SD-7: Environmental Stewardship

Managing its interactions with the environment is essential to OPPD’s ability to serve customers, create value for stakeholders, and contribute to the well-being of the communities it serves and its employees.

Therefore OPPD shall:

• Operate in an environmentally responsible manner and strive for the continuous improvement of its environmental performance

• Conduct all of its operations in a manner that strives for the goal of net zero carbon production by 2050

• Conduct its business in a manner that meets all environmental regulatory standards, and go beyond compliance where practical
SD-7: Environmental Stewardship (continued)

• Be transparent by measuring and reporting its environmental performance on OPPD’s website

• Engage customers and stakeholders to promote energy conservation and efficiency and minimize environmental impact

• Advocate and educate local, state, and federal governments to protect and advance OPPD’s environmental impact
Operate in an environmentally responsible manner and strive for the continuous improvement of its environmental performance

OPPD's Passenger Car Fleet:
- 37 hybrid cars
- 5 all electric cars
- 4 extended range plug-in hybrids

More than 200 vehicles that are all electric, hybrid, or flex fuel

This Year:
- Adding one electric car
- Replacing compact sport utility vehicles and ½ ton pickups in the fleet with the recently available Hybrid Escape and hybrid F150’s

OPPD's Equipment:
- 45 all electric forklifts, yard carts, and man-lifts
- 3 plug-in buckets for line trucks

Next Year:
- Delivery of 2 more plug-in buckets for line trucks in the first quarter of 2021
- OPPD plans to continue replacing streetlight and trouble shooter style aerials with the plug-in hybrid models as units come up for replacement
Operate in an environmentally responsible manner and strive for the continuous improvement of its environmental performance

Investment Recovery

The District focuses on finding avenues for recycling:

2019

- Batteries – 9098 lbs.
- Metal – 76,564 lbs.
- Oil – 12,875 gallons
- Utility Poles – 1154 poles
- FCS Warehouse Contents - 2,560,000 lbs.
- Approximately 50% of fly ash recycled from North Omaha Station and 60% from Nebraska City Station
- Recycling materials also returned over $2M back to OPPD
Operate in an environmentally responsible manner and strive for the continuous improvement of its environmental performance.

Sustainability: Think Bigger

• Triple Bottom Line framework encompasses economic, social, and environmental performance.

• Evolved into an accounting framework and balancing act driven by a trade-off mentality.

• Instead imagine...

“A triple helix for value creation, a genetic code for tomorrow’s capitalism, spurring the regeneration of our economies, societies, and biosphere”

Harvard Business Review, “25 Years Ago I Coined the Phrase “Triple Bottom Line.” Here’s Why It’s Time to Rethink It,” John Elkington, June 2018
Conduct all of its operations in a manner that strives for the goal of net zero carbon production by 2050

Pathways to Decarbonization

• Organization engaged. All core teams active
• 121 generation technologies identified in exploratory phase
• Seven modeling vendor workshops to explore capabilities
• Eight Scope 1 Direct Emission sources complete
• Scope 2 and 3 in progress, including purchased goods/services, building consumption, purchased power
• Stakeholder work to date includes engagement with multiple interested community groups, new platform
Demand Side Management Portfolio Status

<table>
<thead>
<tr>
<th></th>
<th>2019 Actuals In Megawatts</th>
<th>2020 Plan In Megawatts</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Demand Response</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Smart Thermostat Program</td>
<td>6.560</td>
<td>5.000</td>
</tr>
<tr>
<td>Cool Smart</td>
<td>63.330</td>
<td>62.730</td>
</tr>
<tr>
<td>Business Interruptible</td>
<td>50.970</td>
<td>50.910</td>
</tr>
<tr>
<td><strong>Total Demand Response</strong></td>
<td>120.860</td>
<td>118.640</td>
</tr>
<tr>
<td><strong>Energy Efficiency</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HVAC Smart</td>
<td>1.415</td>
<td>1.500</td>
</tr>
<tr>
<td>Certified High Performance Homes</td>
<td>0.145</td>
<td>0.125</td>
</tr>
<tr>
<td>Smart Steps / Income Qualified Pilot</td>
<td>0.002</td>
<td>0.009</td>
</tr>
<tr>
<td>Business Prescriptive Rebates</td>
<td>3.679</td>
<td>4.000</td>
</tr>
<tr>
<td>Business Custom Rebates</td>
<td>0.653</td>
<td>0.400</td>
</tr>
<tr>
<td><strong>Total Annual Energy Efficiency</strong></td>
<td>5.894</td>
<td>6.034</td>
</tr>
<tr>
<td><strong>Total Cumulative Energy Efficiency</strong></td>
<td>36.282</td>
<td>41.781</td>
</tr>
<tr>
<td><strong>Total Annual Cumulative Demand Side Management</strong></td>
<td>157.142</td>
<td>160.421</td>
</tr>
</tbody>
</table>

Conduct all of its operations in a manner that strives for the goal of net zero carbon production by 2050.
Conduct all of its operations in a manner that strives for the goal of net zero carbon production by 2050

Electric Vehicle Rebate Program

- All available rebates in 2018 and 2019 were claimed.
- 2020 residential rebate promotions began in August with 10 rebates in progress.
- New in 2020 is a Fleet rebate with promotion beginning in September.

<table>
<thead>
<tr>
<th>Rebate Type</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Car/Charger Rebate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$4,500</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Car/Charger Rebate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$2,500</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Charger Only Rebate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$500</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home Wiring Rebate</td>
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<td></td>
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<tr>
<td>$100</td>
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<td></td>
<td></td>
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<tr>
<td>Fleet Car/Charger</td>
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</tr>
<tr>
<td>Rebate $2,500</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Fleet Charger Only</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rebate $500</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

OPPD EV Rebates Available by Year
Conduct all of its operations in a manner that strives for the goal of net zero carbon production by 2050

**EV Making an Impact**

- Since the rebate program began in 2018, OPPD has helped customers to save over 455,625 kg of Green House Gas emissions.
- Equivalent to planting 11,871 trees and letting them grow for 10 years!

*Emissions estimates supplied by ChargePoint*
Conduct its business in a manner that meets all environmental regulatory standards and go beyond compliance where practical

No violations of environmental permits that resulted in enforcement action or fines

Standard Compliance
35 environmental regulated permits held
- Consists of Air, Water, Waste, Natural Resources
  • Conducted monthly, quarterly, semi-annual, and annual internal inspections
  • Facilitated two virtual NPDES inspection by the NDEE (NCS and NOS)
  • Facilitated one virtual radiation inspection by the DHHS
  • Facilitated multiple city of Omaha and NDEE air inspections (NOS, NCS, SCS, CCS)

Beyond Compliance
• Plant wide Applicability Limit (PAL) Permit
• Low Emitter Status
• Near zero opacity excursions
• Complying with stormwater requirements at SCS, CCS, JSS though not required
• Land applying sediment from the Settling Basin for soil amendment instead of landfilling
• Prairie in Progress, Avian Protection, working with NGPC to conduct bird surveys, Dedicated Natural Resources role added
Transformer Oil PCB Sampling

- A database of transformer PCB levels is under development
- OPPD identified 21,000 transformers with unknown PCB levels
- Total number of transformers in service territory is 90,770
- Began in early 2020, Put on hold March 20th due to COVID impact
- Transformers Inspected with Project YTD: 1639
  - Transformers found 50-499 ppm = 79
  - Transformers found >500 ppm = 0
- Additional benefit of project - Other maintenance items have been identified early
  - 220 Minor Maintenance Items fixed
Low Emitter Status is achieved after 12 consecutive quarterly tests at 50% below the Mercury and Air Toxics Standard for that constituent, except for Hg, which requires annual testing.

<table>
<thead>
<tr>
<th>Unit</th>
<th>PM</th>
<th>HCl</th>
<th>Hg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nebraska City Unit 1</td>
<td>Obtained 1Q2019 1Q2022</td>
<td>6 of 12 Quarterly tests complete</td>
<td>Not Applicable*</td>
</tr>
<tr>
<td>Nebraska City Unit 2</td>
<td>Obtained 1Q2018 1Q2021</td>
<td>SO2 as surrogate</td>
<td>Not Applicable*</td>
</tr>
<tr>
<td>North Omaha Unit 4</td>
<td>Obtained 1Q2019 1Q2022</td>
<td>Obtained 3Q 2020 3Q2023</td>
<td>Obtained June 2016 June 2021</td>
</tr>
<tr>
<td>North Omaha Unit 5</td>
<td>Obtained 1Q2020 1Q2023</td>
<td>Obtained 1Q2019 1Q2022</td>
<td>Obtained June 2016 June 2021</td>
</tr>
</tbody>
</table>

* Continuous monitoring is used to demonstrate compliance
Be transparent by measuring and reporting its environmental performance on OPPD’s website

Environmental Programs

NATURAL RESOURCE MANAGEMENT

This section deals with OPPD’s stewardship ensuring OPPD conducts business and produces energy in an environmentally sensitive manner, that is transparent to OPPD customers. Learn more.

The Prairie Progress project is a joint effort with the Save Our Monarch Foundation. Learn more.

CORPORATE RESPONSIBILITY

OPPD relays information about programs and activities that govern utilities and the regulations utilities are required to adhere to. Learn more.

ENERGY EFFICIENCY

OPPD provides products and services aimed at improving energy efficiency and saving our customer-owners money. Learn more about the energy efficient products and services available. Learn more.

Environmental Reports

WATER PROTECTION PLAN

This report is designed to protect and conserve avian populations by reducing risks that result from interactions with utility facilities and activities. Read report.

FLEET EMISSIONS

In an effort to be more transparent, OPPD publishes emissions reports for our customer-owners to review. Learn more.

CORR RULE COMPLIANCE DATA & INFORMATION

This section contains reports specified in the rule by the Environmental Protection Agency (EPA). See reports.
Be transparent by measuring and reporting its environmental performance on OPPD’s website.

- 21% Decrease over last ten years
- Note: North Omaha units 1, 2, and 3 ceased coal operation in 2016
Be transparent by measuring and reporting its environmental performance on OPPD’s website

- 35% Decrease over last ten years
- Note: North Omaha units 1, 2, and 3 ceased coal operation in 2016
Be transparent by measuring and reporting its environmental performance on OPPD’s website

- 51% Decrease over last ten years

- Note: North Omaha units 1, 2, and 3 ceased coal operation in 2016
Be transparent by measuring and reporting its environmental performance on OPPD’s website

- 95% Decrease over last ten years
- Prior to 2012 emissions were estimated using EPA methodology
- Actual test data used post 2012
- North Omaha units 1, 2, and 3 ceased coal operation in 2016
- Hg controls implemented for MATS rule compliance in 2016
Advocate and educate local, state, and federal governments to protect and advance OPPD’s environmental impact

- From April to July 2020 the live feed had reached over 4 million people worldwide
Advocate and educate local, state, and federal governments to protect and advance OPPD’s environmental impact

- Letters and testimony to support operational environment for solar in various Sarpy County jurisdictions (Papillion, Sarpy County, Springfield, Gretna)
- Promoted speakers' bureau education to policymakers on renewable energy topics including sustainability and environmental plans:
  - Electric Vehicles - Decarbonization Plan
  - Battery Storage - Renewable Energy Portfolio
- Provided Power with Purpose presentations to various Sarpy County community leaders:
  - Sarpy County Commissioners
  - Sarpy County Wastewater Agency Representatives
  - City Administrators (Bellevue, La Vista, Papillion, Springfield, Gretna)
  - Gretna City Council members
  - Springfield Planning Commissioners
  - Springfield City Councilmembers
Energy Efficiency Education

New EE Webpages

- Interactive home, expanded EE Tips, Usage Calculator, and new DIY Videos
- 55,000+ Site visits since launch on 10/2/2019
- EE Tips Page: over two (2) minutes Avg. Time on Page
- Avg. 580 site visits per month

EE Presentations

- 12 presentations in 2019 to 300 customers and students
- Presented at: Facebook, Lozier, various elementary schools, Bennington Women's Club and more
- Presentations tailored to the customer's needs
Customer-Owned Generation Process Improvements

Rich Content on OPPD.com
Intuitive Online Application
Trained OPPD Personnel and Contractors
Streamlined Internal Processes
ICIS Updated Daily for Safety
New Interconnection Guide for Contractors

“I looked at OPPD’s customer-owned generation web pages today. They were great! They had more information than I could find at other power companies.”...Jessica
Growth in Small Customer-Owned Generation (25 KW or Less)
Recommendation

- The System Management Committee has reviewed and accepted this Monitoring Report for SD-7 and recommends that the Board find OPPD to be sufficiently in compliance with Board Policy SD-7