Chapter 1. Introduction

With the filing of this Flex Load Multi-Year Plan, Portland General Electric requests Oregon Public Utility Commission (OPUC) approval of \$34.3M in funding to support 2025-2026 Flex Load activity. This request includes \$34.0M for existing pilots and programs and \$357.5K for the market transformation work undertaken by the Northwest Energy Efficiency Alliance.

As with prior MYP filings, PGE also includes related Flex Load activities (for informational purposes only) to provide the Commission a holistic view of the Company's Flex Load activity. These related activities include Phase II of the Smart Grid Testbed (SGTB or Testbed) and the Residential Electric Vehicle Smart Charging pilot, respectively funded via dockets UM 1976 and UM 2033. PGE does not request funding approval for either of these activities with this filing.

Table 1. Summary of Flex Load Funding

Activity	2024 (previously approved)	2025 (proposed)	2026 (proposed)	2025-2026 (proposed)
Residential Smart Thermostats	\$3,837,000	\$3,756,000	\$4,044,000	\$7,800,000
Peak Time Rebates	\$2,971,605	\$2,913,610	\$2,967,105	\$5,880,715
Time of Day	\$690,000	\$666,500	\$535,150	\$1,201,650
Energy Partner on Demand	\$5,406,410	\$6,087,977	\$6,055,727	\$12,143,704
Multi-family Water Heating	\$1,656,500	\$1,170,250	\$2,771,080	\$3,941,330
Energy Partner Smart Thermostat	\$1,280,000	\$1,422,000	\$1,573,460	\$2,995,460
NEEA Market Transformation ²	\$357,500	\$ 357,500	TBD	\$ 357,500
Funding	\$16,199,015	\$16,373,837	\$17,946,522	\$34,320,359
Smart Grid Testbed ³	\$2,940,315	\$ 2,030,214	\$ 1,254,288	\$ 3,284,502
Residential EV Charging ⁴	\$1,945,313	\$ 2,130,409	TBD	\$ 2,130,409
Holistic Flex Load Spending ⁵	\$21,084,643	\$20,534,460	\$19,200,810	\$39,735,270

As illustrated above, the 2026 budget increase is chiefly attributable to the Multi-family Water Heating pilot, which we expect to re-enter growth mode that year (see <u>Section 4.2.5</u> for supporting detail).

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² While PGE expects NEEA's Market Transformation activity to continue past 2025, the scope and cost of that work remains to be determined. PGE will reengage with the Commission once PGE and other utilities have aligned on the scope and costs of that additional work and cost.

³ Smart Grid Testbed figures are subject to change; those funding proposals and related filings can be found in UM 1976, available at https://apps.puc.state.or.us/edockets/DocketNoLayout.asp?DocketID=21662.

⁴ Residential Smart Charging pilot is funded separately under UM 2033 and has yet to propose funding for 2026. The 2025 funding for this pilot reflects the most recent available: that filed with PGE's 2023 Final Transportation Electrification Plan under UM 2033, available at https://edocs.puc.state.or.us/efdocs/HAH/um2033hah15818.pdf.

⁵ As noted in the prior footnotes, Smart Grid Testbed and Residential EV Charging activities are funded via separate dockets (UM 1976 and UM 2033, respectively) and are included for informational purposes only.

Table 2. Summary of Flex Load Capacity (forecasted for 2025-2026)

	Summer Capacity			Winter Capacity		
Activity	2024	2025	2026	2024	2025	2026
Residential Smart Thermostats	43.7	48.1	52.5	9.0	9.9	10.8
Peak Time Rebates	15.4	16.1	16.6	11.5	12.0	12.4
Time of Day ⁶	2.5	4.1	5.6	_	_	_
Energy Partner on Demand	38.8	41.3	43.8	31.5	33.5	35.5
Multi-family Water Heating ⁷	2.0	2.0	2.3	2.5	2.5	2.8
Energy Partner Smart Thermostat	2.2	2.1	2.8	0.5	0.6	0.7
Residential EV Charging ⁸	1.8	2.6	3.3	1.9	2.7	3.5
Flex Load Capacity (MW) ⁹	106.5	116.3	126.9	56.9	61.2	65.7

⁶ Note that PGE does not forecast Winter MW for Time of Day

⁷ See Table 37 in Section 4.2.5 for discussion of ~0.2 MW variance between capacity and cost effectiveness calculations.

⁸ PGE includes Residential EV Charging capacity in Flex Load portfolio capacity totals as, despite the fact that it is funded through the Transportation Electrification Plan, it does contribute Flex Load capacity.

⁹ Neither NEEA Market Transformation nor Smart Grid Testbed projects are included in Flex Load capacity figures as they only contribute indirectly thereto.

Table 3. Summary of Flex Load Cost Effectiveness (2023-2026)

Activity	TRC (2023)	TRC (2024)	TRC (2025-2026)
Residential Smart Thermostats	1.97	1.86	3.90
Peak Time Rebates	0.68	0.60	1.13
Time of Day	1.50	1.37	2.52
Energy Partner on Demand	1.29	1.48	2.59
Multi-family Water Heating	0.16	0.28	0.29
Energy Partner Smart Thermostat	0.22	0.12	0.64
Flex Load Portfolio ¹⁰	0.97	1.00	2.07

Note that the above cost effectiveness calculations reflect the full lifecycle of each activity including legacy costs from startup through pilot and into outlying years of program operations. PGE is in the process of developing additional valuation perspectives in line with best practices employed by national, state, and local program administrators such as the Regional Technical Forum (RTF), the Energy Trust, and Bonneville Power Administration (BPA). These changes will focus on current performance and better inform ongoing investment (see <u>Chapter 5</u>) PGE looks forward to sharing these changes with Commission Staff in the coming months.

Additional requests

- Transition Residential Smart Thermostat and Peak Time Rebates activities from pilot to program, which meet OPUC guidance (see support in <u>Section 4.2.1</u> and <u>Section 4.2.2</u>)
- Agreement to file 2026-2030 funding requests for NEEA's market transformation work through a letter order, similar to how SGTB projects are funded. At that time NEEA will have provided preliminary reports and will have a proposal for the additional work and costs (see Section 2.1.4.3)
- Approval of funding for a PGE, LBNL, US DOE project to develop a stakeholder portal and user interface for PGE's AdopDER forecasting model (see <u>Section 3.2</u>)

¹⁰ Smart Grid Testbed and Residential EV Charging are not included in Flex Load cost effectiveness calculations as they are funded via separate dockets (UM 1976 and UM 2033, respectively). NEEA Market Transformation project is not included as it does not provide direct benefits to the portfolio.