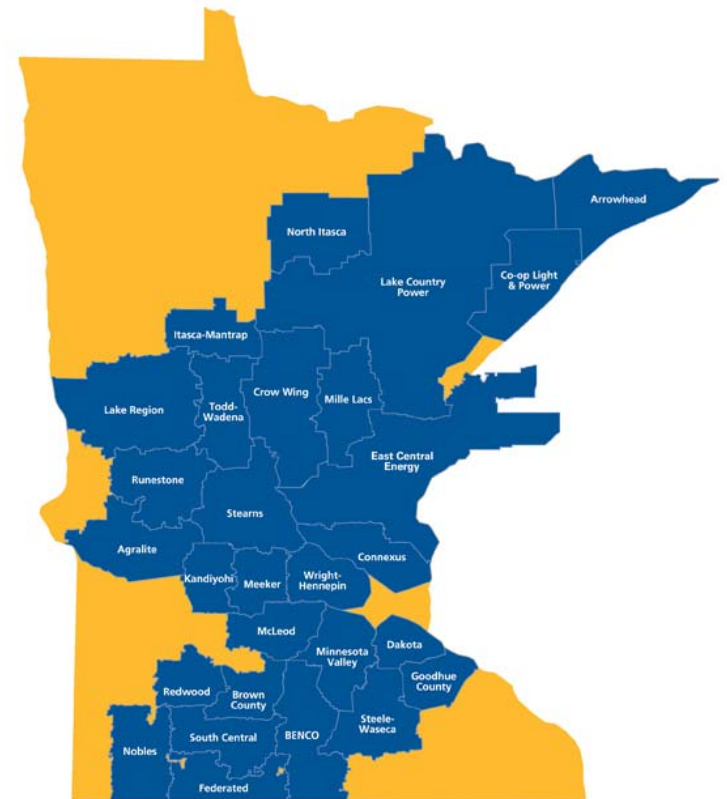

BYOT at Great River Energy

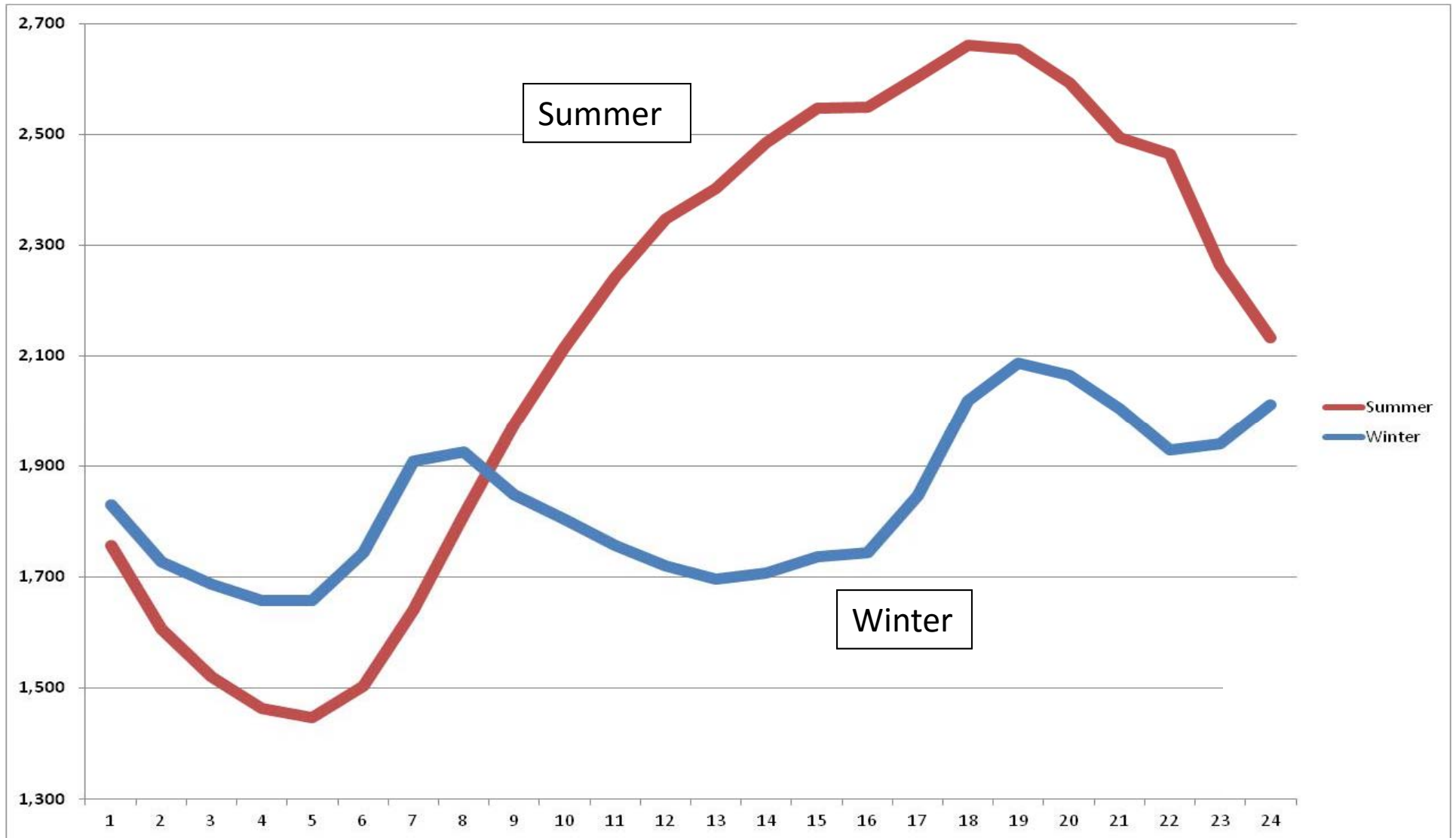
Gary Connett | Director, Member Services and
Demand-Side Management

Great River Energy

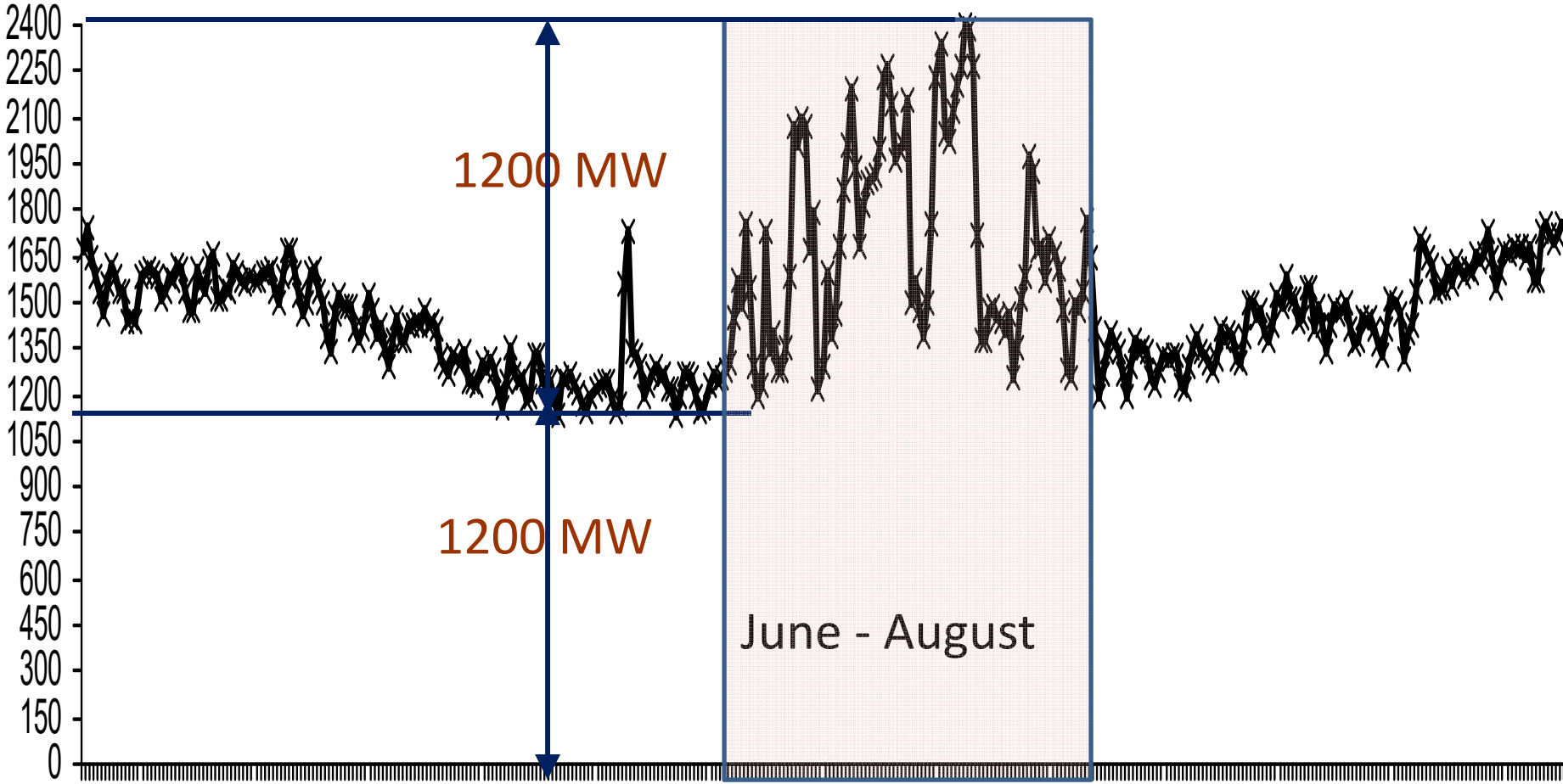
- G&T Cooperative
- 28 member cooperatives
- 634,000 members
 - ~1.7Million people
- Sales:
 - 60% residential
 - 40% commercial and industrial, agriculture
- Member of Midcontinent ISO



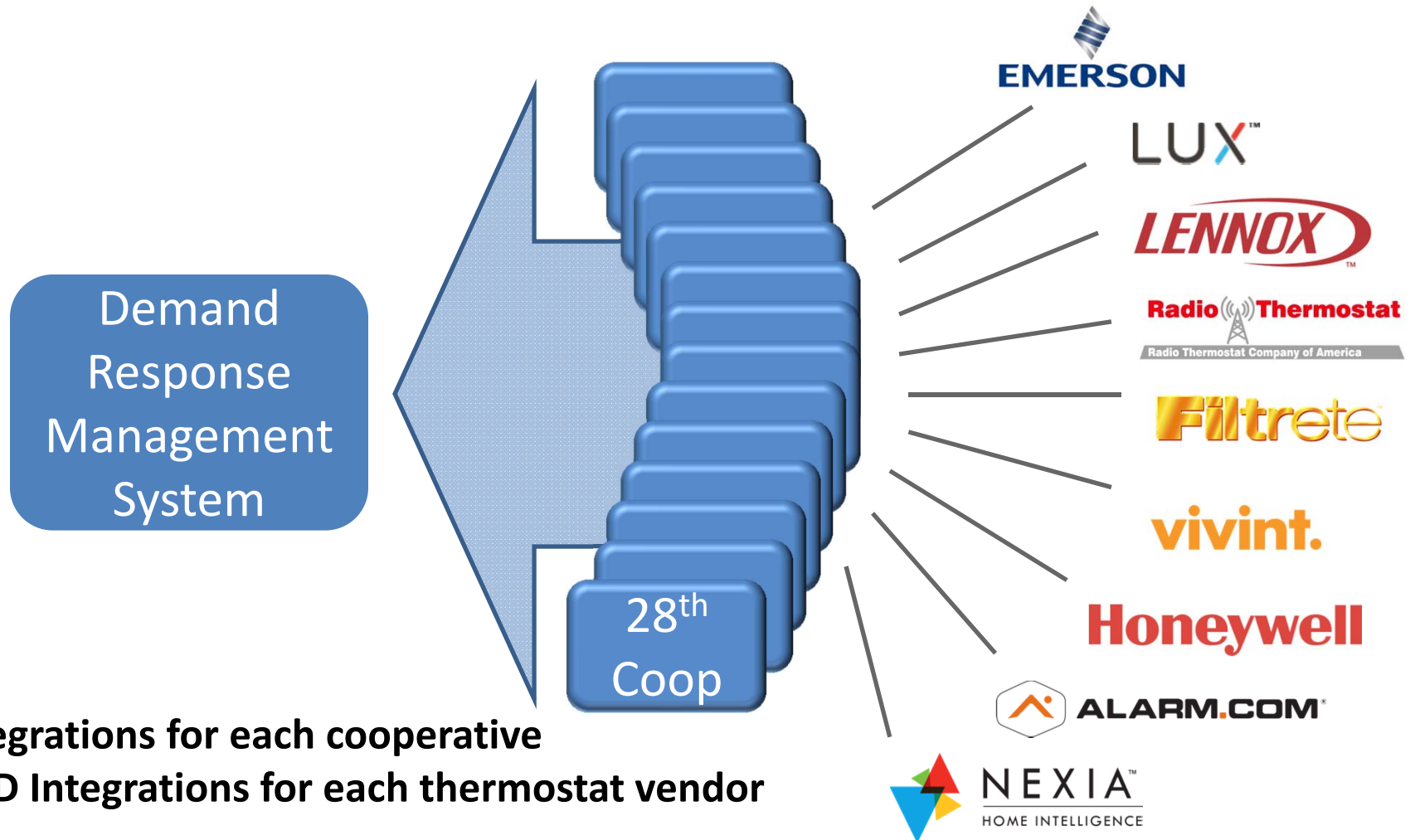
GRE's Load Curves



GRE's daily peaks



BYOT Structure



- Integrations for each cooperative
- AND Integrations for each thermostat vendor

Simplified BYOT structure

- Single integration for all cooperatives
- Single integration for all vendors

Demand
Response
Management
System



 EnergyHub®

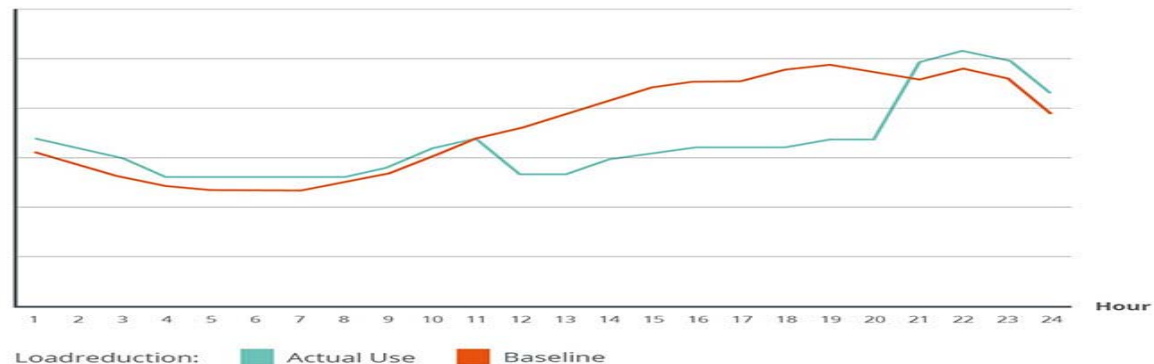


Streamlined enrollment

- ▶ Single enrollment portal on distribution co-op websites for all thermostat partners
- ▶ EnergyHub manages the verification of devices through each thermostat vendor's head end system.
- ▶ A single invoice for each co-op for all thermostat partners

Event scheduling and dispatch

- ▶ GRE has 90,000 cycled air conditioners on DLC
- ▶ DR with thermostat temperature offsets is inherently different.
 - More significant response first hour
 - Less kW per participant in 4th, 5th, etc. hours of control.



Customer satisfaction

- ▶ Participants prefer a WiFi thermostat to a switch; comfort, control, convenience.
- ▶ Participants have a choice, opt outs are allowed.
- ▶ With an offset temperature drift has a ceiling, which provides some comfort assurance

Demand Response

