



Review of Strategic Directive BP-SD-09 Energy Efficiency

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PEOPLE



NPPD Board of Directors Meeting
Strategic Session
May 2025

David Rich, Sustainable Energy Manager



Nebraska Public Power District
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EnergyWiseSM Introduction

EnergyWiseSM is the Program “umbrella” for:

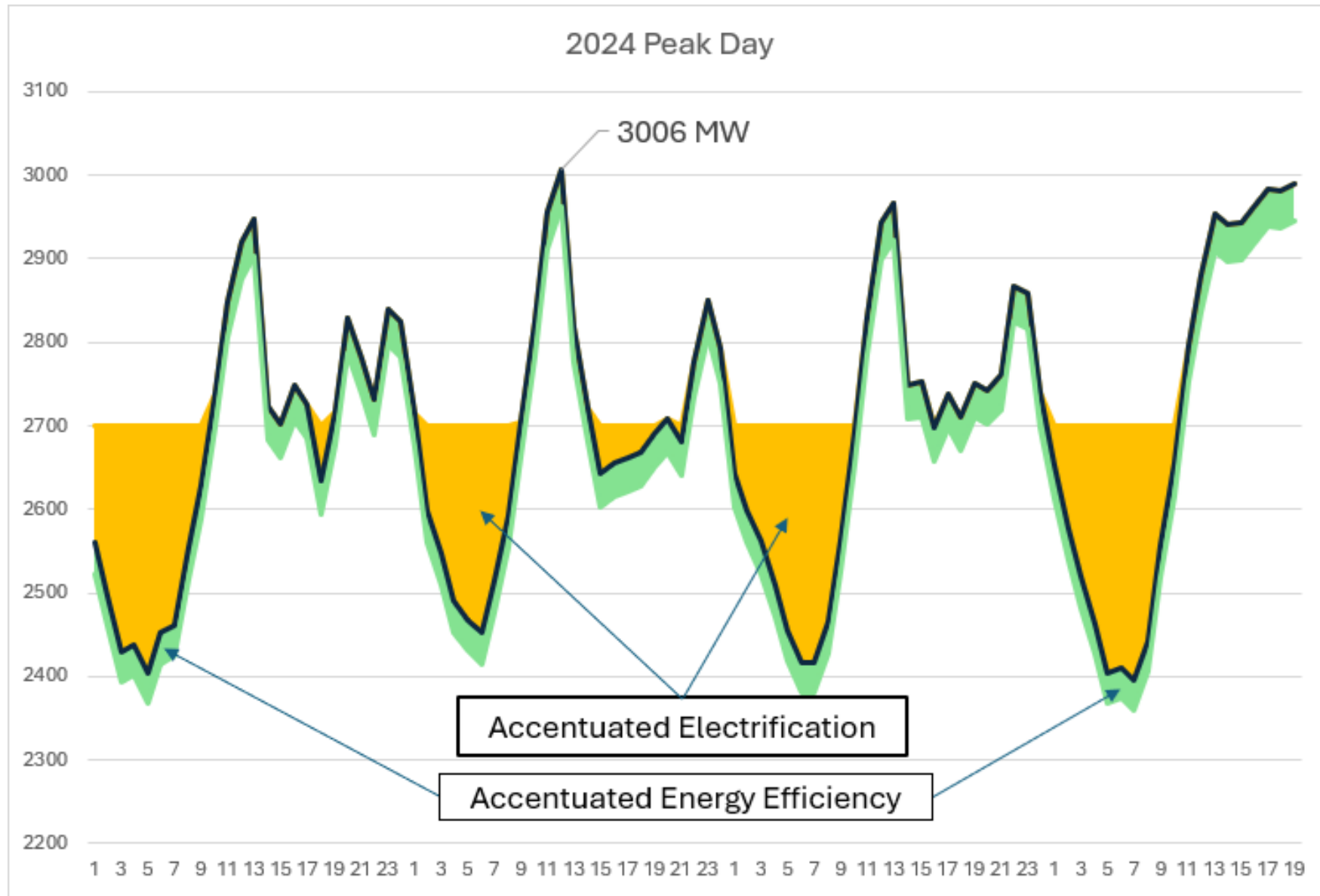
Energy Efficiency (EE)

- Save energy and reduce costs for end-use customers
- Reduce the cost to serve load during peak usage
- Examples: Ground Source Heat Pump, Variable Frequency Drives

Electrification

- Add load by converting fossil fuel sources
- Strategically add load that utilizes existing grid
- Reduction of CO₂
- Save the customer money overall in energy purchases
- Examples: Electric Vehicles, Fossil Fuel Furnace / Water Heater to Electric Heat Pumps, Battery Powered Lawn Tools

EE and Electrification Impacts



2025 Sustainable Energy Team



BP-SD-09, Energy Efficiency

Nebraska Public Power District (NPPD) is committed to:

- Using all available tools to keep electricity affordable for wholesale and end-use customers
- Reduce the cost to serve load during peak usage periods
- Partnering with our wholesale customers to develop programs and services
- Being a resource for technical information for our wholesale customers
- Help end-use customers reduce costs and improve business' bottom lines
- Provide a service that engages customers in a positive way

BP-SD-09, Energy Efficiency (Cont'd)

NPPD is committed to:

- Building relationships with business partners and community colleges
- Partnering with the Nebraska Department of Environment and Energy and other Nebraska utilities
- Taking advantage of state and federal incentives, grants, and other opportunities
- Continually sharing helpful information with customers and teammates
- Offering energy use audits, calculators, information, and recommendations

EnergyWiseSM Programs: Energy Efficiency

Residential

- Heat Pumps
 - Loan or Incentive
- Attic Insulation
- Cooling System Tune-Up
- Smart Thermostat
- Heat Pump Water Heaters



ENERGYWISESM
Use less. Spend less. Do more.

www.EnergyWiseNebraska.com

Commercial / Industrial

- LED Lighting
- Variable Frequency Drives (VFD)
- Industrial Process
- HVAC Programs



Agricultural

- LED Lighting
- Agricultural Programs
- Custom Ag



Ag Incentives

- **Center Pivot/Linear Outlet Component Replacement** a \$500 incentive is available for producers to replace all of a system's existing outlet components such as sprinkler heads, sprayers, rotators, plates, pads and nozzles, and regulators on qualified systems.
- **Irrigation Moisture Sensor** program provides a \$300 incentive to producers that use electric irrigation pumping for installing a moisture sensor incorporated with an irrigation management program or software.
- **Corner Pivot Variable Frequency Drive** an incentive is provided for incorporating variable frequency drives (VFDs) into corner pivot systems. VFDs can reduce output by controlling the motor speed, rather than pumping at full load and throttling water flow using valves and regulators. This program continues to offer significant savings for participating producers.
- **Automated Grain Aeration** an incentive of \$0.011 per bushel based on a grain bin's capacity is provided when a producer installs a system that monitors stored grain and automatically operates fans only when needed and appropriate.
- **Hog Heat Mat** program provides \$40 to \$80 incentives for energy efficient hog mats in lieu of heat lamps in swine farrowing.
- **Custom Agriculture** customers can receive reimbursement for agricultural energy efficiency improvements that are not covered under other programs. Irrigation pump system efficiency tests are reimbursed up to \$350 through this program.

Annual Report

ENERGYWISE™
Use less. Spend less. Do more.



2024
Annual Report
March 2025



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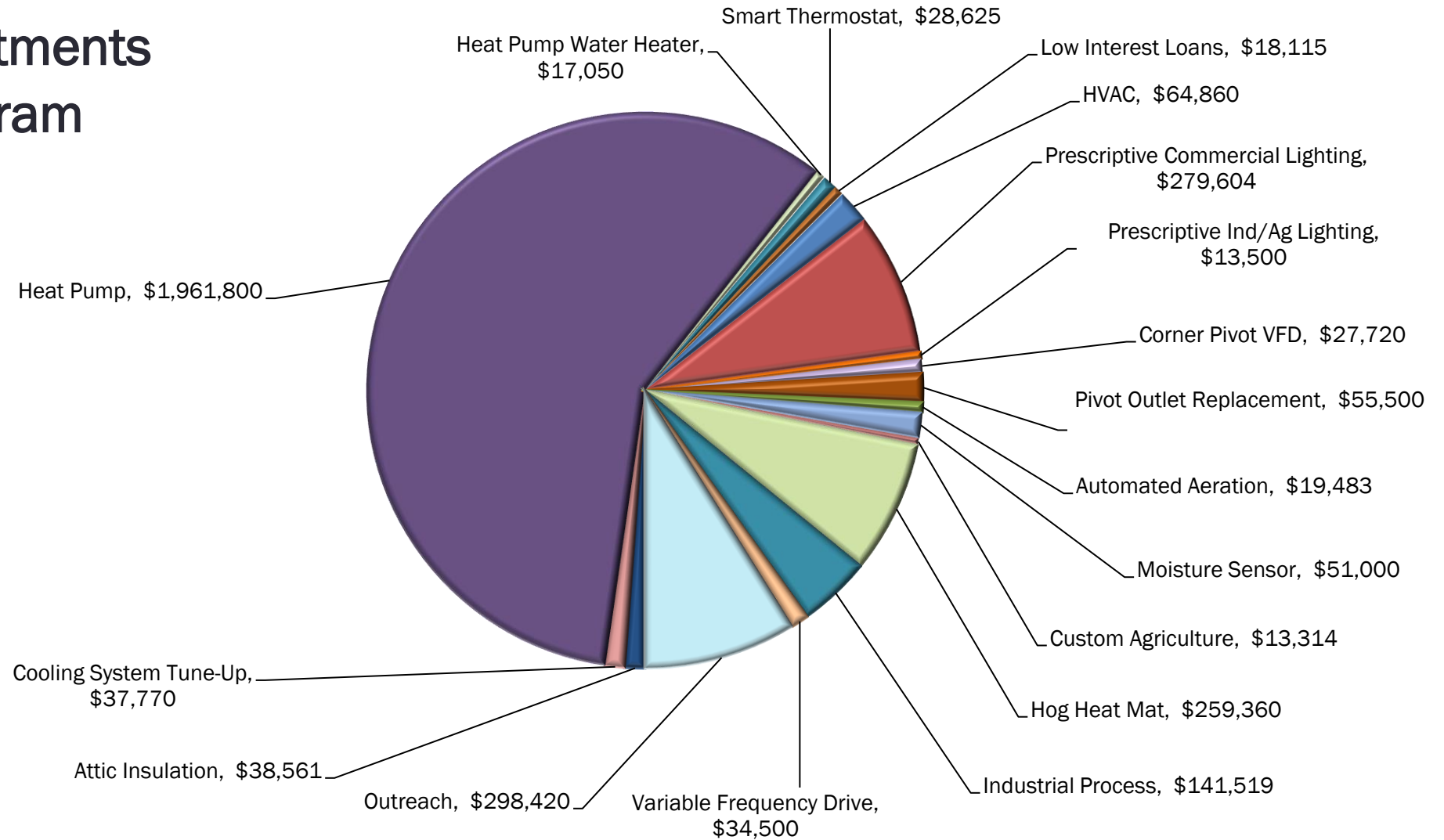
BP-SD-09, Energy Efficiency

2024 EnergyWiseSM Energy Efficiency Results

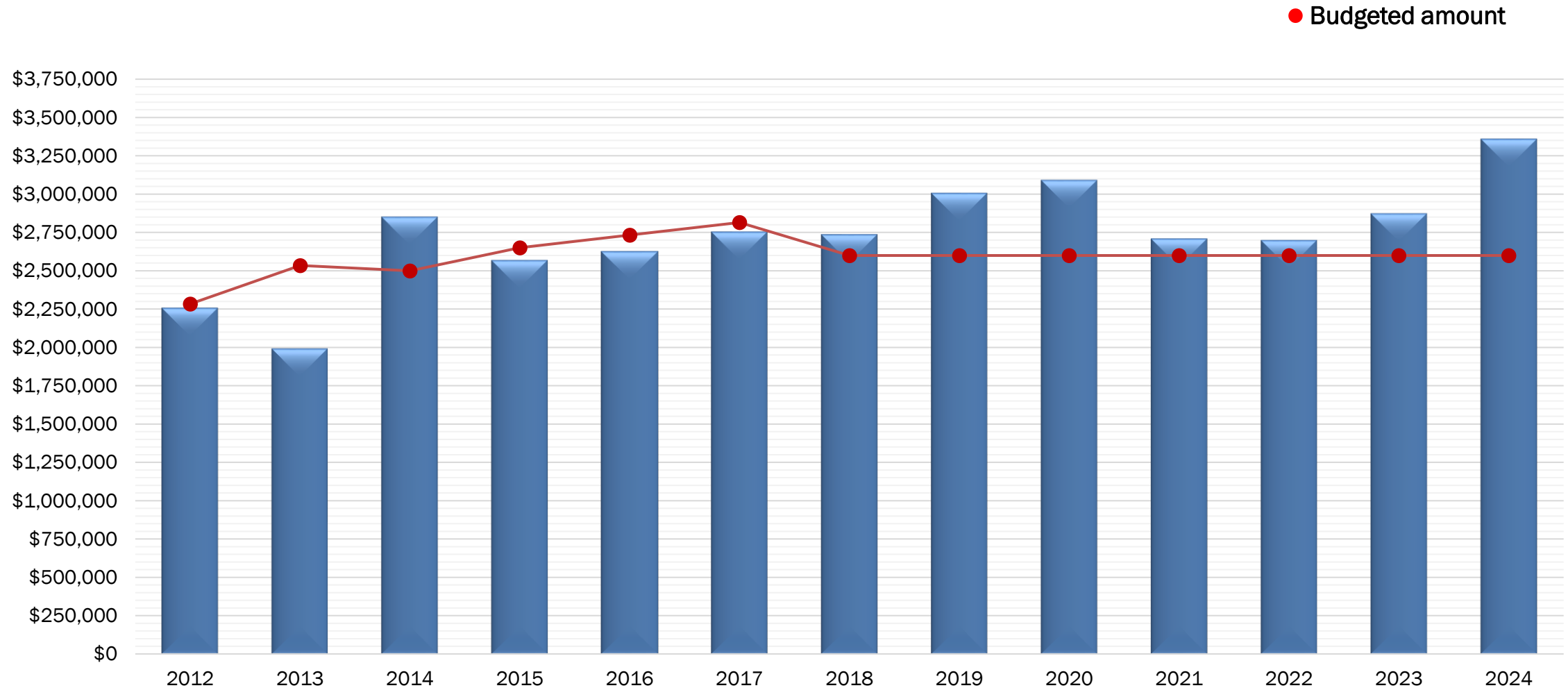
- \$2.6 M budgeted
- \$3.36 M invested*
 - ✓ \$1.96 M - High Efficiency Heat Pumps (Residential)
 - 1,738 incentives
 - ✓ \$1.4 M - Remainder of Programs
 - 3,421 incentives
- *EnergyWiseSM Annual Report for 2024, provides more details.
- Overall cost effectiveness of energy efficiency programs: \$0.013/kWh over LOM (Life of Measure)
 - Cost of Incentives / (Annual Energy Savings x Life of Measure)
 - Well below the 2024 avoided cost of \$0.028/kWh for firm load (Southwest Power Pool average market price for NPPD's load)

BP-SD-09, Energy Efficiency

2024 Investments per Program



Energy Efficiency Incentives by Year



2024 Energy Efficiency Incentives Budget = \$2.6 M



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Questions

Stay connected with us.



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