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VIA ELECTRONIC FILING

April 26, 2024

Public Utility Commission of Oregon
Filing Center
201 High Street SE, Suite 100
P.O. Box 1088
Salem, Oregon 97301

RE: UM 2035 – Idaho Power Company's 2023-2025 Transportation Electrification Plan

Attention Filing Center:

Attached for electronic filing is Idaho Power Company's 2023-2025 Transportation Electrification Plan Report.

If you have any substantive questions about the plan, please contact Regulatory Analyst Jessi Brady at 208-388-5764 or jbrady@idahopower.com.

Very truly yours,



Matthew T. Larkin

MTL/sg
Enclosure

2023-2025 Transportation Electrification Plan Year-End 2023 Report

April 2024

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Executive Summary

Idaho Power's Year-End 2023 Transportation Electrification ("TE") Report discusses all TE-related activities completed under the Company's 2023-2025 TE Plan in the 2023 calendar year. It includes a discussion of expenditures, performance metrics, and a benefit-cost analysis.

Idaho Power's 2023 – 2025 TE Plan presents a strategy for addressing market barriers to electric vehicle ("EV") adoption in the Company's Oregon service territory. It is focused primarily on education, outreach, and technical assistance and is intended to build a foundation of understanding and awareness upon which future efforts may be built.

Procedural Background

Executive Order 20-04, issued on March 18, 2020, directed the Public Utility Commission of Oregon ("OPUC") to "encourage electric companies to support transportation electrification infrastructure that supports GHG reductions, helps achieve the transportation electrification goals set forth in Senate Bill 1044, and is reasonably expected to result in long-term benefit to customers." Enacted in 2021, House Bill 2165 introduced new provisions related to TE and amends existing rules to further accelerate investment in TE infrastructure and programs.

In response to this new legislation, OPUC Staff ("Staff") and stakeholders engaged in workshops throughout 2021 to develop a new approach to transportation electrification planning and to create a new TE investment framework. These efforts culminated in permanent changes to Division 87 of the Oregon Administrative Rules addressing utility transportation electrification plans¹, as well as a guidance document from Staff².

The adopted TE plan rules and guidelines directed utilities to file updated TE plans every three years that include the utility's portfolio of future transportation electrification actions. In addition, utilities are directed to file an annual report that evaluates the most recently accepted TE Plan.

On December 23, 2022, Idaho Power filed its draft TE Plan under the new rules and guidelines. Staff filed Comments on February 10, 2023. Idaho Power filed Reply Comments on February 24, 2023, and a revised TE Plan for Commission acceptance on March 10, 2023. At its public meeting on May 2, 2023, the OPUC accepted Idaho Power's revised TE Plan.³

¹ *In the Matter of Revisions to Division 087 Administrative Rules*, Docket No. AR 654, Order No. 22-336 (Sep. 8, 2022).

² *In the Matter of Revisions to Division 087 Administrative Rules*, Docket No. AR 654, Order No. 22-158 (May 10, 2022).

³ *In the Matter of Idaho Power Company, Application for Transportation Electrification Plan*. UM 2035, Order No. 23-159 (May 4, 2023).

2023 TRANSPORTATION ELECTRIFICATION ANNUAL REPORT

2023 TE Expenditures

OAR 860-087-0030(1)(a-b)

Idaho Power developed a budget that balances the Company's desire to accelerate the adoption of electric vehicles with the equity concerns and economic realities of the region. The Company has aimed to leverage existing events and partnerships and prioritize lower cost marketing channels such as social media and electronic communications where feasible. Idaho Power did not participate in the Clean Fuels Program in 2023 nor was it subject to the Monthly Meter Charge, so the Company did not collect revenue from these programs.

Idaho Power's approved TE budget and actual expenditures for 2023 are included in Table 1 below. All TE funding is operation & maintenance ("O&M") sourced.

Table 1

2023 Oregon TE Approved Budget and Expenditures

TASK DESCRIPTION	2023 Approved Budget	2023 Actual Expenditures
Admin Staff Labor (O&M)	\$8,376	\$4,930
Admin Staff Business Expense	\$650	\$476
Marketing	\$2,000	\$1,648
Training, Education, & Workshops	\$3,550	\$1,660
Total	\$14,576	\$8,714

Evaluation of TE Programs

OAR 860-087-0030(1)(c)

Idaho Power's 2023-2025 TE Plan balances the goal of supporting electrification with supporting its customers by ensuring electric prices stay as low as reasonably possible and program expenditures do not place an undue burden on its small Oregon customer base. Accordingly, Idaho Power's strategy to accelerating TE in its Oregon service area has been focused on three key areas:

1. Conducting at least three outreach activities per year.
2. Providing resources to customers.
3. Providing targeted technical assistance to those interested in learning more about EVs, installing charging, or converting their fleet.

Outreach Activities

The Company performed several forms of outreach in 2023, including bill inserts and newsletters, social media posts, and attending community events. A full list of outreach items is provided in Table 2 below.

Table 2
2023 TE Outreach Activities

Type	Description	Month	Customers Reached/ Impressions	Appendix
Bill Insert	Describes the benefits of EV ownership and provides a link to the Idaho Power EV website	February	12,569	1
Visitor Guide	Page about tourism in Vale within the Eastern Oregon visitor guide - includes information on the EV charging station in Vale and a link to Idaho Power's EV website.	May	100,000 ⁴	2
Newsletter	Includes information on EV rebates for Oregon business customers	June	358 opens, 4 link clicks	3
Event – Vale Flag Day	Idaho Power booth with EV educational resources, including specifics on Oregon EV rebates – also a Ford Lightning on display	June	30	
Event – Malheur County Fair	Idaho Power booth with EV educational resources, including specifics on Oregon EV rebates – also a Ford Lightning on display	August	23,000	
Event – Ontario Chamber of Commerce	Idaho Power presentation on EVs, including information on Oregon rebates for businesses – also a Ford Lightning on display	September	25	
Event – Webinar	Multi-family EV Charging Strategies	April	346	
Social Media	LinkedIn Post – Oregon EV Rebates	June	14,733 reached, 85 link clicks	
Social Media	Facebook Post – Vale Flag Day	June	1,569 reached, 11 engagements	4
Social Media	Facebook Post – Malheur County Fair	August	6,400 reached, 56 engagements	5

In addition, as recommended by OPUC Staff, Idaho Power met with Forth, a nonprofit organization dedicated to increasing equitable access to electric transportation, in June 2023. The purpose of the meeting was to brainstorm ideas to accelerate TE in rural areas like eastern Oregon. Key suggestions from that meeting included:

- Continue to leverage existing events and meet people where they are
- Work with chambers of commerce

⁴ Number of impressions is according to the creator of the visitor guide.

- Continue to build relationships with other assistance providers like energy efficiency program administrators

Idaho Power will continue to engage with Forth as it works to improve its outreach activities and increase TE awareness.

Resources

Idaho Power has readily available EV materials and resources to help customers interested in learning more about EVs. These include marketing materials like newsletters, brochures, bill inserts, and Idaho Power’s EV website.

In 2023, in response to feedback provided by stakeholders during the development of the 2023-2025 TE Plan, Idaho Power developed and launched the Spanish version of its EV website.⁵ The Company also updated informational signage used on display vehicles regarding rebates, incentives, and EV benefits.



Figure 1
Spanish Version of EV Website

Other examples of marketing materials utilized in 2023 are included in Table 2 and are also provided as Appendices 1, 2, 6, 7, and 8.

Technical Assistance

Idaho Power has dedicated TE staff members that provide technical assistance and serve as the utility representative and EV subject matter expert for customers and the community. TE staff

⁵ <https://idahopower.chooseev.com/spanish/about/>

is available by emailing ev@idahopower.com or calling the Idaho Power Customer Service Center. The Customer Service Center offers multilingual customer service representatives and translation services.

In 2023, TE staff members participated in local and state strategic TE efforts including:

- Served on the board of directors for Forth and the Treasure Valley Clean Cities Coalition (serving the greater Boise area into eastern Oregon). Both Forth and the Treasure Valley Clean Cities Coalition are involved in general education about alternative fueled vehicles, including regional and national webinars and other training and educational opportunities. Idaho Power promotes these activities to customers through its energy advisors.
- Tracked and provided input on strategic state (Idaho and Oregon) efforts including the National Electric Vehicle Infrastructure (“NEVI”) programs and the Idaho Strategic Energy Alliance Alternative Fuels Task Force.
- Served on the State of Idaho NEVI program committee.

In addition, Idaho Power’s energy advisors proactively shared with customers information on Oregon EV incentives and rebates, including the Oregon Department of Transportation’s Community Charging Rebate Program,⁶ and the U.S. Environmental Protection Agency’s Clean School Bus Program.⁷ As a result of these conversations, one commercial customer in Idaho Power’s Oregon service area has expressed interest in installing level 2 charging stations and a second customer is looking at electric fleet vehicles. Idaho Power will continue to work with these customers as they move forward in their decision-making process.

Evaluation of Performance Area Categories

OAR 860-087-0030(1)(d)

Given Idaho Power’s service area characteristics and its TE Plan focused on education and outreach, metrics related to infrastructure and program equity are less applicable and/or do not provide value in evaluating the TE Plan. However, Idaho Power understands the importance of metrics as both a quantitative measure of success and a way to track improvements over time. Accordingly, in its 2023-2025 TE Plan, Idaho Power committed to providing the following metrics in its annual reports:

- 1) Number of EVs registered in the Oregon service area and the associated environmental impact
- 2) Number of Electric Vehicle Supply Equipment (“EVSE”) ports by station type
- 3) Response rate to customer surveys and changes in survey responses
- 4) Success of outreach efforts measured through total customers reached and/or engagement with outreach efforts

⁶ <https://www.oregon.gov/odot/climate/pages/communitychargingrebates.aspx>

⁷ <https://www.epa.gov/cleanschoolbus>

Number of EVs and Environmental Impact

From October 2022 to year-end 2023, the number of EVs registered in Idaho Power’s Oregon service area increased by 87 percent. Updated EV registration numbers are provided in Table 3 below.

Table 3
EVs Registered in Idaho Power’s Oregon Service Area

Vehicle Type	October 2022	Year-End 2023	Change
Battery Electric Vehicle (“BEV”)	37	75	103%
Plug-In Hybrid Electric Vehicle (“PHEV”)	15	22	47%
Total	52	97	87%

77 percent of EVs (75 out of 97) registered in Idaho Power’s Oregon service area are BEVs, which will not emit any tailpipe emissions. The remaining 23 percent are PHEVs, which can operate on electricity only, gasoline only, or some combination of electricity and gasoline. A PHEV operating on electricity only (like a BEV) does not generate any tailpipe emissions. When a PHEV is operating on gasoline only, it creates tailpipe emissions based on the PHEV’s gasoline fuel economy. Tailpipe emissions for a PHEV operating on both electricity and gasoline cannot be calculated without detailed information about how the PHEV operates.

Greenhouse gas emissions reductions from the electric vehicles in Idaho Power’s service area are available from the Oregon EV Dashboard, maintained by the Oregon Department of Energy. Modeled based on a 2021 Hyundai Kona ICE vs. a 2021 Kona EV traveling 11,556 miles per year, the gas-powered version emits 10,038 lbs. carbon-dioxide equivalent (“CO₂e”) while the electric version in Idaho Power’s service area would emit just 2,725 lbs. CO₂e per year for a savings of 7,313 lbs. CO₂e per BEV per year⁸. Plug-in hybrid savings would be less assuming some portion of driving is done using gasoline.

In addition, the Oregon Department of Environmental Quality calculates annual metric tons CO₂e emissions per megawatt-hour through its Greenhouse Gas Reporting Program.⁹ Based on Idaho Power’s 2022 value of 0.357, this would equate to 3,031 lbs. CO₂e per year for a savings of 7,007 lbs. CO₂e per BEV per year. Based on 75 BEVs registered in Idaho Power’s Oregon service area, that equates to an estimated savings of 525,525 lbs. CO₂e in 2023.

⁸ Annual EV Emissions from vehicle fueled in Idaho Power’s service area: <https://www.oregon.gov/energy/Data-and-Reports/Pages/Oregon-Electric-Vehicle-Dashboard.aspx>

⁹ <https://www.oregon.gov/deq/ghgp/Pages/GHG-Emissions.aspx>

Table 4 below details the non-greenhouse gas emissions reductions from 75 electric vehicles in Idaho Power’s Oregon service territory. It includes both the reduction in tailpipe emissions from gas-powered vehicles and the increase in emissions from EV charging.

Table 4

Non-Greenhouse Gas Emissions based on 75 BEVs

Pollutant	Tailpipe Emissions		EV Emissions		Net Emissions
	Grams per Mile ¹⁰	Total Annual Pounds	Grams per Mile ¹¹	Total Annual Pounds	Total Annual Pounds
Total Hydrocarbons (HC)	0.307	587	0.009	17	-570
Carbon Monoxide (CO)	3.726	7,119	0.047	90	-7,029
Nitrogen Oxides (NOx)	0.159	304	0.062	119	-185
PM2.5	0.003	6	0.007	13	7

* Average miles/vehicle per year: 11,556¹²

* Average miles/kWh: 3

Charging Stations in Idaho Power’s Oregon Service Area

In 2023, three new charging stations were installed in Idaho Power’s Oregon service area. These include an additional Tesla Supercharger site in Ontario and Level 2 chargers at the Toyota dealership and Holiday Inn in Ontario. The below table includes total charging ports by station type as of year-end 2023.¹³

Table 4

Charging Stations in Idaho Power’s Oregon Service Area

Charging Level	Year-End 2023
Level 2	18
Direct Current Fast Charging (“DCFC”)	20
Total	38

¹⁰ Emissions from Light Duty Vehicle: <https://www.bts.gov/content/estimated-national-average-vehicle-emissions-rates-vehicle-vehicle-type-using-gasoline-and>

¹¹ EV emissions are based on emissions rates for Idaho Power’s generation, contained in Appendix 9.

¹² Average miles/vehicle per year in 2022: Oregon 11,556: <https://www.oregon.gov/energy/Data-and-Reports/Pages/Oregon-Electric-Vehicle-Dashboard.aspx>

¹³ Idaho Power did not include a comparison to October 2022 as it has switched to using its own EV website for charging station data, as opposed to Plugshare.com. The data is inconsistent between the two sources, and does not result in an accurate comparison. Idaho Power will utilize its EV website for charging station locations for future reporting.



Figure 2
Holiday Inn Tesla Supercharger in Ontario



Figure 3
Toyota Dealership Level 2 Chargers

Customer Survey Responses

Idaho Power did not conduct a customer survey in 2023 and instead relied on the survey conducted in July 2022 to inform its 2023 TE activities. To avoid survey fatigue, Idaho Power will survey customers approximately every 2 years. The Company's next survey will be in 2024.

Success of Outreach Efforts

Please see Table 2 for the metrics associated with each of the Company’s 2023 outreach activities.

Benefit-Cost Analysis

OAR 860-087-0030(1)(e)

To determine the cost effectiveness of the 2023 actual expenditures and remaining 2024-2025 budgeted expenditures, Idaho Power performed three cost/benefit analyses for its TE Plan. These include:

- Participant Cost Test (“PCT”) - the costs and benefits to the EV owner
- Ratepayer Impact Measure (“RIM”) - the cost and benefits to Idaho Power customers
- Societal Cost Test (“SCT”) - the costs and benefits to all Oregon residents

The results of each test are below. Overall, the Company found that the TE Plan will provide an estimated net benefit (i.e., a ratio greater than 1) according to all three tests.¹⁴ The improvement in the cost-effectiveness is largely due to the higher than anticipated electric vehicle registrations in 2023 and resulting increase in projected EV registration in 2024 and 2025. Additionally, less costs were incurred in 2023 as fewer charging stations were installed in the region than initially forecasted.

Table 5

Results of the 2023-2025 Benefit/Cost Analysis

TASK DESCRIPTION	PCT	RIM	SCT
Benefits	\$7,091,515	\$776,007	\$5,264,993
Costs	\$2,613,558	\$564,321	\$3,438,392
Ratio	2.71	1.38	1.53

To arrive at these results, the Company analyzed eight different cost/benefit components as outlined below. The components were updated based on 2023 actuals and updated forecasts for 2024 and 2025.

¹⁴ Incremental EV sales attributable to Idaho Power efforts are based on the difference between the High and Medium EV adoption forecast in the Company’s 2022 Distribution System Planning Report – Part 2, Docket No. UM 2196, adjusted based on actual 2023 registration data.

Table 6
Benefit/Cost Analysis Components

Cost/Benefit Component	PCT	RIM	SCT
Incremental EV Cost	Cost		Cost
Federal and State EV Tax Credit	Benefit		
EV O&M Savings	Benefit		Benefit
Fuel Savings	Benefit		Benefit
Electricity Supply Costs for EV Charging		Cost	Cost
Charging Infrastructure Cost	Cost		Cost
Electricity Bill for EV Charging	Cost	Benefit	
Emission Savings			Benefit
Program Budget		Cost	Cost

Ratepayer Impact

OAR 860-087-0030(1)(f)

Idaho Power did not use customer funds for TE programs included within the TE Plan.

Impact to Innovation, Competition, and Customer Choice in Oregon

OAR 860-087-0030(3)(g)

Idaho Power expects that any material impact on the EV market in its Oregon service area will not occur for several years until greater adoption is achieved. Idaho Power does not intend to own or operate stations outside of public-facing properties it owns such as visitor centers and campgrounds.

CONCLUSION

Throughout 2023, Idaho Power's TE efforts were focused on improving visibility and awareness of EVs in its Oregon service area through outreach, education, and technical assistance. Interest in transportation electrification is limited – but growing – in the eastern Oregon region. Idaho Power is optimistic that with continued incentives to purchase an EV or install charging infrastructure, improvements to battery technology, and increased customer awareness, EV adoption will continue to grow in the region.

BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON

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Appendix 1
Bill Insert – EV Ownership Benefits

April 26, 2024

Consider an Electric Vehicle (EV)

With prices among the lowest in the nation, record reliable service and clean-energy goals, Idaho Power proudly supports customer use of EVs.



WANT TO LEARN MORE?

- ✓ Calculate savings
- ✓ Compare cars
- ✓ Learn about Oregon tax credits and incentives
- ✓ Find charging stations
- ✓ Learn about providing charging stations at your business

Visit idahopower.com/EV

 **IDAHO POWER**®

An IDACORP Company

Why choose an EV?



Fuel Savings

Mile for mile, it **costs one-third to half** the amount to fuel an EV compared to a gas-powered vehicle.



Better Air Quality

With no tailpipe emissions, all-electric vehicles **don't contribute to air pollution.**



Less Maintenance

All-electric vehicles have fewer moving parts and fluids, resulting in **lower maintenance costs.**



Performance

With instant acceleration, EVs are fun, quiet and **easy to drive.**

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Appendix 2
2023 – 2024 Eastern Oregon Visitor Guide

April 26, 2024

Drexel H. Foundation

Rest, Repair, Recharge & Rejuvenate in Downtown Vale

We listened to the youth from Drexel Foundation's Engaging Young Voices in Shaping our community & transformed to action:

- Electric vehicle charging station: Free to charge all EV car types dual ports Level 2
- A bike repair station: Free use with tools & pump for fixing bikes & skateboards
 - Free Map for a self-guided tour: sharing 28 public art assets in Vale
- Outdoor Displays of untold stories: showcasing the inclusivity and diversity reflected in the public conversation of Malheur County history
- QR codes of historic buildings: Historic Photos to learn more about 10 historic buildings in Vale
- For more information about these Free amenities or our Free programs like us on  Facebook &  Instagram: [drexelfoundation](https://www.instagram.com/drexelfoundation)



Find it all at National Historic Register Grand Opera House at 147 Main Street N. Vale, Oregon on the Authentic Oregon Trail near the crossroad of Hwy 20 & Hwy 26. Find more info at www.thedrexelfoundation.org

Drexel H. Foundation's mission is to enrich the lives of youth & families by providing art, humanities and multicultural experiences and to restore & preserve historical buildings in rural Eastern Oregon. We provide FREE multidisciplinary Art Programs for children and families. See the banner on site thanking all our project partners.

Find more local charging stations at idahopower.com/ev

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OF OREGON

IDAHO POWER COMPANY

Appendix 3
EV Network Newsletter

April 26, 2024

Best, Patti

From: Idaho Power <hello@idahopower.com>
Sent: Friday, June 9, 2023 8:01 AM
To: Best, Patti
Subject: Idaho Power's EV Network Newsletter



PATTI, thank you for continuing to be a part of Idaho Power's **EV Network!** Below you'll find the latest EV news and events at Idaho Power.

If you have family or friends who own an electric vehicle or are interested in learning more, please invite them to [join](#).

Father's Day Car Show

Looking for something to entertain dad on Father's Day? Check out the [20th Annual Downtown Boise Father's Day Car Show](#). The show is free and celebrates transportation, both past and future, alongside downtown's vibrant food and shopping scene in the heart of Idaho's beautiful capital city.

While you're there, be sure to stop by and check out Idaho Power's EV and talk to our staff about all things electrification!

When: Sunday, June 18, 9 a.m. to 3:30 p.m.

Where: Three downtown Boise locations

- In front of the Idaho Capitol building, along Jefferson St. between 6th St. and 9th St.
- 8th St., between Bannock St. and State St.
- Capitol Blvd., between Bannock St. and Jefferson St.

We hope to see you there!



Rebates for Oregon Business Customers

We're sharing an exciting opportunity for Oregon business customers! Starting June 13, Oregon businesses can apply for a rebate to install a public EV charging port at their business or multifamily housing unit. Rebates range from \$4,250-\$5,500 per level 2 charging port and cover up to 75% of eligible costs.

The Community Charging Rebates program is part of Oregon Department of Transportation's (ODOT) \$100M commitment to accelerate the development of EV charging along major roads and within Oregon communities over the next five years.

Visit [ODOT's website](#) to learn more.



Idaho Power Hosts Fleet Electric Vehicle Open House

Idaho Power recently hosted an open house in Twin Falls – appropriately dubbed “Electric Avenue” – to talk with area businesses interested in electrifying their fleet vehicles. We showed off our fleet of electric passenger vehicles, a forklift and our Ford Lightning truck. A representative from the Treasure Valley Clean Cities Coalition and City of Boise was also on hand to showcase their electric fleet vehicles and educate customers about EVs, as well as reps for Mack Trucks and Soletac electric tractors. The event was a great way for area businesses to learn about EV best applications, benefits/costs and how to fuel.

Interested in learning more about EVs? Check out our [website](#) to compare cars, calculate savings and so much more.

Saving Energy This Summer

Summer weather has arrived, and that can mean increased energy use (and higher bills) as we cool our homes and businesses. Here are some low- and no-cost tips to help you stay cool and manage your summer energy use.

- **Check your thermostat setting and align it with your comfort and budget.** In the warmer months, each degree you raise your thermostat reduces cooling costs by 2-3%.
- **Use ceiling and box fans instead of reducing the A/C temperature.** Fans can help you feel up to four degrees cooler. But remember: fans

cool people, not air, so remember to turn them off when you leave the room.

- **Do laundry and run the dishwasher in the early morning or late evening hours** to avoid adding heat to your home during the warmest part of the day.

For more energy-saving tips and programs, visit idahopower.com/save.



1221 W. Idaho St., Boise, ID 83702

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Appendix 4
Facebook Post – Vale Flag Day

April 26, 2024



Idaho Power

Jun 12

Come see us tomorrow at Vale's Art in the Park event held at Wadleigh Park from 9 a.m. to noon! We'll have our electric Ford Lightning truck on display and an employee onsite to chat all things electric vehicles and Idaho Power.

The Drexel Foundation is sponsoring this FREE fun event that will include painting the Vale Park playground, playing games and a visual arts competition.

For more information, visit thedrexelfoundation.org/.

[Show Less](#)



Like



Comment



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Appendix 5
Facebook Post – Malheur County Fair

April 26, 2024



Idaho Power

Aug 3

It's fair season! Come stop by the Malheur County Fair and chat with our energy advisors and check out the Ford Lightning electric truck we'll have on display. The fair runs through August 5. We hope to see you there!



BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON

IDAHO POWER COMPANY

Appendix 6
Display Material – EV Website

April 26, 2024

You can't spell

LOVE without EV



Visit idahopower.com/ev

- Discover the benefits:** Fuel savings, fewer emissions, instant acceleration and a smooth ride.
- Calculate your savings:** Mile for mile, it costs less to drive an EV.
- Compare cars:** Find an EV with the range you need.
- Find a charging station:** Locate a public charging station or learn about home charging options.
- Sign up for our EV network:** Join to hear about EV opportunities and news from Idaho Power.



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Appendix 7
Display Material – Oregon EV Rebates

April 26, 2024

Electric Vehicle Rebates

Electric Vehicle Federal Tax Credit

Up to \$7,500 for purchase of a qualifying EV

Ask your tax professional or dealership about this credit.

For Vehicles Purchased Before May 1, 2023

Oregon Electric Vehicle Standard Rebate

- \$2,500 for battery capacity of 10 kWh or more
- \$1,500 for battery capacity of 10 kWh or less
- \$750 for zero emission motorcycle

Oregon Charge Ahead Rebate

Up to \$5,000 for low- and moderate-income drivers who replace 20+ year old car with a new or used EV.

Additional terms and conditions apply. For complete details visit the Oregon Department of Environmental Quality website.



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Appendix 8
Display Material – Community Charging Rebates

April 26, 2024

Electric Vehicle Charging Station Rebates

Electric Vehicle Charging Station Rebates

Rebates for installing public EV charging or multi-family charging.

Applications accepted through October or until funding is reserved.

Project Type	Charger Type	Maximum Rebate per port, minimum 2 ports per site
Publicly accessible parking	Level 2	\$4,250, up to 75% of eligible project cost
Multifamily housing	Level 2	\$5,500, up to 75% of eligible project cost
Multifamily housing	Level 1	\$750



For applications and terms and conditions, visit:



BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON

IDAHO POWER COMPANY

Appendix 9
Emissions 2023 Report

April 26, 2024

	Generation/Purchases by Fuel Type														SUM ALL		
	Hydro	Coal ¹	Natural Gas ²	Unspecified ³	Wind	Solar	Landfill Gas ⁴	Waste Heat ⁴	Wood Residual ³	Methane ³	Diesel ³	Geothermal					
	MWh	5,802,241	2,980,808	2,777,957	2,674,219	1,735,174	728,471	65,661	61,912	19,785	1,672	26	276	16,848,202			
	kWh	5,802,241,000	2,980,808,000	2,777,957,000	2,674,219,000	1,735,174,000	728,471,000	65,661,000	61,912,000	19,785,000	1,672,000	26,000	276,000	16,848,202,000			
	% of Total	34.44%	17.69%	16.49%	15.87%	10.30%	4.32%	0.39%	0.37%	0.12%	0.01%	0.00%	0.00%	100.00%			
carbon monoxide (CO)	Avg. lb/kWh	0.00E+00	1.36E-03	3.41E-04	3.10E-04	0.00E+00	0.00E+00	3.41E-04	3.41E-04	3.41E-04	3.41E-04	0.00E+00	3.10E-04	Avg. lb/kWh	carbon monoxide (CO)		
nitrogen oxides (NOx)	Avg. lb/kWh	0.00E+00	1.87E-03	4.45E-04	4.13E-04	0.00E+00	0.00E+00	4.45E-04	4.45E-04	4.45E-04	4.45E-04	0.00E+00	4.13E-04	Avg. lb/kWh	nitrogen oxides (NOx)		
PM-2.5	Avg. lb/kWh	0.00E+00	1.26E-04	6.36E-05	6.62E-05	0.00E+00	0.00E+00	6.36E-05	6.36E-05	6.36E-05	6.36E-05	0.00E+00	6.62E-05	Avg. lb/kWh	PM-2.5		
PM-10	Avg. lb/kWh	0.00E+00	1.68E-04	6.36E-05	5.00E-05	0.00E+00	0.00E+00	6.36E-05	6.36E-05	6.36E-05	6.36E-05	0.00E+00	5.00E-05	Avg. lb/kWh	PM-10		
sulfur dioxide (SO2)	Avg. lb/kWh	0.00E+00	1.41E-03	5.66E-06	1.31E-04	0.00E+00	0.00E+00	5.66E-06	5.66E-06	5.66E-06	5.66E-06	0.00E+00	1.31E-04	Avg. lb/kWh	sulfur dioxide (SO2)		
volatile organic compounds (VOCs)	Avg. lb/kWh	0.00E+00	2.13E-05	2.02E-05	1.30E-05	0.00E+00	0.00E+00	2.02E-05	2.02E-05	2.02E-05	2.02E-05	0.00E+00	1.30E-05	Avg. lb/kWh	volatile organic compounds (VOCs)		
total hydrocarbons (THC) = TOC	Avg. lb/kWh	0.00E+00	2.13E-05	1.06E-04	5.98E-05	0.00E+00	0.00E+00	1.06E-04	1.06E-04	1.06E-04	1.06E-04	0.00E+00	5.98E-05	Avg. lb/kWh	total hydrocarbons (THC) = TOC		
1,3-butadiene	Avg. lb/kWh	0.00E+00	0.00E+00	4.14E-09	2.26E-09	0.00E+00	0.00E+00	4.14E-09	4.14E-09	4.14E-09	4.14E-09	0.00E+00	2.26E-09	Avg. lb/kWh	1,3-butadiene		
acetaldehyde	Avg. lb/kWh	0.00E+00	1.47E-07	3.85E-07	2.24E-07	0.00E+00	0.00E+00	3.85E-07	3.85E-07	3.85E-07	3.85E-07	0.00E+00	2.24E-07	Avg. lb/kWh	acetaldehyde		
acrolein	Avg. lb/kWh	0.00E+00	8.54E-08	6.17E-08	4.14E-08	0.00E+00	0.00E+00	6.17E-08	6.17E-08	6.17E-08	6.17E-08	0.00E+00	4.14E-08	Avg. lb/kWh	acrolein		
arsenic	Avg. lb/kWh	0.00E+00	9.78E-08	1.89E-09	9.92E-09	0.00E+00	0.00E+00	1.89E-09	1.89E-09	1.89E-09	1.89E-09	0.00E+00	9.92E-09	Avg. lb/kWh	arsenic		
benzene	Avg. lb/kWh	0.00E+00	3.08E-07	1.16E-07	9.11E-08	0.00E+00	0.00E+00	1.16E-07	1.16E-07	1.16E-07	1.16E-07	0.00E+00	9.11E-08	Avg. lb/kWh	benzene		
chromium	Avg. lb/kWh	0.00E+00	7.36E-08	1.32E-08	1.39E-08	0.00E+00	0.00E+00	1.32E-08	1.32E-08	1.32E-08	1.32E-08	0.00E+00	1.39E-08	Avg. lb/kWh	chromium		
formaldehyde	Avg. lb/kWh	0.00E+00	5.70E-08	6.84E-06	3.74E-06	0.00E+00	0.00E+00	6.84E-06	6.84E-06	6.84E-06	6.84E-06	0.00E+00	3.74E-06	Avg. lb/kWh	formaldehyde		
mercury	Avg. lb/kWh	0.00E+00	2.39E-08	2.46E-09	3.51E-09	0.00E+00	0.00E+00	2.46E-09	2.46E-09	2.46E-09	2.46E-09	0.00E+00	3.51E-09	Avg. lb/kWh	mercury		
naphthalene	Avg. lb/kWh	0.00E+00	4.61E-09	1.25E-08	7.25E-09	0.00E+00	0.00E+00	1.25E-08	1.25E-08	1.25E-08	1.25E-08	0.00E+00	7.25E-09	Avg. lb/kWh	naphthalene		
nickel	Avg. lb/kWh	0.00E+00	7.57E-08	1.98E-08	1.77E-08	0.00E+00	0.00E+00	1.98E-08	1.98E-08	1.98E-08	1.98E-08	0.00E+00	1.77E-08	Avg. lb/kWh	nickel		

Footnotes

- 1 Average lb/kWh emissions factor based on average of rates from Jim Bridger (Units 1-4) and N. Valmy (Unit 2) coal plants
- 2 Average lb/kWh emissions factor based on average from IPC's Langley, Danskin and Bennett Mountain NG plants
- 3 Uses the average emissions from NG plants.
- 4 Average lb/kWh emissions factor for unspecified purchases based on average of all resource mix.

Idaho Power Emissions Calculation - 75 BEVs

	Avg. lb/kWh	Avg lbs./Year	Total lbs./Year	Grams/Mile
carbon monoxide (CO)	3.10E-04	1.19E+00	90	0.047
nitrogen oxides (NOx)	4.13E-04	1.59E+00	119	0.062
PM-2.5	4.62E-05	1.78E-01	13	0.007
PM-10	5.00E-05	1.92E-01	14	0.008
sulfur dioxide (SO2)	1.31E-04	5.04E-01	38	0.020
volatile organic compounds (VOCs)	1.30E-05	5.00E-02	4	0.002
total hydrocarbons (THC) = TOC	5.98E-05	2.30E-01	17	0.009
1,3-butadiene	2.26E-09	8.71E-06	0	0.000
acetaldehyde	2.24E-07	8.61E-04	0	0.000
acrolein	4.14E-08	1.59E-04	0	0.000
arsenic	9.92E-09	3.82E-05	0	0.000
benzene	9.11E-08	3.51E-04	0	0.000
chromium	1.39E-08	5.36E-05	0	0.000
formaldehyde	3.74E-06	1.44E-02	1	0.001
mercury	3.51E-09	1.35E-05	0	0.000
naphthalene	7.25E-09	2.79E-05	0	0.000
nickel	1.77E-08	6.82E-05	0	0.000

Footnotes

- 1 Average miles/vehicle per year in Oregon: 11,556 (according to <https://www.oregon.gov/energy/Data-and-Reports/Pages/Oregon-Electric-Vehicle-Dashboard.aspx>)
- 2 Average miles/KWh: 3
- 3 Number of BEVs: 75

Tailpipe Emissions Calculation - 75 BEVs

	Grams/Mile	Grams/Year	Total lbs./Year
Total Hydrocarbons (HC)	0.307	3548	587
Exhaust CO	3.726	43058	7119
Exhaust NOx	0.159	1837	304
Exhaust PM2.5	0.003	35	6

Footnotes

- 1 Emissions from Light Duty Vehicle: <https://www.bts.gov/content/estimated-national-average-vehicle-emissions-rates-vehicle-type-using-gasoline-and>
- 2 Pounds/Gram: 0.00220462