



Review of Strategic Directive BP-SD-10 Electrification of the Economy

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NPPD Board of Directors Meeting
Strategic Session
May 2024

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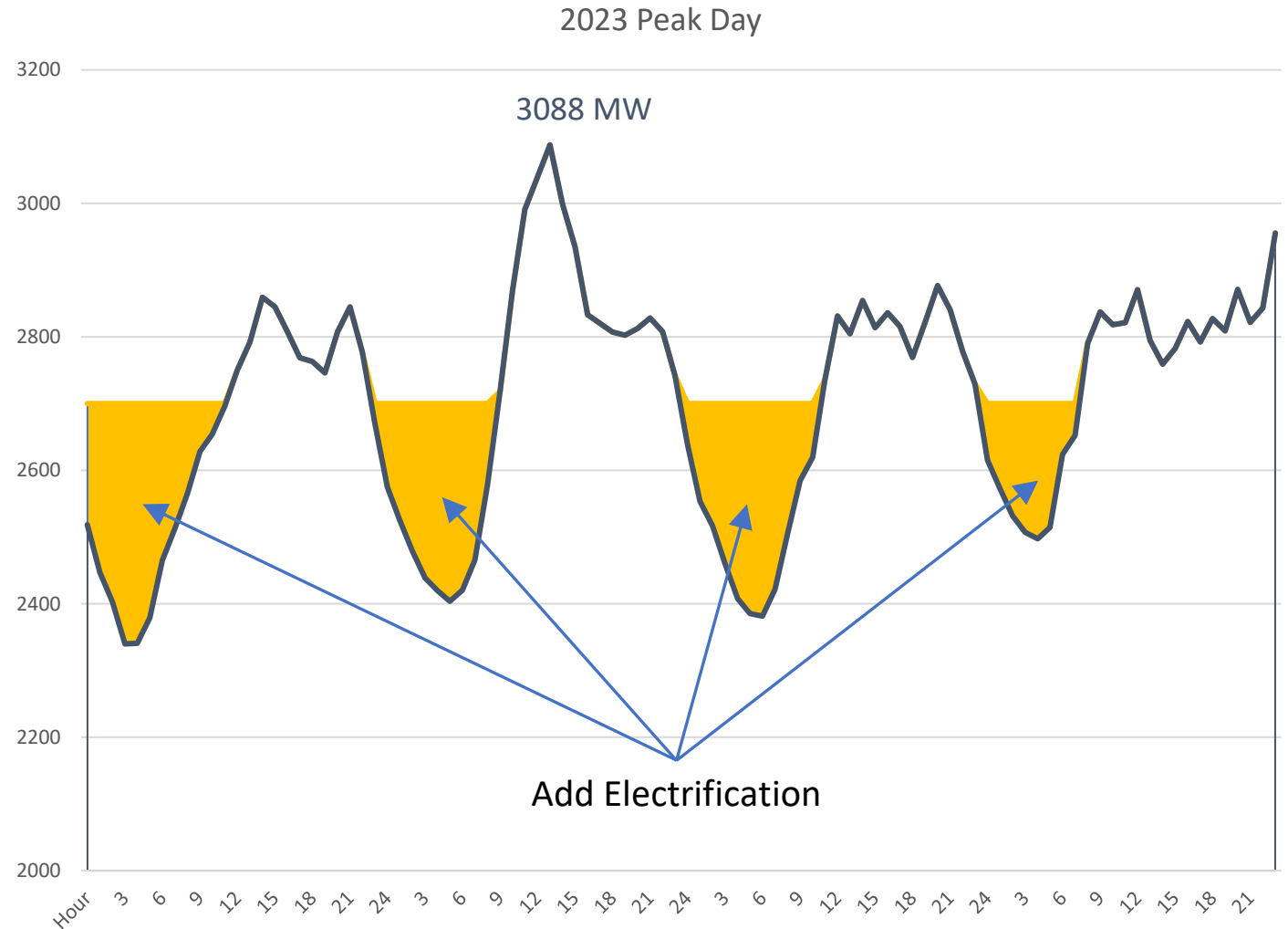
BP-SD-10, Electrification of the Economy

Nebraska Public Power District (NPPD) is committed to:

- Reduce the customers total energy cost
- Reduce greenhouse gas emissions
- Strategically add load that utilizes existing grid and generation
- Being a resource for technical information for our wholesale customers
- Provide a service that engages customers in a positive way
- Taking advantage of state and federal incentives, grants, and other opportunities

Transportation Electrification Goals

- **Overnight Charging Preferred**
 - ✓ Adds Load off peak
 - ✓ Keeps rates low
 - ✓ Time of Use Rates (TOU) can be designed to promote the usage on these off-peak periods



NPPD graph

Electric Vehicle Charging Levels

| | AC Charging Home, Fleet and Public Use | DC Fast Charging Public and Large Fleet Use |
|--|--|---|
| Type | Level 2 | Level 3 |
| Power | 208V or 240V 1 ph 3 kW to 19.2 kW 12 to 80 amps | 480V 3 ph 50 kW to 350kW 60 to 500 amps |
| Charge Time (Miles of range per hour of charge) | 6.6 kW – 20 to 25 miles 9.6 kW – 40 to 45 miles 19.2 kW – up to 60 miles | 50 kW – up to 150 miles 100 kW – up to 300 miles 350 kW – up to 260 in less than 30 minutes |
| Cost and complexity tends to increase the faster the charging level. | | |

EnergyWiseSM Programs: Electrification

Residential

- Level 2 Charging Stations
- Pre-Wiring for Charging Station
- Lawn & Garden
- Induction Cooking



Commercial / Industrial

- Charging Stations
 - Level 2
 - DC Fast Charger (DCFC)
- Pre-Wiring for Chargers
- July 1, 2024: reducing commercial incentives



Wholesale Customers

- Battery Electric Vehicles (EVs) for Check Out
- EV Advertising and Promotional Events

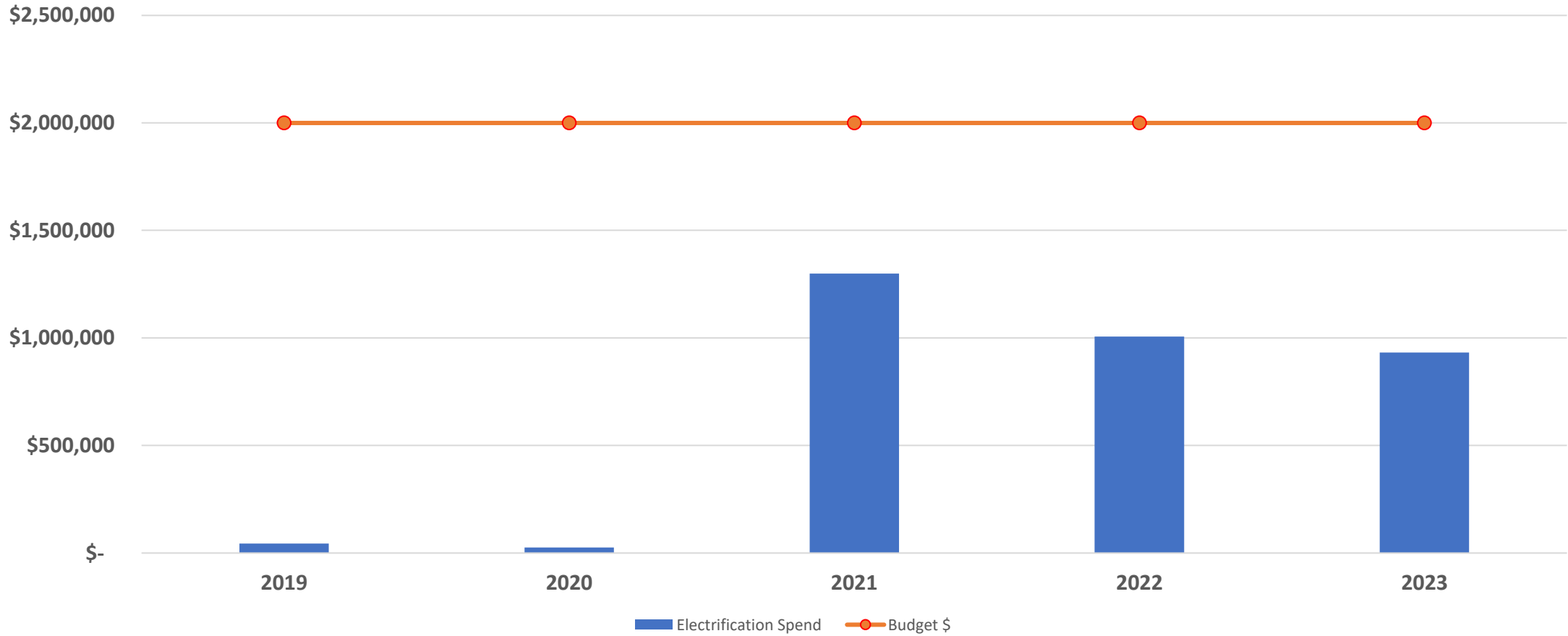
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BP-SD-10 Electrification Spend by Year

Includes Capital and O&M



BP-SD-10 Electrification 2023 Investment

| BP-SD-10-Electrification | Count | NPPD \$ |
|--|------------|-------------------|
| Residential Electric Vehicle* | 13 | \$ 52,000 |
| Residential ChargePoint Charging Station | 52 | \$ 26,000 |
| Residential Charging Station Pre-Wiring | 97 | \$ 46,351 |
| Utility/Non-Profit Owned Charger | 5 | \$ 387,306 |
| Commercial Charger and Conduit | 5 | \$ 57,459 |
| Induction Cooktop | 111 | \$ 48,700 |
| Electric Mowers | 337 | \$ 92,787 |
| Other Lawn and Garden** | 197 | \$ 18,974 |
| Wholesale Customer Advertising | 91 | \$ 12,408 |
| Totals | 908 | \$ 741,985 |

* 2022 Incentives paid in 2023

** Chainsaws, Tillers, and Snowblowers

National Electric Vehicle Infrastructure (NEVI)

- **Nebraska Plan**

- Nebraska targeted locations
 - ✓ Retail: Big Springs, Kearney, York
 - ✓ Wholesale: Gothenburg
 - ✓ Others: Kimball, Sidney, Omaha
- \$6 Million per year for 5 years
- 20% matching funds for host site/owner, 80% by NEVI program
- NPPD will not incentivize NEVI chargers starting July 1, 2024
- Requirements
 - ✓ 4 DCFC stations each capable of 150 kW charging
 - ✓ Within 50 Miles of next stations

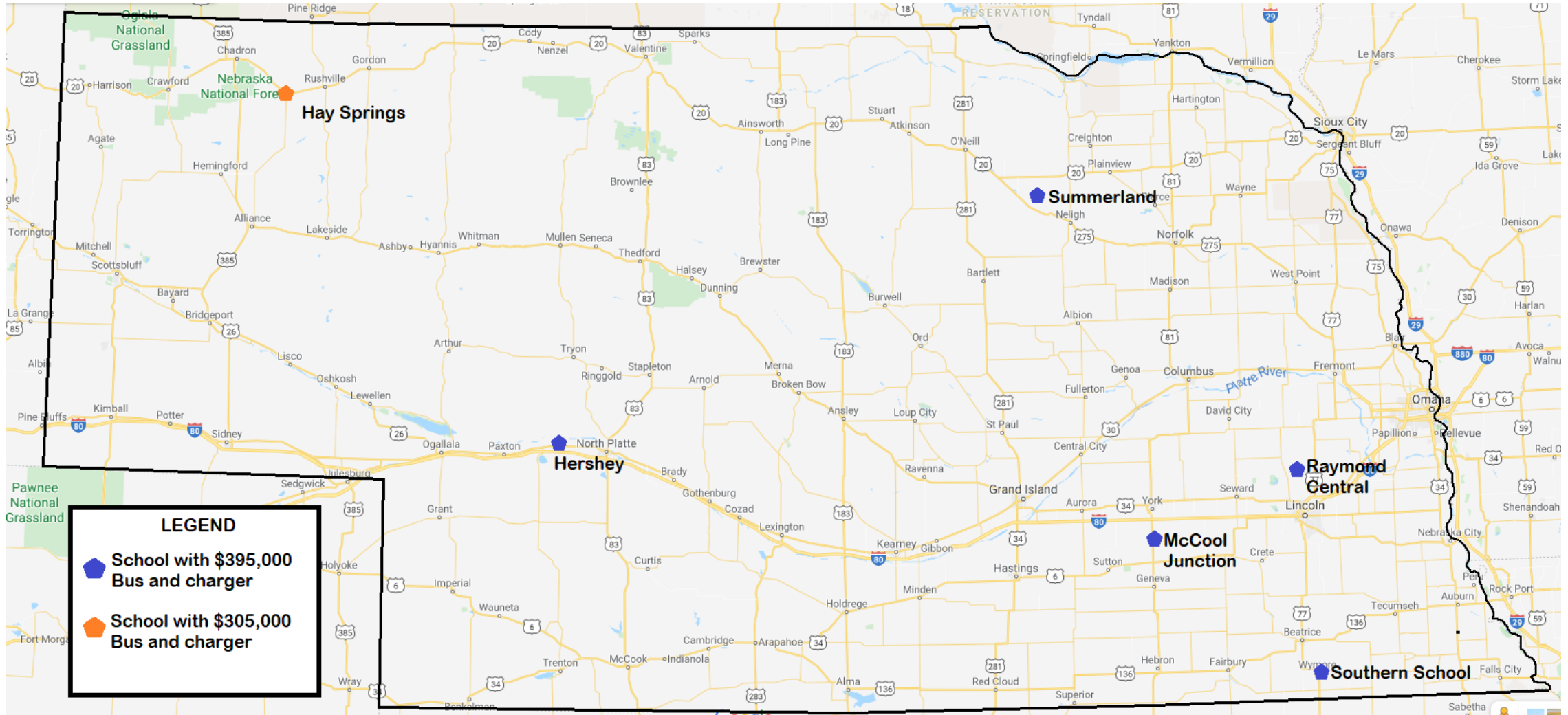
2024/2025 Program Changes

- **Proposed limits in effect 1 July 2024**
 - NPPD will not incentivize NEVI backed DCFCs.
 - Added Maximum for commercial “For Profit”
 - Added Maximum for “Non-Profit”
- **Potential 2025 Updates**
 - Focus on level 2 charging
 - Focus on commercial conduit (make ready)
 - Focus on residential pre-wiring (make ready)
 - Adjust Commercial DCFC (due to legislation)

Clean School Bus (CSB) Program

- **Infrastructure Investment and Jobs Act (IIJA or BIL)**
 - ✓ \$5 Billion from 2022 to 2026
- **Processed by Environmental Protection Agency (EPA)**
- **Replace Old Bus**
 - ✓ Scrap 2010 or older diesel-powered bus
 - ✓ Scrap, sell or donate 2011 or newer bus
- **Class 7+ Electric Bus gets \$375,000**
- **Class 3-6 Electric Bus gets \$285,000**
- **Schools also get \$20,000 for charging station infrastructure**

Electric School Bus Program



Electric School Bus Program (Cont'd)

- **Summerland (Elkhorn Rural PPD)**
 - ✓ Bus Received: November 2023
 - ✓ Charger: one L3 (30 kW)
 - 90% incentive from NPPD/Elkhorn
- **Raymond Central (Norris PPD)**
 - ✓ Bus Received: Spring 2024
 - ✓ Charger: Unknown
 - Eligible for 90% incentive from NPPD/Norris
- **Hershey (Dawson PPD)**
 - ✓ Bus Received: October 2023
 - ✓ Charger: one L3 (62.5 kW)
 - 90% incentive from NPPD/Dawson

Electric School Bus Program (Cont'd)

- **McCool Junction (Perennial PPD)**
 - ✓ Bus Received: October 24, 2023
 - ✓ Charger: one L2 (19.2 kW)
 - 90% incentive from NPPD/Perennial
- **Southern (City of Wymore)**
 - ✓ Bus Received: Oct 31, 2023,
 - ✓ Charger: two L2 (19 kW), one L3 (60 kW)
 - 90% incentive from NPPD/City of Wymore
- **Hay Springs (NPPD Retail)**
 - ✓ Bus Received: expected April 2024
 - ✓ Charger: planning one L2 (19.2 kW)
 - Planning 90% incentive



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Questions

Stay connected with us.



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