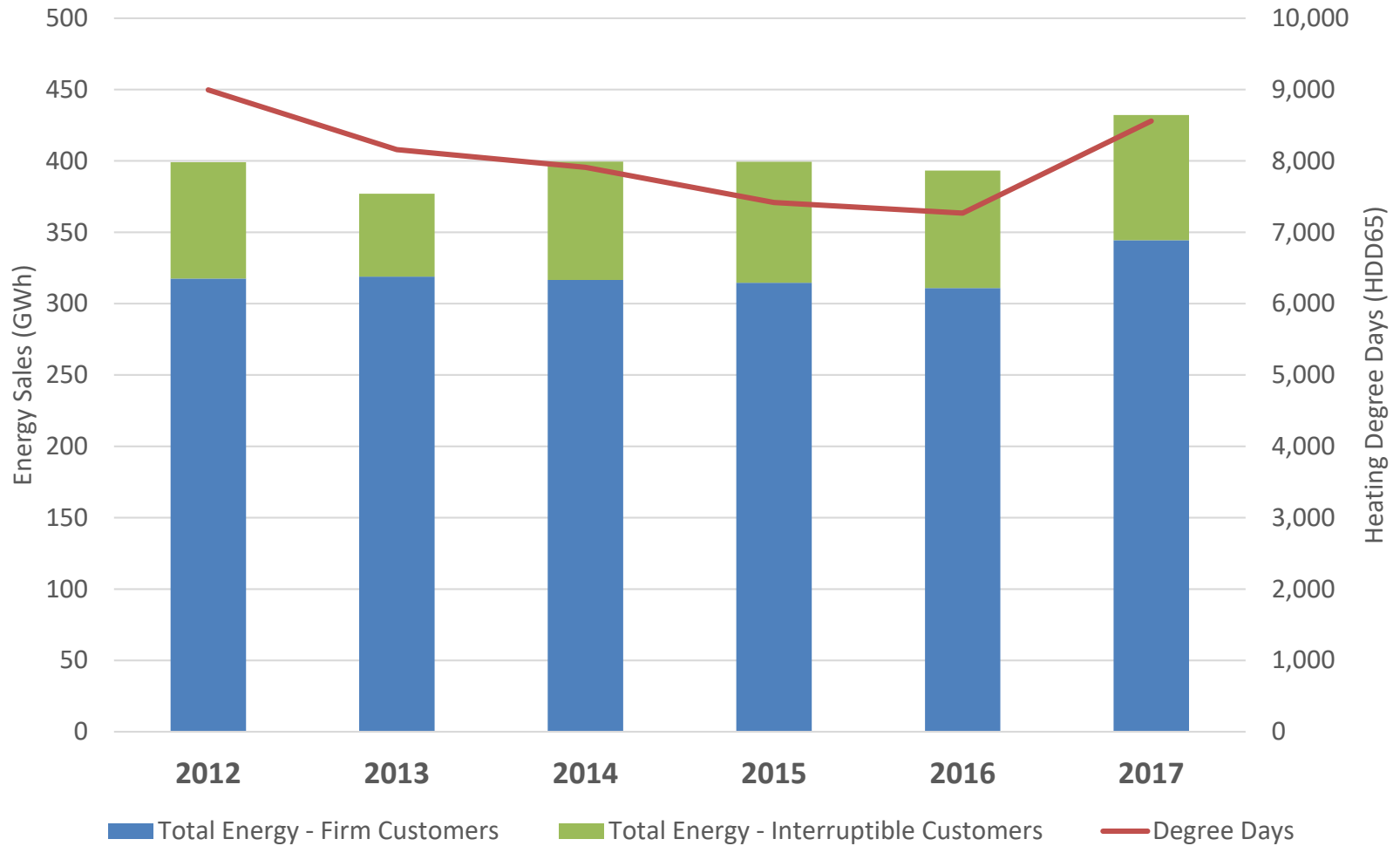


AELP 2012-2016 Generation Fuel Mix

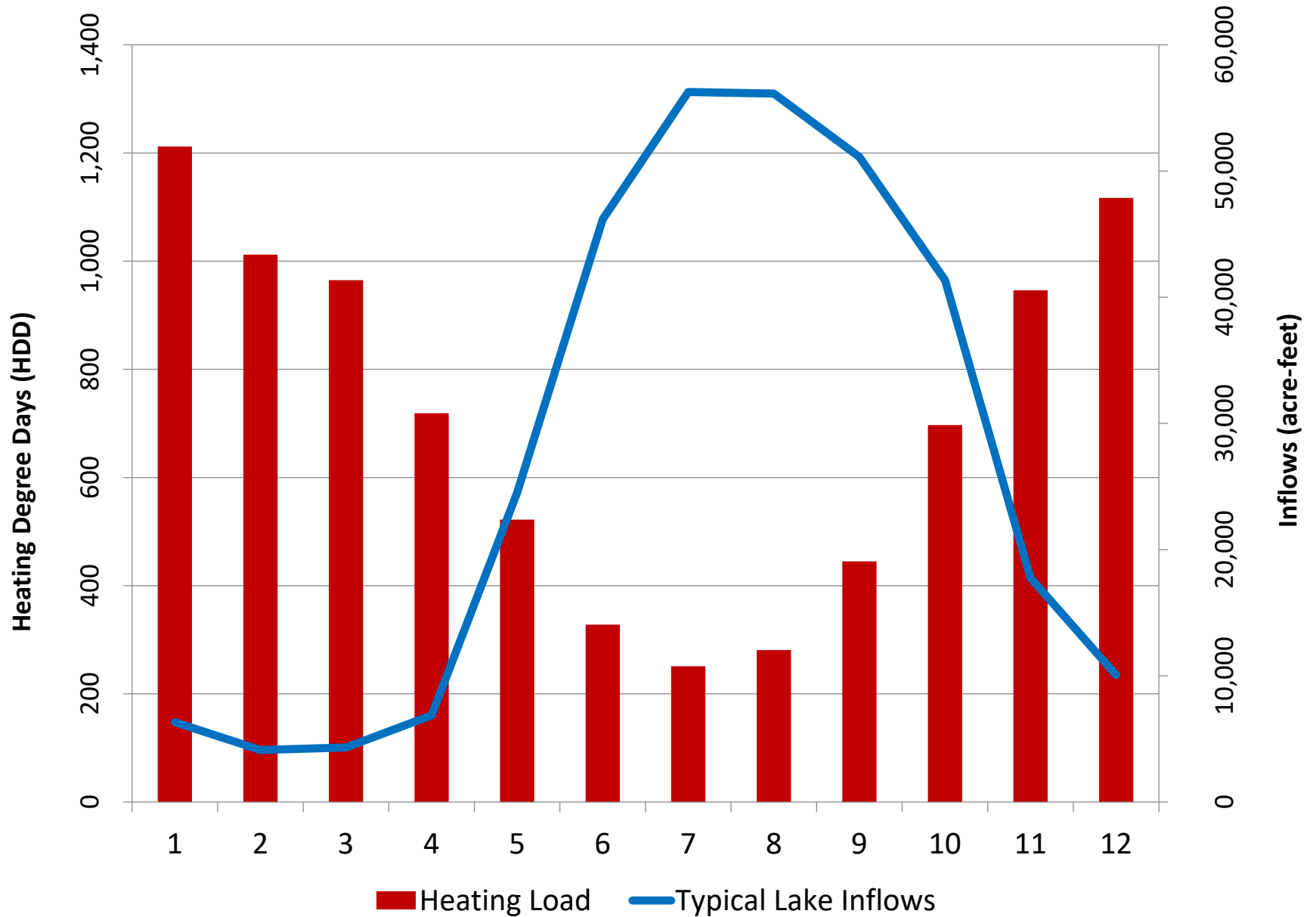


■ Hydro ■ Diesel

AEL&P Energy Sales

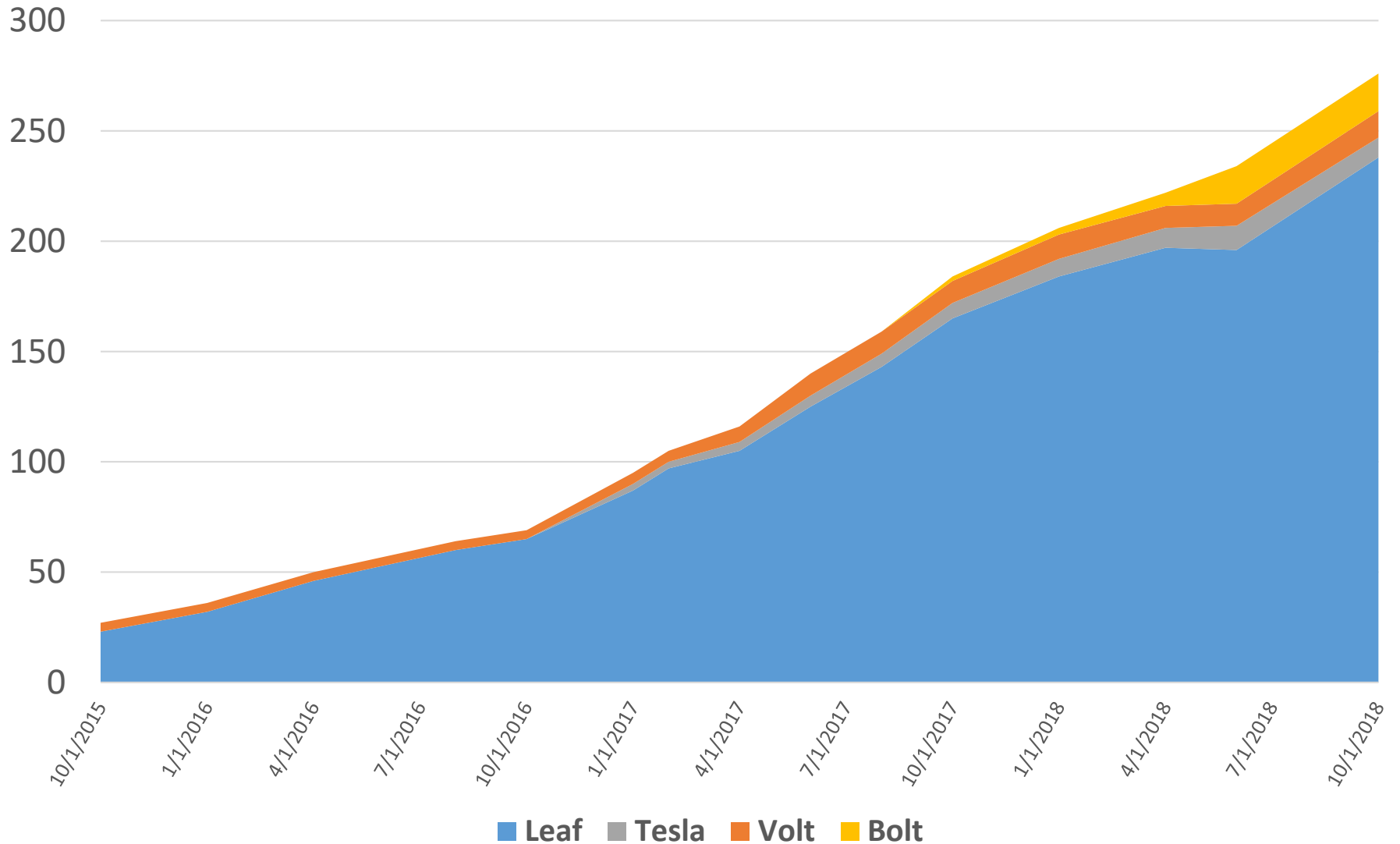


Heating Degree Days and Long Lake Inflows by Month



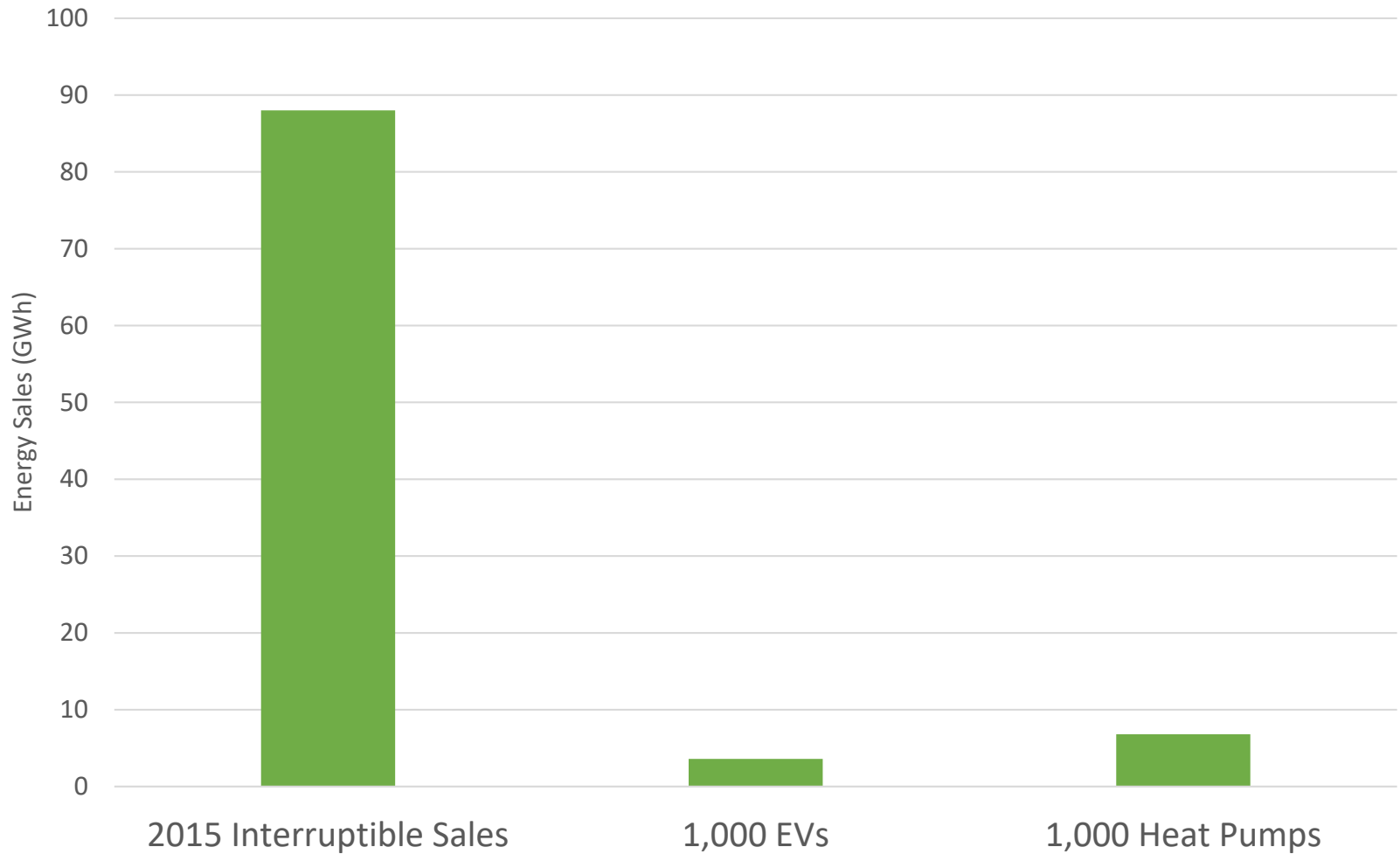


Juneau EV Registrations

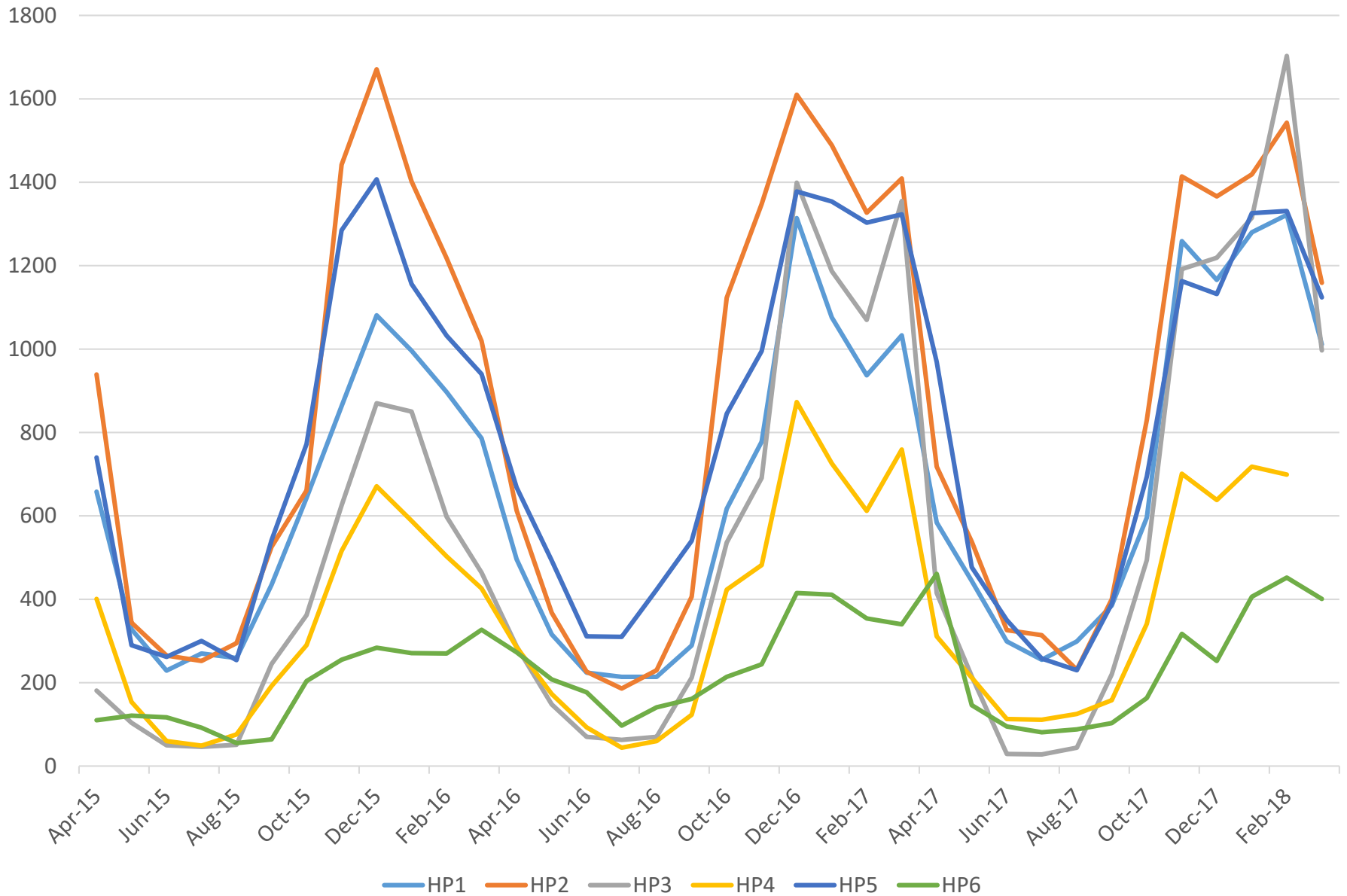




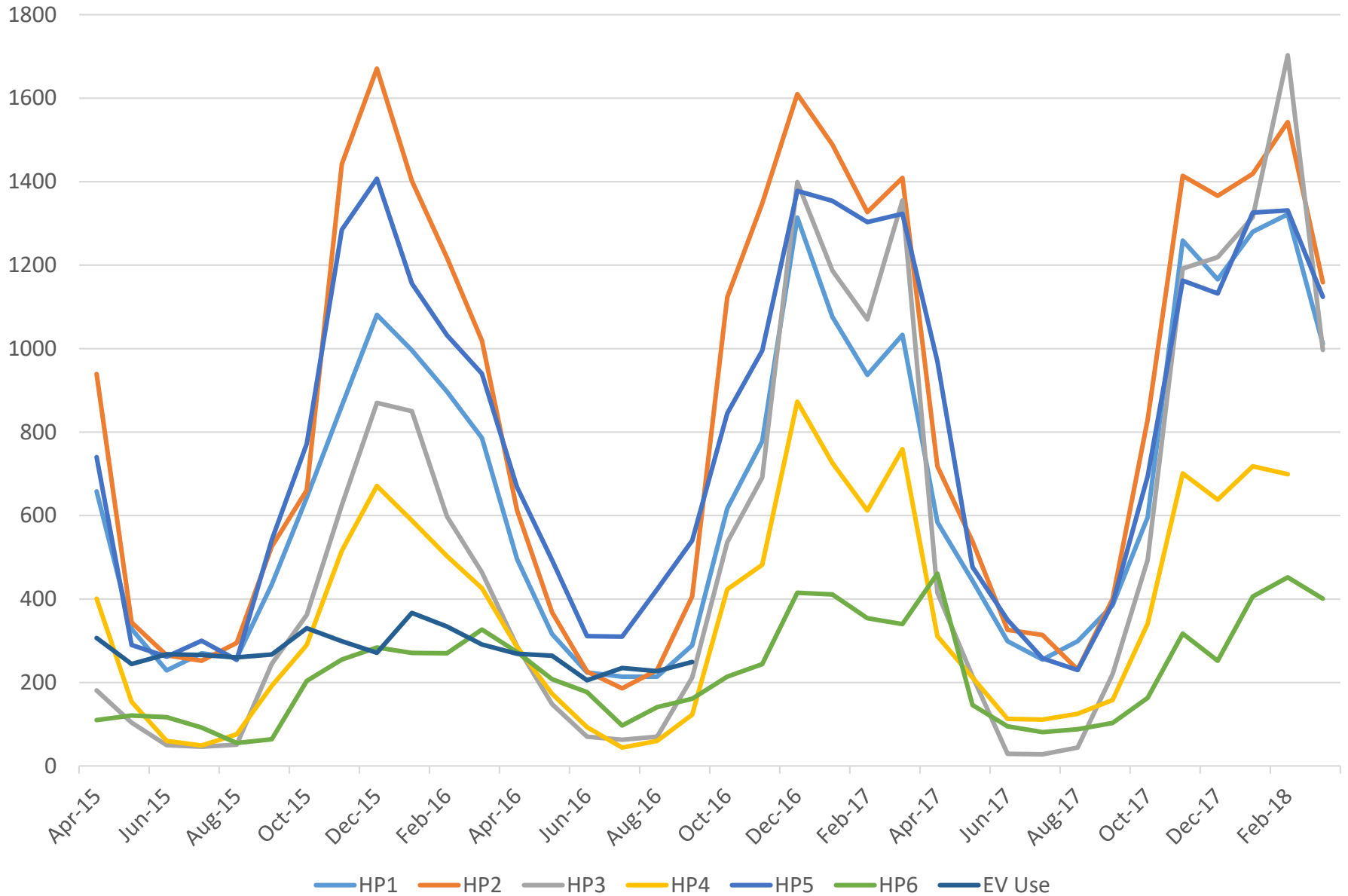
AEL&P Energy Sales



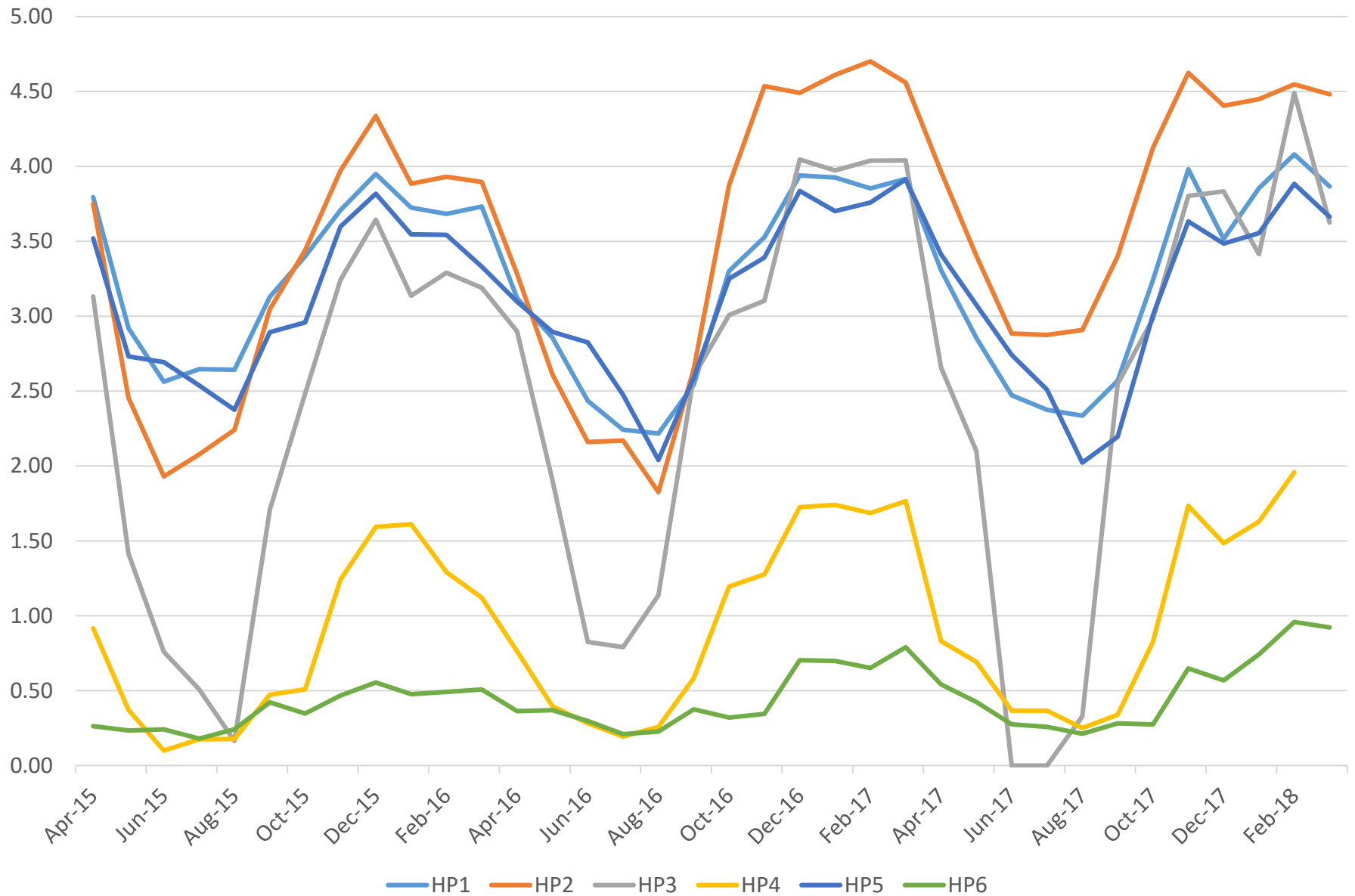
ASHP Energy Consumption (kWh) by Month 4/2015-3/2018



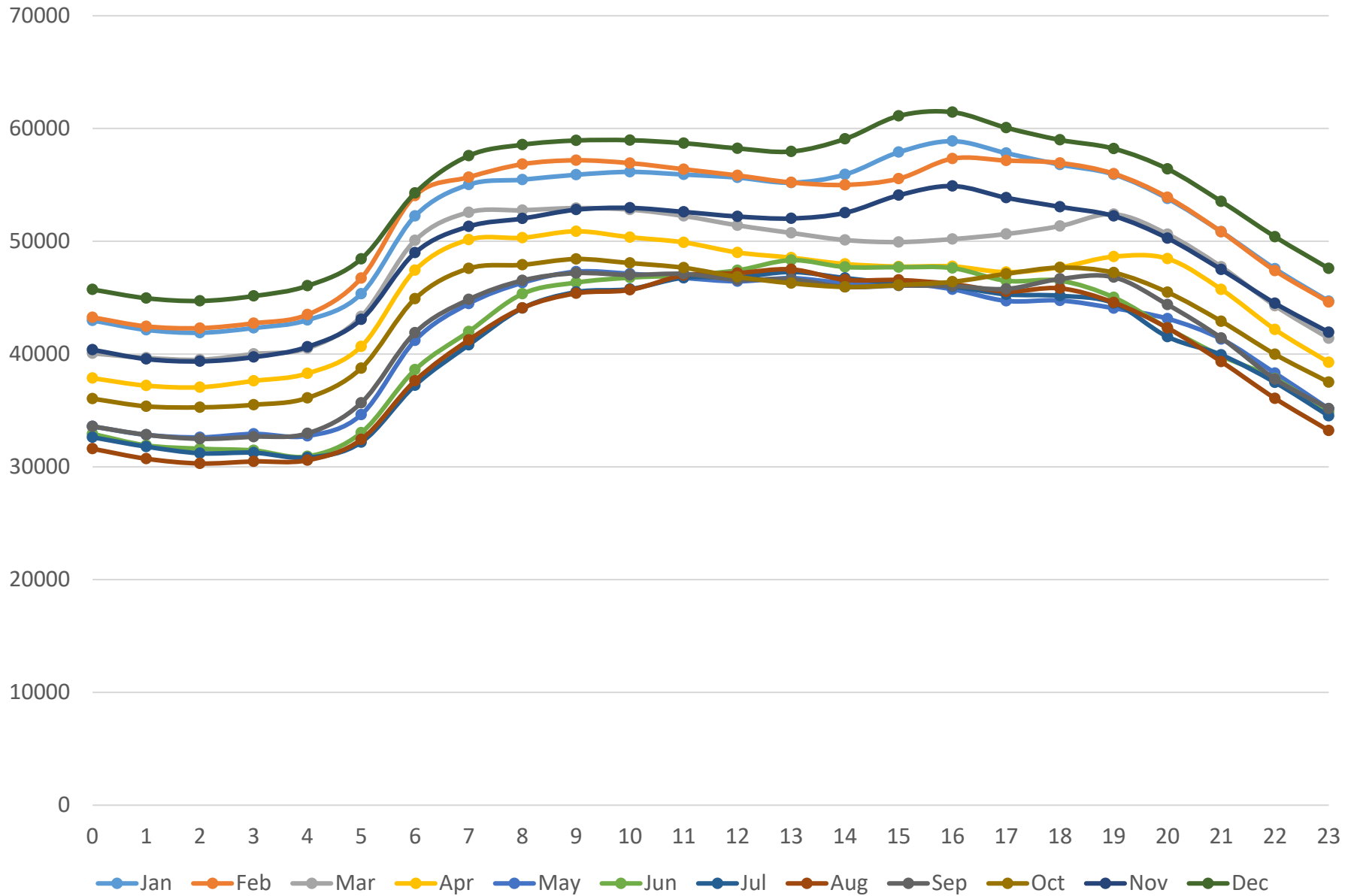
ASHP Energy Consumption (kWh) by Month 4/2015-3/2018



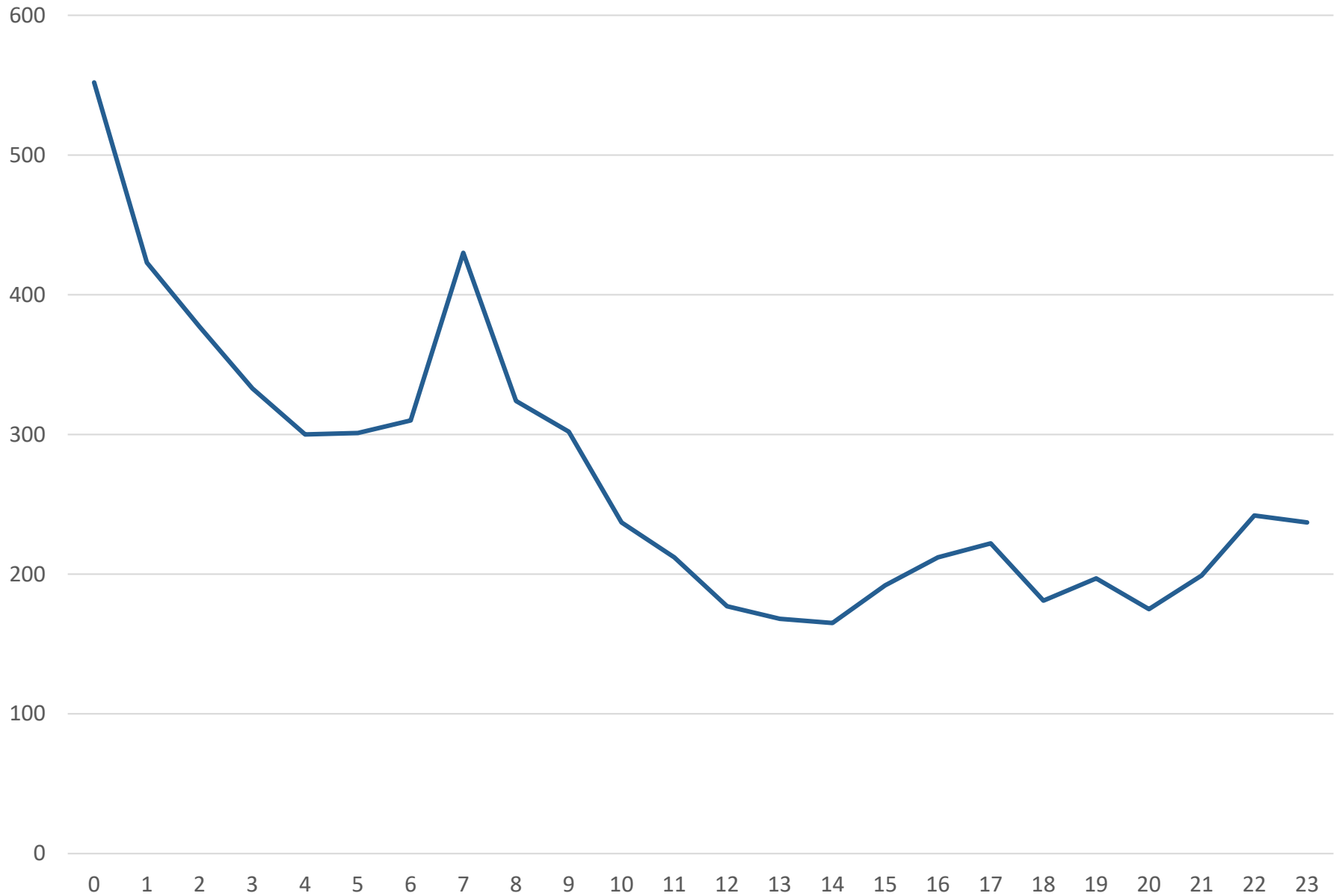
ASHP Average Demand (kW) by Month 4/2015-3/2018



AELP 2015-2016 Average Hourly Feeder Total kW by Month

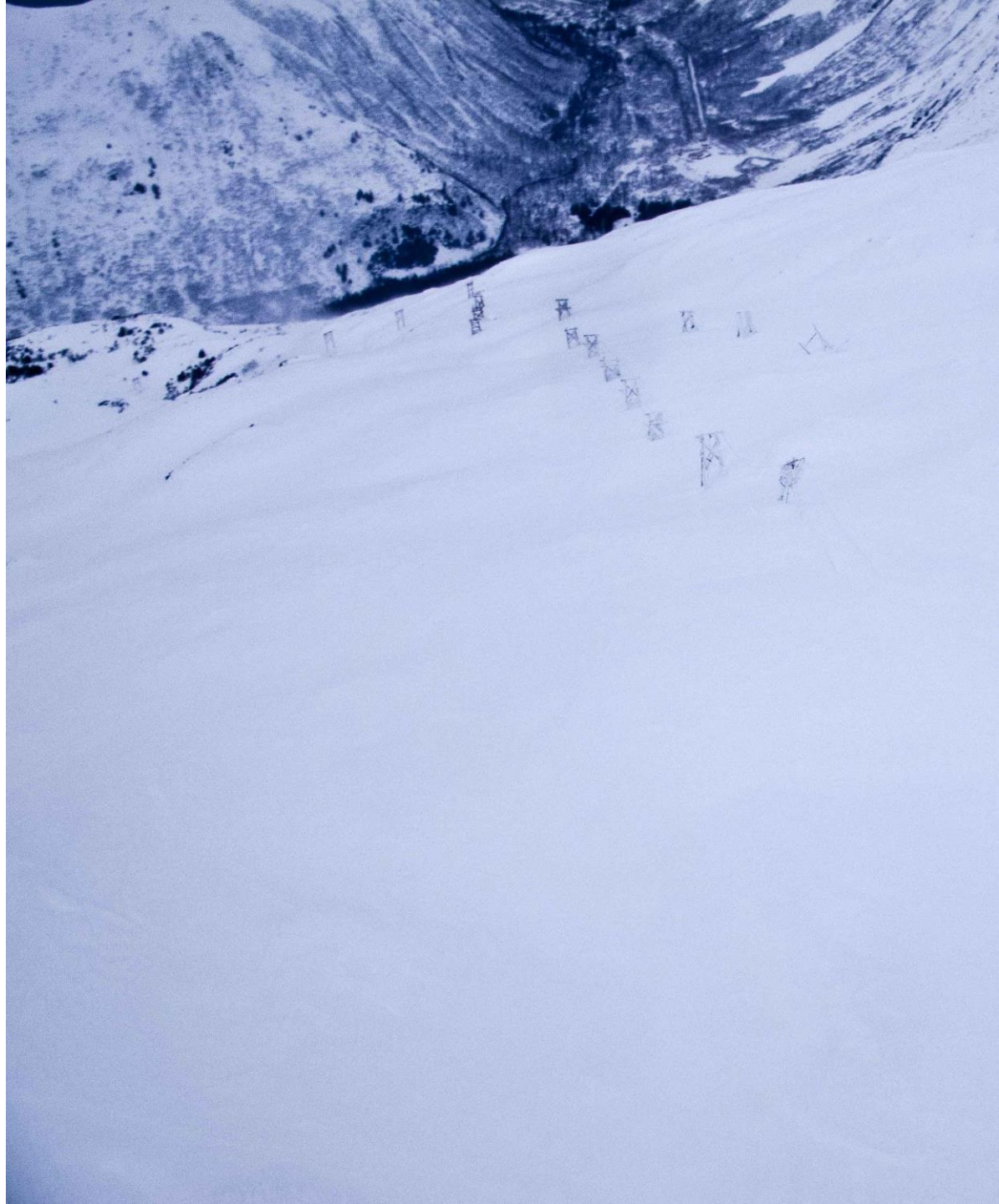


ASHP Hour of Recorded Demand Peak Frequency 4/2015-3/2018



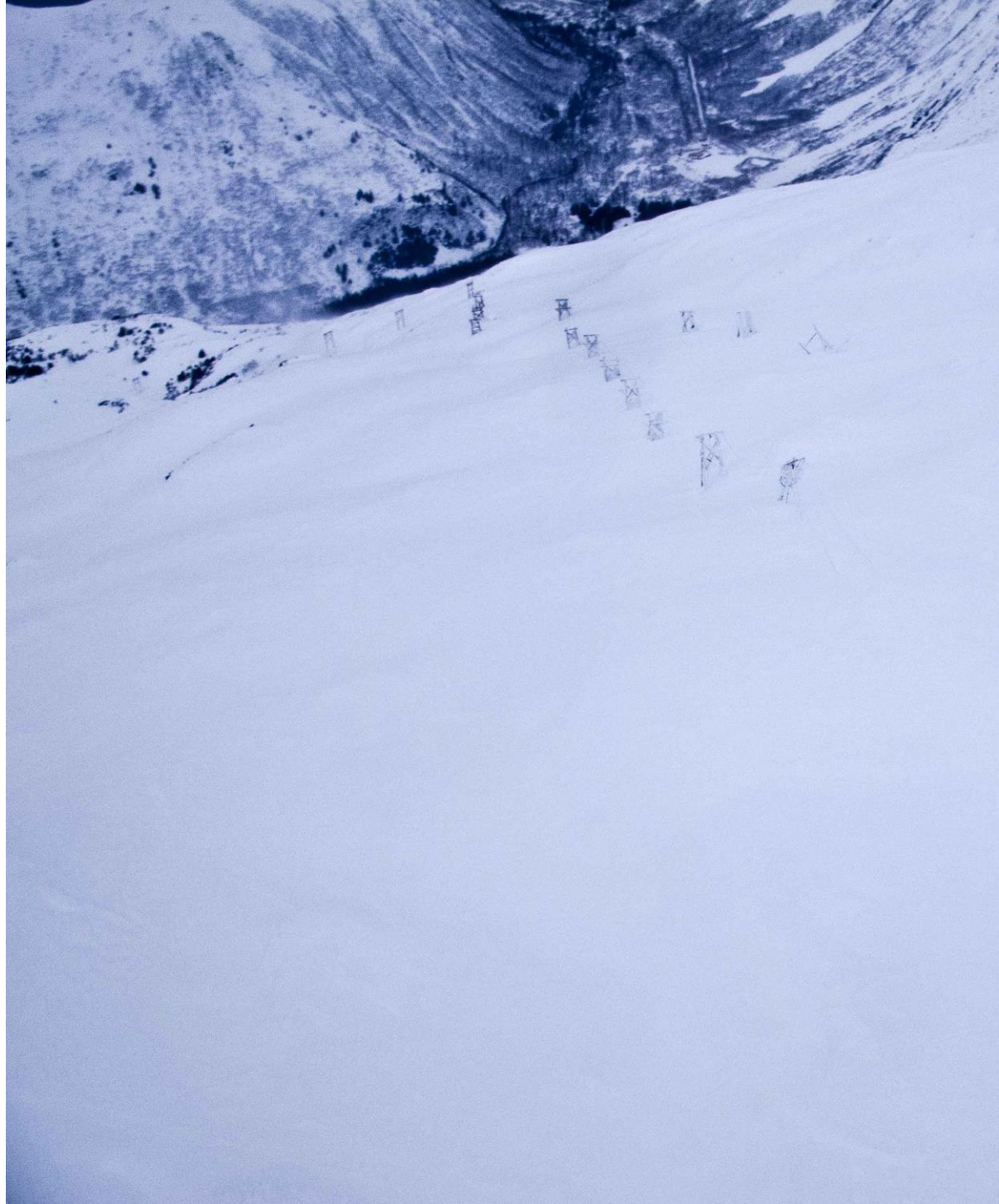
Juneau Renewable Heating

Identify achievable
potential for efficiency
and conservation,
including required
incentives and roles



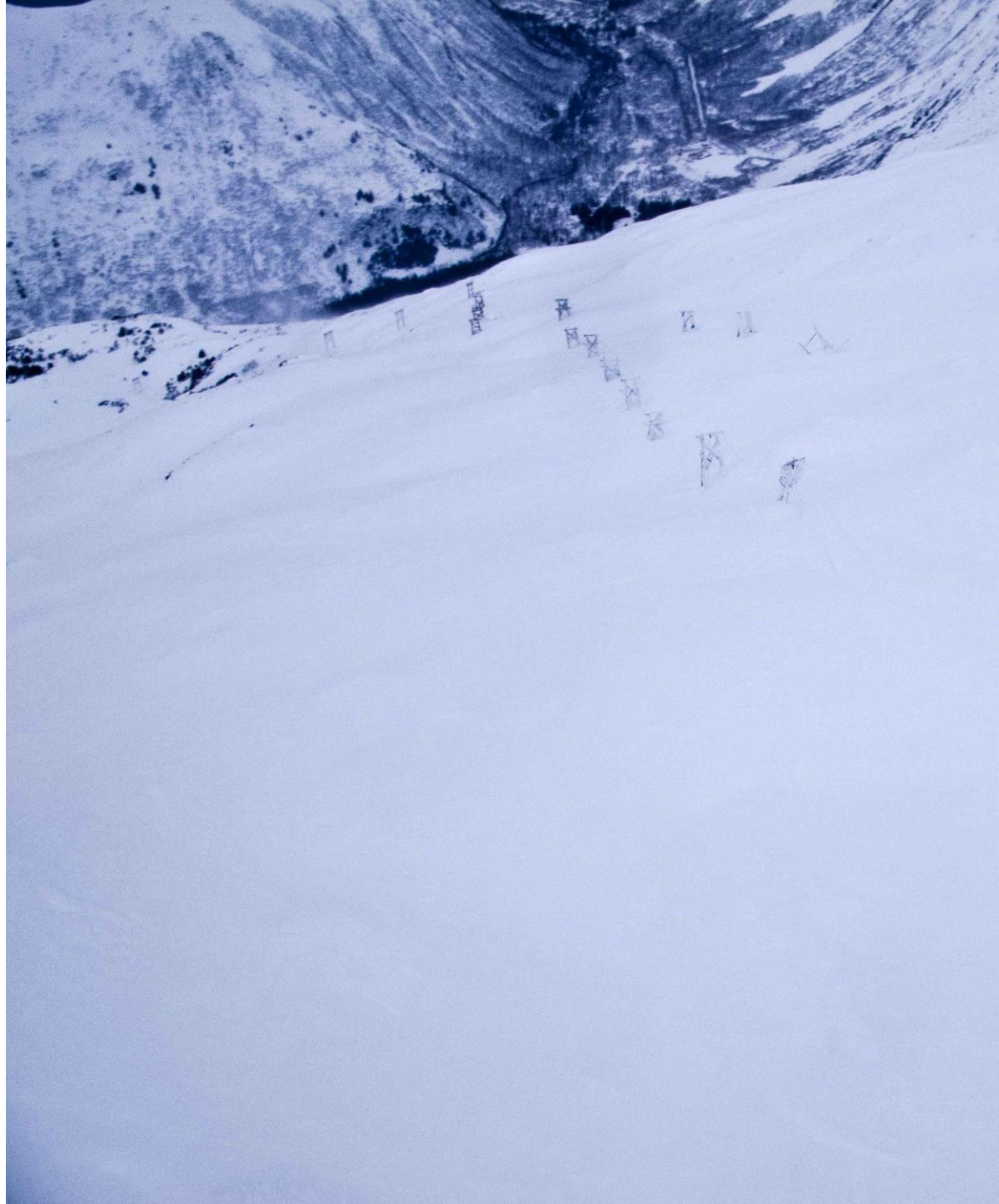
Juneau Renewable Heating

Outline a strategic prioritization for load shifting (resistance to heat pump, electric vehicles, and oil to electric)



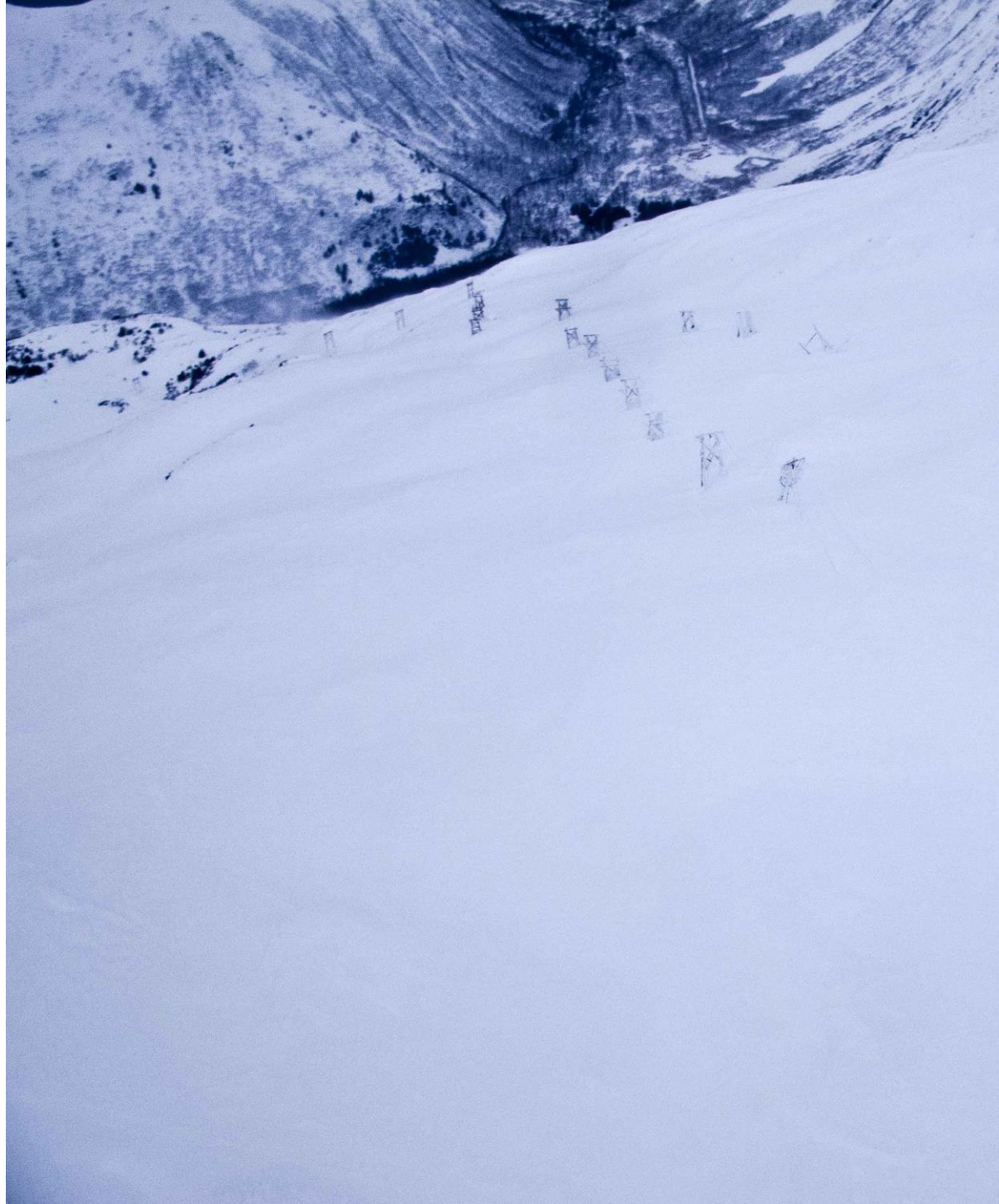
Juneau Renewable Heating

Identify firm and
standby resource needs
and timing, including
accounting for the
eventual loss of
interruptible sales to
the Greens Creek mine



Juneau Renewable Heating

Evaluate geographic
prioritization for load
shifting in the
transmission and
distribution system





ALASKA ELECTRIC LIGHT & POW

