Chapter 3. Executive Summary

The purpose of this executive summary is to inform the reader with context, strategy, theme, and vision which the reader can carry throughout the document. This section ends with a high-level overview of the proposed activity, the cost of that activity and review of the regulatory actions to date.

3.1 Vision of the 2023 Plan

PGE is committed to building an Oregon in which all our customers, employees, and communities can thrive. We are committed to an economy-wide clean energy future where electricity powers more of our lives, displacing higher greenhouse gas (GHG)-emitting fossil fuels and expanding electricity's share of total energy consumption. Our customers and communities are electrifying their vehicles, homes, and workplaces, and the pace is accelerating. We are working harder and faster to enable this transition, partnering with school districts, transit districts, automobile manufacturers, government agencies, and our customers.

Electrifying transportation provides one of the most significant opportunities to reduce economy wide GHG emissions. PGE supports this conversion through infrastructure investment, partnerships, and offerings that meet our customers' and communities' needs. PGE is working toward a transportation ecosystem where:

- Oregonians have the information they need to transition to EVs
- Charging is equitable, reliable, affordable, and accessible
- Transportation electrification helps organizations and municipalities achieve their emissions goals
- EVs are efficiently integrated into the electrical grid, minimizing growth in system peak energy requirements
- Electric mobility, from mass transit to micromobility, is equitable and available to all

PGE's role is to enable and support a seamless, end-to-end, grid-connected electric mobility ecosystem that is easy-to-use, affordable, and accessible to all. Our vision is that all customers share in the benefits and opportunities of a clean energy future, including access to clean, reliable, and affordable electric transportation "fuel". In this clean energy future, PGE is able to plan, reliably and safely serve, and manage TE load. PGE will accomplish this through well-constructed rates and tariffs which serve at least cost and outline the roles of the utility and the customers, whether bringing home an EV for the first time, or charging multiple electric long haul semi-trucks on a hot and dry August day.

3.2 The Purpose of the 2023 Plan

The purpose of the 2023 TE Plan is to advance PGE's ability to plan for, manage, and serve our customers and their emerging electric vehicle charging needs amidst a dynamic market environment. The portfolio of proposed activities, many of which are a continuation of existing programs and investments, meet the needs of our TE customers, while also reflecting our greater focus on enhancing the customer experience and managing TE load growth for the benefit of the system. The 2023 TE Plan also reflects our commitment to advancing social equity in the communities we serve. It positions a significant investment with underserved communities, over 58 percent of proposed spending is targeted to underserved communities or dedicated to meeting those communities' charging needs. PGE's 2023 TE Plan relies on four major funding pools:

- $45.3 million in Clean Fuels Program funds
- $23.0 million in Monthly Meter Charge (MMC) funds is inclusive of $10.5 million in previously approved MMC funds[25] and this request to approve $12.5 million in new MMC spending through the 2023 TE Plan
- $17.8 million existing/approved customer investment
- PGE requests an additional $9.9 million in customer investment in this TE Plan

This adds up to a total TE Plan request for approval of an additional $22.4 million in expenditures from Monthly Meter Charge (MMC) and base rate funding in 2024-2025. Clean Fuels Program expenditures will be adjusted annually to reflect actual credit sale revenues.

PGE will leverage these expenditures to better understand the different types of load we will be asked to serve in the near term, including residential single family, multi-family, business, municipal, heavy duty, and fleet. Insights gathered through the proposed programs will inform PGE of how to construct long term sustainable practices for planning, serving, and managing EV load. PGE anticipates our role in the market will need to change as it evolves, and private market entities gather the experience, capability, and trust of customers to meet their charging needs. Over the course of 2024-2025, PGE will further partnerships with the private market, non-profits, municipalities, state and local government, and community organizations to extend the benefits of PGE's work beyond that of any single customer's investment. PGE believes the Plan meets the requirements set out by the Commission in Oregon Administrative Rules Division 87, Transportation Electrification Plans.[26]

Coinciding with this filing PGE has also filed the following tariffs. The OPUC filing center will grant these tariff filings with an Advice File number. We will update this docket with those file numbers for parties to track.

- Modification of Schedule 8 – Residential Electric Vehicle Charging Pilot[27] to lift the cap, reduce the incentive amount, and provide additional flexibility in how customers can receive their rebate payments (see Section 7.2.2.4, Appendix A.1 for program details)
- Modification of Schedule 52 – Nonresidential Electric Vehicle Charging Rebate Pilot[28] to include revamped multi-family criteria (see Sections 7.2.3.2, 7.2.3.3, Appendix B.1 for program details)
- Modification of Schedule 56 – Fleet Electrification Make-Ready Pilot[29] to include revamped multi-family criteria (see Section 7.2.4.2, Appendix A.2 for program details)

[25] $10.5 million MMC dollars were approved by the Commission through docketed proceedings, detailed in Appendix I.
[26] Oregon Administrative Rules, Division 87, Transportation Electrification Plans. Retrieved from https://secure.sos.state.or.us/oard/displayDivisionRules.action?selectedDivision=4089.
[27] PGE Schedule 8, retrieved from https://assets.ctfassets.net/416ywc1laqmd/2CrkwfPNPaDoM1tiVX68k0/ebaf7236dbbcf7a85c04197310f530ee/Sched_008.pdf.
[28] PGE Schedule 52, retrieved from https://assets.ctfassets.net/416ywc1laqmd/4kQwkhxFjQiA3zg1zFbWGl/70b713aa73ffaae5f60127e93d64a0de/Sched_052.pdf.
[29] PGE Schedule 56, retrieved from https://assets.ctfassets.net/416ywc1laqmd/4dd9mfMxN9CRrBK44zHGks/53401726275ac452bd7eb6e21974a435/Sched_056.pdf.

3.3 Changes Since the 2019 Plan

3.3.1 Market Changes

3.3.1.1 Vehicle Availability and Price, Charging Availability

The number of charging ports in the United States increased more in 2022 than in the preceding three years combined. In 2022 10,00 fast chargers and 54,000 level 3 chargers were added nationally. The increase in charging infrastructure has helped to address, not alleviate, one of the major concerns that consumers have had about electric vehicles, namely range anxiety. As of October 2022 there were 1.9 million EVs registered nationally or 0.7 percent of the 281 million passenger vehicles. Oregon is ahead of the national EV adoption rate with 62,455 EVs registered in the state, or 2 percent of the 3.2 million passenger vehicles as of March 2023.[30,31 ,32]

In 2019, the EV market was already seeing significant growth, but it was still relatively small compared to traditional gasoline-powered vehicles. However, by 2023, the market has grown considerably and has become a more mainstream option for consumers. One of the major indicators of this growth is the number of electric vehicle models available: there were approximately 220 EV models available globally in 2018, while by 2021 that number had more than doubled to 450.[33] This increase in the number of models has helped to make EVs more accessible to a wider range of consumers, with options ranging from affordable city cars to luxury SUVs.

Along with the increase in models, the cost (adjusted for vehicle range) of EVs globally continued to decline from 2020 to 2021, accounting for the increase in average range per vehicle.[34] While still more expensive on average than the overall car market, strong consumer demand shows that customers value the benefits of driving electric. Moreover, up-front purchase price is not the only factor influencing customer decisions, and on a total cost of ownership basis EVs can be more compelling due to lower maintenance and fuel costs.[35]

The growth in the EV market has also been supported by an increase in the number of charging stations available. In 2019, there were approximately 500,000 charging stations globally, while by 2022, that number had grown to over 1.2 million.[36] In the U.S. cumulatively, by 2019 there were more

[30] Oregon Department of Transportation. *DMV Facts and Statistics*. Retrieved from https://www.oregon.gov/odot/dmv/pages/news/factsstats.aspx#:~:text=Today%20in%20Oregon%20there%20are,Nearly%203.1%20million%20licensed%20drivers.
[31] Oregon Department of Energy. *Oregon Electric Vehicle Dashboard*. Retrieved from https://www.oregon.gov/energy/Data-and-Reports/Pages/Oregon-Electric-Vehicle-Dashboard.aspx.
[32] Lewis (January 9, 2023). Electrek. *Here's how many EV chargers the US has – and how many it needs*. Retrieved from https://electrek.co/2023/01/09/heres-how-many-ev-chargers-the-us-has-and-how-many-it-needs/.
[33] International Energy Agency (2022). *Global EV Outlook 2022: Trends in electric light-duty vehicles*. Retrieved from https://www.iea.org/reports/global-ev-outlook-2022/trends-in-electric-light-duty-vehicles.
[34] Ibid. While the cost of BEVs and PHEVs have both increased in the US in that timeframe, the greater increase in vehicle range has led to a reduction in the average price-per-range, which is a useful way to compare EV prices given their different features.
[35] See Section 9.6 for detailed cost data on total cost of ownership savings for EV ownership.
[36] U.S. Department of Energy. *Alternative Fuels Data Center: Electric Vehicle Charging Station Locations*. Retrieved from https://afdc.energy.gov/fuels/electricity_locations.html#/find/nearest?fuel=ELEC.

than 78,000 charging ports at a total of approximately 26,000 EV charging stations.[37] By January 2023, S&P Global Mobility estimated that there were around 16,822 Tesla Superchargers and Tesla destination chargers in the United States, along with 126,500 Level 2 and 20,431 Level 3 charging ports.

As of September 27, 2022, all 50 states plus Washington, DC and Puerto Rico have approved state plans under the National Electric Vehicle Infrastructure (NEVI) formula program. The IIJA has made available $5 billion over five years to be spent on EV charging infrastructure across the US. President Joe Biden has pledged that the federal government will pay for the installation of 500,000 chargers.

New light-duty vehicle registration share for EVs reached 5.2 percent over the first 10 months of 2022, and rapid growth is expected, thanks to consumer demand, US government policy such as the IRA, which incentivizes EV purchases, and increasing interest and investment from the financial sector.[38]

As illustrated above, the EV market has seen significant growth and evolution between 2019 and 2022. The number of models available has increased dramatically, costs have declined, charging infrastructure has expanded, and government incentives and regulations have further supported adoption. PGE's AdopDER model shows growth will continue, as EVs become an increasingly mainstream option for consumers.

3.4 State and Federal Policies, Programs, and Actions

3.4.1 State Legislative Actions

The 2021 Oregon Legislature enacted House Bill (HB) 2165[39], introduced by Governor Kate Brown, to extend and improve Oregon's EV rebate and support utility investment in EV infrastructure. HB 2165 includes the following major elements:

- EV Rebate Improvements: The bill removes the 2024 sunset on Oregon's EV Rebate program and makes other targeted changes to better support underserved communities.
- Transportation Electrification Monthly Meter Charge: HB 2165 also requires PGE and Pacific Power to collect a charge set to 0.25 percent of the total revenues collected by the utility. The fee is collected as a Monthly Meter Charge from all customers through 2030. Funds from the charge must be used by each utility to support and integrate transportation electrification and must be spent on elements contained in a utility's TE plan. Budgets for the use of these funds must be approved by the OPUC. This charge is a minimum amount collected for utility transportation electrification activities. The utility must make reasonable efforts to spend not less than half the amount collected through this fee on TE in underserved communities.

[37] Note: Includes public and private EV charging ports. Trends from U.S. Department of Energy. *FOTW# 1174, February 22, 2021: Over 20,000 New Electric Vehicle Charging Outlets Were Installed in the United States in 2019*. Retrieved from https://www.energy.gov/eere/vehicles/articles/fotw-1174-february-22-2021-over-20000-new-electric-vehicle-charging-outlets#:~:text=Cumulatively%2C%20by%202019%20there%20were,and%20private%20EV%20charging%20outlets.&text=Trends%20from%20the%20Alternative%20Fueling,Second%20Quarter%202020%20%2C%20October%202020.

[38] S&P Global. *Mobility: Electric Vehicle Trends*. Retrieved from https://www.spglobal.com/mobility/en/topic/electric-vehicle-trends.html.

[39] Oregon HB 2165, retrieved from https://olis.oregonlegislature.gov/liz/2021R1/Measures/Overview/HB2165.

- Updating current law on utility investment in TE infrastructure: HB 2165 also updates ORS 757.357[40] regarding Commission authority to allow cost recovery for transportation electrification infrastructure measures. The bill recognizes utility investments in TE infrastructure as a utility service, provided the investment both supports greenhouse gas reductions in the transportation sector over time and benefits utility customers. HB 2165 also codifies in statute that utility investment to support transportation electrification includes behind-the-meter infrastructure. Taken together, these changes and the regular monthly charge underscore that enabling and managing transportation electrification, in the eyes of the 2021 Legislature and Oregon law, is a core, ongoing, and recoverable component of utility business to serve customers.

The 2021 Oregon Legislature also enacted House Bill 2180[41], requiring that all new multi-family buildings (of five or more units) and new commercial buildings be made EV-ready, with provisions for electrical service capacity and conduit to serve 20 percent of parking spots. The bill allows local governments to require a greater percentage of parking spots be made EV-ready, and the Land Conservation and Development Commission adopted a rule in 2022 that requires cities within metropolitan areas to require 40 percent of parking spots be made EV-ready[42].

The 2021 Legislature also moved Oregon's previous deadline for 100 percent of new light-duty state-owned vehicle purchases to be ZEVs from 2029 to 2025 (HB 2027[43]). The Legislature also directed the State Parks and Recreation Department to allow for the installation and service of public EV charging stations in parking spaces in the state park system (HB 2290[44]).

In the 2022 Short Session, the Legislature supported both infrastructure and vehicle purchase incentives. House Bill 4139[45] established the Medium- and Heavy-Duty Electrification Charging Fund at the DEQ, which received $15 million in House Bill 5202[46] for a grant program supporting medium- and heavy-duty zero-emission vehicle charging and fueling infrastructure projects. The Legislature also appropriated an additional $15 million to the state's zero-emission and EV rebate program, which the DEQ awarded across the state in Spring 2023.

3.4.1.1 State Agency and Executive Actions

In March 2020, Governor Kate Brown issued Executive Order 20-04[47] directing state agencies to take actions to reduce and regulate greenhouse gas emissions. This order includes directives to the OPUC to encourage electric companies to support transportation electrification and achieve the state goals established in Senate Bill 1044[48]. The order also directs the DEQ to extend and expand the Oregon Clean Fuels Program and increase credits generated from electricity as a motor vehicle fuel.

[40] Oregon Revised Statute 757.357, retrieved from https://oregon.public.law/statutes/ors_757.357
[41] Oregon HB 2180 retrieved from https://olis.oregonlegislature.gov/liz/2021R1/Measures/Overview/HB2180.
[42] Oregon Administrative Rules, Chapter 660, Division 12, Rule 660-012-0410 retrieved from https://secure.sos.state.or.us/oard/view.action?ruleNumber=660-012-0410.
[43] Oregon HB 2027, retrieved from https://olis.oregonlegislature.gov/liz/2021R1/Measures/Overview/HB2027.
[44] Oregon HB 2290, retrieved from https://olis.oregonlegislature.gov/liz/2021R1/Measures/Overview/HB2290.
[45] Oregon HB 4139, retrieved from https://olis.oregonlegislature.gov/liz/2022R1/Measures/Overview/HB4139.
[46] Oregon HB 5202, retrieved from https://olis.oregonlegislature.gov/liz/2022R1/Measures/Overview/HB5202.
[47] Oregon Executive Order 20-04, retrieved from https://www.oregon.gov/gov/Documents/executive_orders/eo_20-04.pdf.
[48] Oregon SB 1044, retrieved from https://olis.oregonlegislature.gov/liz/2019R1/Downloads/MeasureDocument/SB1044/Enrolled.

In March 2021, the Environmental Quality Commission (EQC) adopted DEQ's revised Oregon Clean Fuels Program rules to increase the amount of clean fuels credits generated from EV charging.[49] The rules now allow additional clean fuels credits to be generated when renewable energy certificates are retired alongside EV charging for both residential and non-residential EVs. PGE takes advantage of this opportunity on behalf of our residential customers, generating $5,394,400 in 2021 credit revenues for the 2023 program year. The new rules also allow public entities like school districts and local governments to generate credits in advance of EV charging to help fund the purchase of EVs or related transportation electrification investments. In September 2022, the EQC adopted rules extending the Oregon Clean Fuels Program to 2035 and requiring a 37 percent reduction from 2010 levels in the carbon intensity of motor vehicle fuels.[50]

The EQC also adopted California's medium- and heavy-duty diesel engine standards, including the Advanced Clean Trucks (ACT) rule that requires manufacturers of medium- and heavy-duty vehicles to sell a certain percentage of ZEVs, beginning with the 2024 vehicle model year. In November 2022, the Oregon Environmental Quality Commission adopted California's Advanced Clean Cars II rule[51] in Oregon as permitted by the federal Clean Air Act[52], requiring that all light-duty vehicle sales in Oregon be ZEVs by 2035.

3.4.1.2 Federal Actions

The IIJA and the IRA[53], both passed by Congress since PGE's last TE Plan, provide significant funding and incentives to support transportation electrification.

The IIJA provides both formula funds and flexible funds to states, including more than $52 million over five years for Oregon to deploy corridor fast charging under the NEVI program[54]. The IIJA also creates a variety of new and substantial competitive grant opportunities for transportation electrification, including for buses and heavy vehicles. The IRA made significant modifications to the EV tax credit, lifting the 200,000-vehicle manufacturer cap for the credit but adding new rules for the credit on domestic manufacturing, supply chain, and vehicle cost. The IRA also created a used EV vehicle tax credit, along with tax credits for commercial EVs and for the installation of EVSE in certain communities.

PGE expects that these funding sources will help drive transportation electrification in our service area, where interest and adoption of EVs is already significant, and complement the state programs and incentives. They also create opportunities for PGE to partner with our customers and communities on grant opportunities to gain external funding support for TE.

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[49] Oregon Administrative Rules, Chapter 340, Division 253, retrieved from https://secure.sos.state.or.us/oard/displayDivisionRules.action?selectedDivision=1560.
[50] Oregon DEQ. *Clean Fuels Program Expansion 2022*. Filed September 23, 2022. Retrieved from https://www.oregon.gov/deq/rulemaking/Pages/cfp2022.aspx.
[51] California Air Resources Board. *Advanced Clean Cars II*. Retrieved from https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/advanced-clean-cars-ii.
[52] United States Environmental Protection Agency. *Overview of the Clean Air Act and Air Pollution*. Retrieved from https://www.epa.gov/clean-air-act-overview.
[53] 117th Congress (2021-22) *House Rule 5376 Inflation Reduction Act of 2022*. Retrieved from https://www.congress.gov/bill/117th-congress/house-bill/5376.
[54] U.S. Department of Transportation, Federal Highway Administration. *National Electric Vehicle Infrastructure Formula Program*. Retrieved from https://www.fhwa.dot.gov/bipartisan-infrastructure-law/nevi_formula_program.cfm.

3.5 The 2023 TE Plan Reflects the Market Context and Utility Role

In previous TE meetings with stakeholders and Commission Staff, PGE shared concepts focused on accelerating transportation electrification. These earlier concepts of the TE Plan outlined significantly greater expenditures and service levels for the same activities now proposed in PGE's 2023 TE Plan. The company delayed the filing of our TE Plan until mid-2023. The new timing allows better sequencing of the TE Plan with the Company's IRP and CEP filings. Additionally, the new timing helps give OPUC Staff and stakeholders a clearer sense of how our TE Plan fits with our overall decarbonization strategy—for both PGE and our customers—as well as cumulative customer price impacts. PGE heard clearly from both Staff and stakeholders that they want to see the TE Plan in this larger context. PGE's 2023 IRP and CEP forecast the need for new generation, additional energy efficiency, and distributed energy resources. New system investments to meet greenhouse gas goals and investments in transportation electrification require that PGE balance and manage impacts to customers.

Thus, the TE Plan was reassessed for right size and context. The 2023 TE Plan undertakes the same programmatic and infrastructure measure activities shared with stakeholders earlier in 2022 but reduces the funding levels and maximizes the utilization of Monthly Meter Charge and Clean Fuels Funds prior to incremental customer dollars. Further, where the 2022 concept of the TE Plan was focused on charger deployment, the 2023 TE Plan is focused on understanding charger needs and how to best meet them, both now and long term, through more sustainable less programmatic approaches. Therefore, the reader will note a theme of collecting data and market experience through the 2023 TE Plan programmatic areas (fleet, multi-family, municipal, public, heavy-duty, and single family residential) to inform the utility's market role, rate, and tariff designs. This change is better structured to bring the planning, service, and management of TE load into the base business practices of the utility. PGE envisions this may be done through TE-specific rates or TE-specific line extension allowances. Program approaches are envisioned as a tool to learn more about a market or technology or to meet policy goals which the private market does not have a process or driver to meet (such as to meet the charging needs of underserved communities or equitable access to transportation electrification).

3.5.1 PGE's Role

PGE envisions several roles for the utility in the present market. Some of these roles may change as the market matures. PGE sees the primary role of the utility in transportation to be planning, serving, and managing TE load. However, there are several other activities that the present market requires of PGE or that PGE proposes should be conducted to inform the utility on how to properly scope our role or provide insight into how best to plan, serve, and manage TE load in the future.

3.5.1.1 Plan for TE Load

As previously mentioned, PGE's planning processes such as the IRP and DSP identify when, where, what kind, and how much TE load will interconnect to the PGE system. In later portions of this TE Plan we illustrate how the AdopDER model forecasts TE load growth. We are undertaking efforts to enhance our modeling capabilities and are investing in the AdopDER model, whose information feeds into the abovementioned planning efforts, as well as the CEP, MYP and TE Plan. The higher fidelity, more granular data which PGE is able to harvest and work with, the better prepared PGE will be on several fronts. For example, this information may allow PGE to target infrastructure investment ahead of the load development or direct program offerings to TE load pockets that would otherwise

strain distribution capacity. The 2023 TE Plan focuses on acquiring load profile data for different types of TE load, which can help PGE plan how to manage this load or develop specific rates and/or programs to target specific TE load types.

3.5.1.2 Serve TE Load

Make-Ready

For programs like multi-family, fleet, heavy duty, public, and business, PGE envisions a role in make-ready. In each case, the level of PGE involvement and investment may vary. In some cases PGE will provide the make-ready infrastructure, while in others it may be provided through the line extension allowance and additional incremental funding for make-ready infrastructure. However, in all cases PGE will provide the requirements for the interconnection of make-ready infrastructure to the PGE system. The make-ready activity embedded in the PGE 2023 TE Plan programs is designed to meet the needs of customers while informing PGE of how to structure our make-ready role.

Siting Load

Being informed and able to plan for TE load is also contingent on where load is sited, the size and demands of these sites, and, where possible, influencing site design and placement. An example of work PGE is conducting to understand TE load siting is our work with Daimler at Electric Island to better understand the service and site requirements for heavy duty vehicles. We are additionally working with the State of Oregon and others regarding the siting of high-powered heavy duty charging. These site loads are significant and can contribute to peak demand. On Electric Island, PGE is exploring how to reliably manage these large loads through the siting of local generation and energy storage. This partnership with Daimler on heaving duty charging site development will inform PGE how to plan and timelines for development of these types of sites. The addition of local generation and energy storage may be an import aspect of future heavy duty site development and possibly requirements. Early engagement with site developers is necessary to meet build-out timelines and customer expectations as these sites are large in terms of the capacity needed, the needed infrastructure, and the physical space to accommodate heavy duty vehicle traffic. Early insights such as those acquired from our Electric Island work help PGE understand how to develop site requirements for all types of interconnected TE load. These may include metering, communication, and/or infrastructure requirements as well as who pays for what portion of that infrastructure.

3.5.1.3 Manage TE Load

As TE load develops, PGE will seek to develop load management strategies. Development of practices and programs to manage TE load will harvest benefits and result in lower overall costs to serve and thus lower the cost of EV ownership. At present PGE has identified roughly four approaches for directly managing TE load: rate design, demand response charger control, telemetry to the car, and local generation/storage. Rate design can send the proper pricing signal to customers to align how they charge their car in accordance with grid needs. Time of use rate design such as PGE's Time of Day whole home residential rate is one potential avenue to accomplish this, as is Schedule 50, which PGE uses for public charging and similarly has a peak demand component. The activities proposed in this TE Plan will explore whether other time-of-use or dynamic rate designs might also be ultimately offered or required of certain TE loads.

Additionally, rates can be paired with flex load schemes to target load reductions or the delivery of other energy and capacity services from the vehicle to the building or the grid. These more active load management schemes can be targeted by location, time, and type of energy service needed.

PGE will explore how to develop such capabilities through the activities proposed in the 2023 TE Plan.

Immediately, PGE is exploring two types of direct TE load control. First, through the residential smart charging program PGE is exploring demand response or peak load reduction through connected level two chargers. PGE is also currently testing a type of managed charging through vehicle telematics. The company is leveraging the PGE Smart Grid Testbed to explore how connection by way of an API to the vehicle will result in not only load reduction on peak, but also other more varied energy service the vehicle might be able to offer. Further exploration will require partnership with either the auto manufacturer or an entity who has partnered with the auto manufacturer to offer vehicle telematics. PGE is currently in discussions with several auto manufacturers to explore vehicle telematics partnership.

3.5.1.4 Underserved Communities

PGE is committed to understanding and serving the needs of underserved communities. Our role as a regulated entity is unique in that we report our activities through publicly available filings in an open adjudicatory process. PGE believes this process and the relationships the utility has built with the state and local governments—and diverse communities therein—are unique and can be utilized to meet the needs of underserved communities. The ability of the utility to leverage patient capital is another benefit of having the utility active in the TE market.

The 2023 TE Plan investment directs over 58 percent of funds to activities to benefit underserved communities. Our municipal charging program is an example of our commitment to reach and meet the needs of underserved communities. It is one of the largest of the portfolio and deploys pole and pedestal charging through partnership with municipalities to primarily serve underserved and low income neighborhoods in the PGE service territory. Our multi-family program is also focused on installations in low income and underserved communities.

One reason for our focused investment in these communities is because the private market is not likely to choose these areas for first or second round investment. Secondly, PGE believes that these customers have unique charging needs and patterns. Roughly 20% of Uber and Lyft drivers receive some sort of public assistance and these drivers work for ride-hauling services for more than 8 hours a day.[55] These customers likely have higher-than-average charger utilization, and therefore a greater sensitivity to charger availability, charging costs, and rates of charge. PGE recognizes the utility has a role in addressing these use cases, which cross over with the charging needs of low income and underserved communities. The proposed multi-family program is designed to provide insights into how to structure this role while meets needs and maintaining balance within the market.

Further, PGE's work can help seed the market, either pulling in the private market by demonstrating a business case or creating private market partnerships. PGE wants to invest early in transportation electrification for underserved communities to prevent them from falling behind other segments of the market. The Company will reassess our activity in these communities as the market matures and will continue to seek partnerships to lessen investment risks.

PGE acknowledges that, at present, it will need to own chargers to meet underserved community needs. However, PGE does not envision this role is necessary for more mature markets or where the

[55] Waheed, Herrera, Gonzalez-Vasquez, Shadduck-Hernández, Koonse, and Leynov (UCLA Institute for Research on Labor and Employment). *More Than A Gig: A Survey of Ride-Hailing Drivers In Los Angeles*. Retrieved from https://irle.ucla.edu/wp-content/uploads/2018/05/Final-Report.-UCLA-More-than-a-Gig.pdf.

use case for charger is well known and understood by the utility. The 2023 TE Plan does make investments or continues investment in markets that are maturing. However, the 2023 Plan also makes investments to learn about different load types, needs, and unique use cases.

Finally, as their energy provider, working with municipalities is a proper role for PGE. This role is facilitated by already existing, collaborative relationships and areas of mutual and overlapping interests and needs; notably, working directly with municipalities to meet their community and decarbonization goals through electrification, including in the transportation sector. The 2023 TE Plan invests in these relationships with the placement of pole- and pedestal- mounted chargers.

3.6 Synopses of Program Activity

The following tables provide synopses of the programs including a description of the work, changes proposed, the load management approach, the target market, and how the activity is funded. Greater detail can be found in Appendix A Summary of Current Activities and Appendix C New Activity Applications.

Based on Stakeholder Comments on the draft TE Plan, PGE made several changes to the proposals for Public Charging – Electric Avenue and Municipal Charging Collaboration and Business and Multi-family Make-ready Solutions. Overviews of those updated proposals are presented in Table 5 and Table 6 below and are reflected in the program applications in Appendices C.1 and C.2 and are also recapped in Appendix J along with other substantive changes.

Table 4. Residential EV Smart Charge Pilot Overview

Activity	Residential EV Smart Charge Pilot			
Strategic Alignment	Manage TE Load; Structure TE Rates/Tariff; Equity			
Description	• $300 rebate towards purchase and installation of qualified L2 at-home charger ($1,000 income-qualified rebate) • $50 rebate for Tesla drivers with non-qualified chargers			
What has changed	• Pilot extended; enrollment cap expanded • Charger incentive decreased from $500 to $300 • Creation of managed charging program			
Load management	• $25 seasonal incentive (six-month season; Oct-Mar, Apr-Sep) for allowing PGE to pause EV charging during peak loads			
Target market	• Residential EV drivers residing in single family homes			
Funding ($MM)		Previously approved[56]	Requested with 2023 TE Plan	Total
	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]
	Total	2.42	4.08	6.5
	• 2022 MMC funds panel upgrade rebates and trade ally network development			

[56] The figures shown in this budget have been approved previously by the Commission through docketed proceedings, detailed in Appendix I.

Table 5. Public Charging – Electric Avenue and Municipal Charging Collaboration Overview

Activity	Public Charging – Electric Avenue and Municipal Charging Collaboration			
Strategic Alignment	Utility Infrastructure Role; Coordinate Load Siting; Manage TE Load; Structure TE Rates/Tariff; Equity; Coordination/ Partnership			
Description	• Collaborate with municipalities on equitable access to public L2 charging infrastructure in underserved communities • Deploy chargers more cost-efficiently via existing utility right-of-way assets • Explore opportunities to collocate with the multi-family program • Informs potential private partnerships			
What has changed	• Refocus from broader ownership of L2 infrastructure to helping provide infrastructure in underserved communities • Remove DCFC ports			
Load management	• Schedule 50 rate, with time of use and +$0.19/ kWh at peak usage (3 to 8 PM weekdays, like TOD rate)			
Target market	• +180 L2 ports focused on underserved communities (additional to 60 and 100 ports in the 2022-3 MMC budgets) • Approximate total of 340 L2 ports =12 percent of the total public L2 ports TEINA indicates needed by 2025			
Funding ($MM)		Previously approved[57]	Requested with 2023 TE Plan	Total
	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]
	Total	5.53	10.12	15.65

[57] The figures shown in this budget have been approved previously by the Commission through docketed proceedings, detailed in Appendix I.

Table 6. Business and Multi-family Make-ready Solutions Overview

Activity	Business and Multi-family Make-ready Solutions			
Strategic Alignment	Utility Infrastructure Role; $ Structure TE Rates/Tariff; Equity; Coordination/ Partnership			
Description	• Support EV ownership and charging access for business and multi-family properties • PGE constructs make-ready • Customer or third party owns and maintains chargers, receives rebate on purchase of qualified chargers			
What has changed	• More support for EVSE deployment to the underserved MF segment • Reduced ports from +1,000 to 100 based on PGE and TEINA data showing that demand in underserved/low-to-medium income multi-family market is still developing • Charger rebate split between initial deployment, and 5 year anniversary, with anniversary rebate contingent on maintaining prices to users within 10% of prices for PGE Schedule 50 • Focus on workplace, commercial, and multi-family segments (funded by 2023 MMC)			
Load management	• Chargers able to respond to pricing or DR signals, but not subject to Schedule 50 • Provides data on multi-family charging profiles to develop the appropriate rate or future load management offering			
Target market	• Workplace/commercial: 60 ports • Multi-family: 40 ports			
Funding ($MM)		Previously approved[58]	Requested with 2023 TE Plan	Total
	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]
	Total	2.54		2.54

[58] The figures shown in this budget have been approved previously by the Commission through docketed proceedings, detailed in Appendix I.

Table 7. Fleet Partner Overview

Activity	Fleet Partner			
Strategic Alignment	Planning; Utility Infrastructure Role; Coordinate Load Siting; Manage TE Load; Structure TE Rates/Tariff; Coordination/ Partnership			
Description	• Provide free upfront planning and technical services to reduce the complexity of planning for fleet electrification • Provide custom incentives to help lower the costs of building electric fleet depots • Better understand how fleet size and load profiles impact the grid • Networked EV charging for future managed charging and demand response programs			
What has changed	• Reduce incentives by 50 percent, bringing the multiplier down from 15x to 7.5x in the following formula: *Year 5 usage x LEA x multiplier* • Lower maximum incentive cap from $750K to $400K • The above changes improve cost effectiveness and allow the pilot to reach more customers, sites, and ports while still providing an incentive to help overcome initial cost barriers faced by customers			
Load management	• Require installed chargers be qualified & networked, with ability to perform demand response • Participants expected to participate in future PGE demand response programs			
Target market	• Non-residential fleets, with ~450 ports (2021-24), an additional ~500 ports (2024-2025), for a total of ~950 make-ready ports[59]			
Funding ($MM)		Previously approved[60]	Requested with 2023 TE Plan	Total
	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]
	Total	8.65	9.47	18.12

[59] Port counts increasing due to decrease in incentive offered, allowing deployment to more sites.
[60] The figures shown in this budget have been approved previously by the Commission through docketed proceedings, detailed in Appendix I.

3.7 PGE's Grant Work

3.7.1 Connection to Strategy

Our grant activities connect to PGE 2023 TE Plan strategy several ways. Firstly, much of our grant work is focused on equity and partnership. Secondly, grant-funded activity also collects information and data[61] to inform our planning activity. An example of these strategic connections is our emerging technology work, which informs how we can serve and manage future TE loads and use cases.

3.7.2 Overview of PGE Grants

PGE funds its TE grants through participation in the Oregon Clean Fuels Program (CFP) on behalf of the Company's residential customers. The CFP is a statewide program administered by the Oregon DEQ that requires a reduction in the carbon intensity of transportation fuels. The DEQ quantifies the carbon intensity of fuel sources and sets an annual target. Fuels which produce emissions above the standard (e.g., diesel) create deficits, whereas those with emissions below the standard (e.g., electricity) generate credits.

PGE participates in CFP in several capacities, one of which is on behalf of residential customers who drive EVs. PGE must use the revenue from credit sales in specific ways.[62] PGE funds three grant programs with revenue from the CFP: the Drive Change Fund (DCF), the Electric School Bus Fund, and external matching funds. An overview of the programs follows, with additional information available in Appendix A.4.

3.7.3 The Drive Change Fund

The Drive Change Fund (DCF) is a competitive grant available to non-residential customers for transportation electrification projects that prioritize underserved communities, advance transportation electrification, and benefit residential customers. Since 2019, PGE has awarded over $8.92 million in DCF grant funding to 54 projects. PGE ran the fourth cycle of DCF in 2022, awarding $2.28 million to 15 community transportation electrification projects. 2023 will be the fifth year of the DCF.

3.7.4 Electric School Bus Fund

The Electric School Bus Fund (ESB) is a competitive grant to help public school districts in PGE's service area fund the incremental costs of purchasing electric school buses, with a focus on school districts serving underserved communities. Since 2020, PGE has awarded over $4.9 million in grant funding to purchase 19 electric school buses. In 2022, PGE allocated approximately $1.5 million to help school districts and school bus fleet operators acquire electric buses and charging infrastructure. PGE awarded grants to five districts to fund a total of six buses. 2023 will be the fourth year of the Electric School Bus Fund.

3.7.5 Matching External Funds

Matching external funds are available to public agencies, community-based organizations, nonprofits, educational institutions, and other partnerships applying to external funding opportunities. No successful grant matching bids were received in the first year of grant matching (2022) because the program was opened late in the year. That funding was put towards the 2022 DCF total. PGE expects an increase in matching opportunities in 2023.

[61] Possible since all chargers funded through PGE grants are DR-capable.
[62] Full overview of PGE's CFP funding program see Appendix A.4.

PGE coordinates closely with state and local agencies and other grant making bodies to ensure that available pools of funding are complementary and not duplicative. For example, the ESB funded four electric school buses for the Portland Public School District. In this case, the bus depot was located in PacificCorp's service area. PacifiCorp was able to use their CFP-funded matching funds to support the make-ready and charging infrastructure needed to charge the ESB-funded buses.

3.8 Connecting Activities to the Strategy

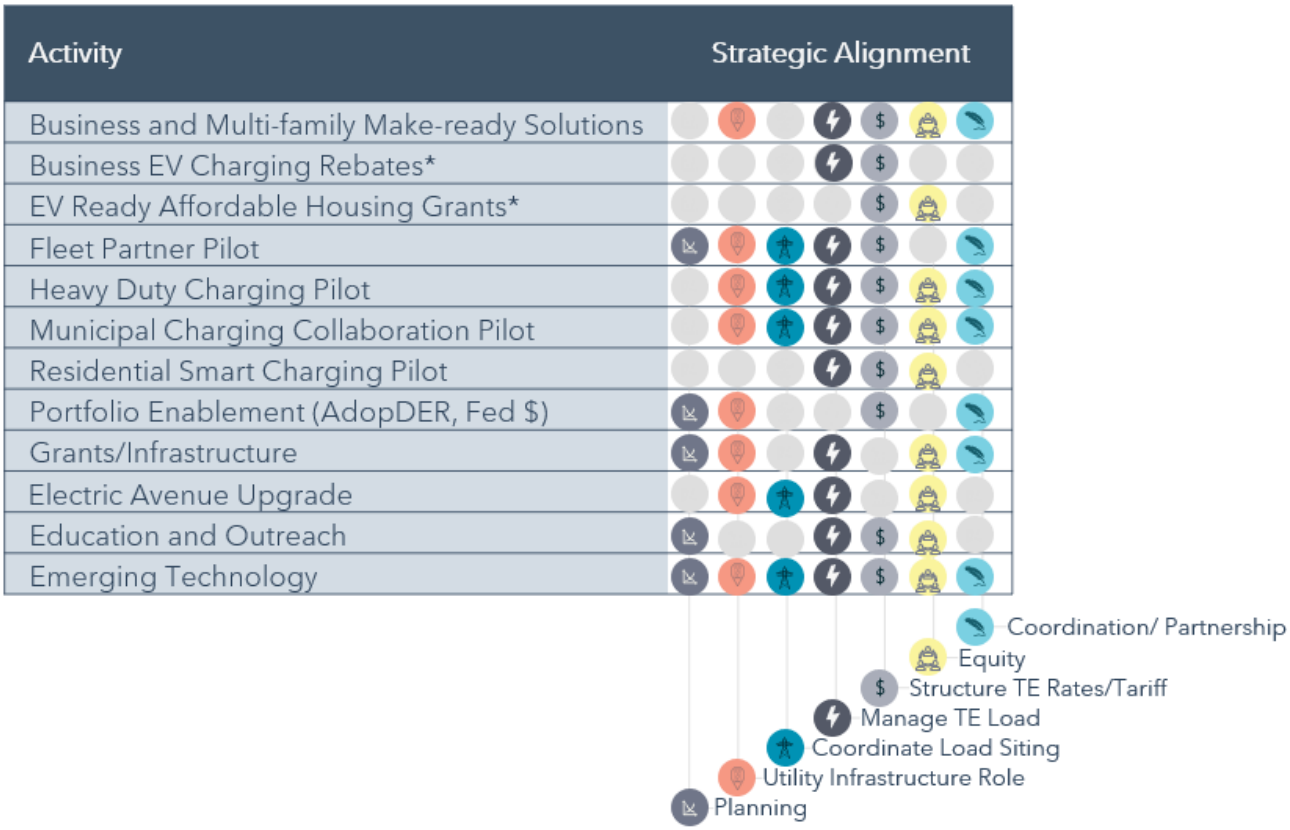

Figure 5. Connecting Transportation Electrification Activities to the Strategy

3.8.1 Providing the Right Customer Experience

PGE's market research and customer conversations have underscored a need for PGE to provide improved energy information and comprehensive engagement for residential and small business customers to make individual decisions about their service options.

We understand the need for the utility to play a strong role in identifying additional means to lower EV adoption costs as well as help customers overcome technical challenges to adoption of efficiency

products[63] and, increasingly, grid-enabled products. PGE identifies customer needs through market research, interviews, surveys, and feedback from demonstration and pilot activities. These help us understand the diversity of customer needs and identify barriers associated with customers' experiences in achieving their goals. We build on this understanding of customer needs through stakeholder engagement and workshops. In exploring what is required to provide a holistic customer engagement for flex load adoption, PGE has identified the following customer priorities:

- Awareness and education for customers related to programs and rates that can help them better achieve their individual goals
- Accurate information on products that support the grid and how to use them
- Rebates/incentives and offering on-bill financing at the time of purchase
- Seamless enrollment into applicable flex load programs
- Additional affordability resources available to customers for whom energy costs are a greater burden
- Coordination of purchase, installation, and maintenance services
- Pathways for market partners to participate in offers and delivery
- Solutions for overcoming related hurdles such as the cost of electrical panel replacements
- Awareness and education of complimentary offerings such as EV Charging and TOD rates

A holistic customer experience means that our customers can find the information and/or service they need via their preferred channel at the time that is right for them. In considering our residential and small business customers' current engagement pathways with PGE, we have concluded that an integrated digital experience is necessary to help them complete the energy journey from awareness to education, adoption, and through to implementation and support. Without tackling the complexity of flex load adoption in an end-to-end manner, PGE risks losing customers along this journey, which will make it more difficult for PGE to meet our decarbonization targets. PGE is working to enhance our current digital customer channel for a more seamless flex load adoption experience. The development of this customer experience begins by ensuring customers have the right information to understand their bill and energy usage. Features such as enhanced rate comparison tools, load disaggregation, and improved user interfaces are important components of customer awareness and education that will help customers understand where there may be opportunities to engage programs that meet their needs.

Once a customer has chosen a device and/or a rate that meets their need, it is important that PGE provide tools necessary to overcome other acquisition barriers for adoption as part of the seamless experience. These include integration of applicable rebates, options for financing, the convenience of on-bill repayment, and integration with installers. As PGE implements this improved customer journey(s), we plan to seek to recover on this capital investment in our digital toolset through a future rate case filing(s). We are also seeking to identify advantageous financing terms and rates that can be provided to customers by a third-party lender, and plan to file a tariff for customer financing options.

[63] NEEA. *Energy Efficiency Financing: Barriers and Opportunities in the Small Utility Market Report #E16-298*; 2016. Retrieved from https://neea.org/resources/energy-efficiency-financing-barriers-and-opportunities-in-the-small-utility-market.

3.9 Plan Budget

The 2023 TE Plan includes a portfolio of programs, infrastructure measures, and rates/tariffs which are needed to execute PGE's strategy to plan, serve, and manage the TE load. Table 8 provides an overview of the proposed incremental TE Portfolio spend. Table 9 provides an overview of the TE Portfolio costs for currently approved TE programs.

Table 8. 2023-2025 TE Portfolio Proposed Incremental Spend

TE Portfolio Proposed Incremental Spend	2023	2024	2025	2023-2025 Incremental Spend
Customer Ratepayer Subtotal	-	**$3,296,506**	**$6,593,530**	**$9,890,036**
Fleet Partner Pilot	-	$3,036,856	$6,427,093	$9,463,949
Public Charging - Municipal Charging Collaboration	-	$159,650	$166,437	$326,087
Portfolio Support	-	$100,000	-	$100,000
Monthly Meter Charge Subtotal	-	**$4,721,812**	**$7,772,414**	**$12,494,226**
Portfolio Support	-	$287,500	$287,500	$575,000
Public Charging - Municipal Charging Collaboration	-	$2,489,000	$5,354,505	$7,843,504
Residential Smart Charging Pilot	-	$1,945,313	$2,130,409	$4,075,722
Clean Fuels Subtotal	-	**$13,714,381**	**$19,809,449**	**$33,523,830**
Public Charging - Municipal Charging Collaboration	-	$ -	$1,953,000	$1,953,000
Clean Fuels Program	-	$13,714,381	$17,856,449	$31,570,830
Grand Total	-	$21,732,699	$34,175,393	$55,908,092

Table 9. 2023-2025 TE Approved Spend for Current Programs[64]

TE Portfolio Approved Spend	2023	2024	2025	2023-2025 Approved Spend
Customer Ratepayer Subtotal	**$7,410,200**	**$5,267,177**	**$1,505,181**	**$14,182,557**
Business & Multi-Family Make-Ready Solutions	$100,000	$701,852	$1,052,778	$1,854,630
Fleet Partner Pilot	$4,426,760	$3,378,884	$15,680	$7,821,324
Heavy Duty Charging Pilot	$1,997,290	$1,186,441	$436,723	$3,620,453
Portfolio Support	$300,000	-	-	$300,000
Public Charging - Municipal Charging Collaboration	$586,150	-	-	$586,150
Monthly Meter Charge Subtotal	**$8,026,294**	**$2,327,328**	**$198,800**	**$10,552,422**
Business & Multi-Family Make-Ready Solutions	$110,100	$383,600	$198,800	$692,500
Business EV Charging Rebates	$14,000	$1,943,728	0	$1,957,728
EV Ready Affordable Housing Grants	$1,000,000	-	-	$1,000,000
Fleet Partner Pilot	$832,000	-	-	$832,000
Portfolio Support	$1,511,500	-	-	$1,511,500
Public Charging - Municipal Charging Collaboration	$3,821,694	0.001654877	-	$3,821,694
Residential Smart Charging Pilot	$737,000	-	-	$737,000
Deferral Subtotal	**$2,646,059**	**$678,162**	**$305,747**	**$3,629,968**
Business EV Charging Rebates	$446,000	$385,000	-	$831,000
Public Charging - Electric Ave	$520,059	$293,162	$305,747	$1,118,968
Residential Smart Charging Pilot	$1,680,000	-	-	$1,680,000
Clean Fuels Program	**$11,758,817**	-	-	**$11,758,817**
Grand Total	$29,841,370	$8,272,666	$2,009,728	$40,123,764

[64] The figures shown in this budget have been approved previously by the Commission through docketed proceedings, detailed in Appendix I.

Activity	Strategic Alignment	Previously Approved	Incremental	Total
Public Charging - Municipal and Electric Ave		$5,526,943	$8,169,591	$13,696,531
Business EV Charging Rebates**		$2,788,728		$2,788,728
EV Ready Affordable Housing Grants**		$1,000,000		$1,000,000
Fleet Partner Pilot		$8,653,324	$9,463,949	$18,117,273
Heavy Duty Charging Pilot		$3,620,453		$3,620,453
Business and Multi-family Make-ready Solutions*		$2,547,130		$2,547,130
Residential Smart EV Charging Pilot		$2,417,000	$4,075,722	$6,492,722
Portfolio Enablement (AdopDER, Fed $)		$1,811,500	$675,000	$2,486,500
Subtotal Customer Rates		**$28,364,947**	**$22,384,262**	**$50,749,340**
Grants/Infrastructure				
Electric Avenue Upgrade				
Education and Outreach				
Emerging Technology				
Public Charging – Municipal*			$1,953,000	$1,953,000
Clean Fuels (2023 + forecast 2024-2025)		**$11,758,817**	**$33,523,830**	**$45, 282,647**
Total Budget		**$40,123,764**	**$55,908,092**	**$96,031,987**

**Funded from both Customer Rates and Clean Fuels*
***These activities are sunsetting*

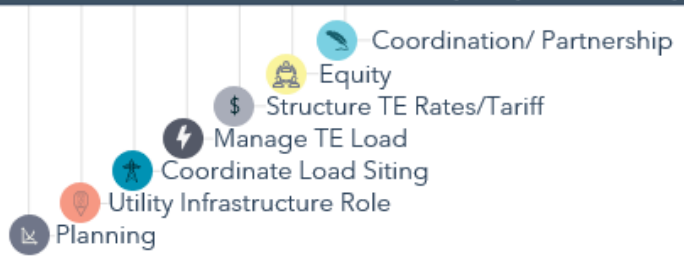

Figure 6. Transportation Electrification Budget[65]

[65] The figures shown in the "Previously Approved" column this budget have been approved previously by the Commission through docketed proceedings, detailed in Appendix I.

3.10 Regulatory

3.10.1 Timeline of Regulatory Activity Since 2019 Plan

The following is a review of the regulatory activities affecting the development the 2023 TE Plan:

- April 16, 2019: OPUC adopts Division 87 rules prescribing the required elements of utility TE Plans and setting a deadline for new plans to be filed two years after Commission acceptance of the prior plans.
- September 30, 2019: PGE files its first formal TE Plan for Commission acceptance under the new rules.
- February 13, 2020: PGE 2019 TE Plan accepted by Commission, thus starting the two-year clock for PGE to file its next plan.
- March 18, 2020: Governor Brown issues Executive Order 20-04, which establishes new greenhouse gas emissions goals for the State of Oregon, directs state agencies to identify and prioritize actions to meet the goals, and directs the Commission to encourage electric companies to support TE infrastructure that supports GHG reductions and helps achieve TE goals set forth in SB 1044 (2019).
- January 28, 2021: Commission directs Staff (Order No. 21-026) to open an investigation to develop a TE investment framework, which Staff defines as a decision-making tool to provide guiding principles to establish the bounds and desired outcomes of utility TE investments, and the basis for their evaluation by the Commission.
- May 26, 2021: In Docket No. UM 2165 Staff holds the first of a series of workshops with utilities and stakeholders to investigate the TEIF, continuing through the summer and fall of 2021.
- May 26, 2021: Coincidentally on the same day as the first UM 2165 workshop, Governor Brown signs HB 2165 into law, amending ORS 757.357 to establish a new utility TE monthly meter charge with required expenditures on underserved communities and placing new importance on investment in charging infrastructure as distinct from programmatic activity in support of TE.
- December 14, 2021: Commission directs Staff (Order No. 21-484) to explore the implementation of the TEIF, open a rulemaking to revise Division 87 (Docket No. AR 654) to reflect statutory and state policy changes, and extend by twelve months the Division 87 deadline that would have required PGE to file a new TEP in February 2022, even as the TEIF and Division 87 revisions were in development.
- April 28, 2022: PGE holds the first of a series of six stakeholder workshops running through April 2023 to share information on its TEP development process and solicit input on its next TE plan.
- May 5, 2022: Staff presents draft Division 87 revisions to the Commission, which opens formal rulemaking.
- August 23, 2022: After further Staff-led workshops in UM 2165, the Commission adopts Staff's recommended guidance document for implementation of the TEIF and the Division 87 rule revisions, including performance metrics developed collaboratively by utilities and stakeholders as well as recommendations for the use of ODOT's Transportation Electrification Infrastructure Needs Analysis (TEINA) as a framework to help evaluate appropriate levels of utility investment in support of TE. In adopting this guidance the Commission also modifies Order No. 18-376, which

outlined principles for the use of Clean Fuels Program funds, to allow closer coordination of these revenues with other utility funding streams in support of TE.

- September 6, 2022: Commission adopts Division 87 revisions, establishing a three-year cycle for utility TE plan filings beginning in 2025, with annual reports and allowance for mid-cycle plan and budget updates if needed.
- October 18, 2022: Commission approves (Order No. 22-381) PGE's proposed 2022 MMC Budget and associated infrastructure measure applications as provided for in HB 2165 and the revised Division 87 rules.
- February 8, 2023: Commission grants (Order No. 23-034) a request from PGE for a further extension of its TEP filing deadline to June 1, 2023 to allow better alignment of its TEP planning process with its parallel IRP and CEP planning processes, so that Staff and stakeholders will have fuller context to evaluate the TEP and impact on customers once filed.
- April 18, 2023: Commission approves (Order No. 23-147) PGE's proposed 2023 MMC Budget and associated infrastructure measure applications as an update to its 2019 TEP, as provided for in the revised Division 87 rules.
- April 20, 2023: PGE holds a final workshop with Staff and stakeholders to share information regarding the content and scope of its in-development 2023 TEP and invite comments, questions, and input.
- June 1, 2023: In compliance with Division 87, PGE presents a draft of its second formal TEP to encompass its portfolio of programs and infrastructure measures in support of TE for calendar years 2023-2025, for Staff and stakeholder review and input.
- August 25, 2023: A final plan filed.

3.10.2 TEIF, TEINA, Division 87 Revisions

As noted in the above timeline, the Commission's Staff-led UM 2165 and AR 654 dockets overlapped and intertwined during 2021 and 2022, with significant redirection occurring with the passage of HB 2165 during the 2021 legislative session.

The TEIF was initiated with the goal of helping Staff, utilities, and stakeholders clarify the appropriate utility role and scope of activity in support of TE and to establish a basis for Commission evaluation of the next round of utility TE Plans. HB 2165 provided legislative direction that was critical to the UM 2165 investigation, but also extended the process as parties digested and adjusted to the new policy landscape created by the bill. The initial expectation that a TEIF would be adopted by the Commission in 2021 and inform utility TE plans slated for filing in the first half of 2022 proved unrealistic as the need for revisions to the Division 87 rules became clear. The Commission's decision to extend the utility TE Plan filing deadlines and allow further time for exploration of the TEIF flowed naturally from these overlapping developments and processes.

We believe that ultimately, the TEIF proposed by Staff and adopted by the Commission in tandem with the Division 87 rule revisions strives to create a holistic TE planning process for utilities. This process incorporates HB 2165 requirements within a framework that includes an infrastructure budget "guardrail" based on ODOT's TEINA methodology, performance area categories developed in collaboration with utilities and stakeholders, and benefit/cost analysis. We believe that the Commission intends the end result to be a comprehensive plan from each investor-owned utility that integrates their entire portfolio of near- and long-term TE actions, programs, and infrastructure measures—as well as their all-source budget—into a single document for Commission and stakeholder review.

The extensive discussions among Staff, stakeholders, and utilities that culminated in Staff's proposed TEIF guidance document and rule revisions were illuminating in many ways, not least of which was the magnitude of the challenge involved in the climate change-driven imperative to electrify the transportation system as a critical decarbonization strategy. At the same time, however, we saw that the market is evolving rapidly. The facts on the road, so to speak, have evolved from the those we faced as we developed our 2019 TEP. Application of the TEINA methodology, in isolation, could in principle be used to justify massive levels of utility investment in TE charging infrastructure with rate impacts that we determined, based on conversations, would be unlikely to gain support from policymakers or customers. The parties to the UM 2165 and AR 654 discussions and PGE's own TEP workshops enjoyed broad agreement on the importance of supporting the TE transformation and that utilities have a vital role to play in that transformation. Yet most parties also expressed the need for caution in balancing investment to keep pace with the market and promote rapid progress in TE with the need to maintain equity and affordability in electricity prices, especially in light of other investments utilities must make in support of decarbonization of the broader energy system.

3.10.3 PGE's Request for Extension

It was in this context that PGE made the decision in January 2023 to request an additional extension of the deadline to file its next TE Plan.

During most of 2022 PGE assumed—and expressed to Staff and stakeholders—that it would develop a new TE Plan in parallel with the AR 654 rulemaking process and file the plan soon after the Commission adopted the new rules. Indeed, the Company initially hoped the rulemaking process would be complete and our plan could be filed early in the third quarter of 2022. However, as the TEIF and rulemaking processes were extended, and as the Company discussed concepts and

budgetary scope for the plan, it became clear that both Staff and stakeholders expected to evaluate the Plan in a broader context that would include PGE's proposals for its upcoming IRP and first-ever CEP as well, and more particularly the potential cumulative customer price impact of all three plans. The IRP and CEP, however, were not slated for filing until the end of March, 2023; more than a month after PGE's February 2023 deadline for filing the TE Plan.

As PGE evaluated its planning processes internally, the Company concluded it would be preferable for Staff and stakeholders to have the broader context of the IRP/CEP first. While the TE Plan is an important priority for PGE, its customers and stakeholders, the magnitude of investment involved in the TE Plan is modest compared to the needs addressed in the IRP/CEP. In addition to providing a more rational sequencing of the plans, the additional time allowed PGE to evaluate the fast-changing EV charging market and determine the optimal balance of priorities, investments, and costs associated with the TE Plan on its customers' behalf.

Thus, PGE formulated its request to the Commission, which was granted on February 8, 2023, for a June 1 deadline to present its draft TE Plan for Staff and stakeholder review. As part of that request, the Company also proposed to share 2023 budgets for expenditure of MMC revenues and Clean Fuels Program funds. In both cases, PGE shared drafts with stakeholders and invited feedback, questions, and suggestions prior to filing the 2023 budgets with the Commission. These interim measures will meet statutory requirements and provide program continuity while the full TE Plan goes through a review and acceptance process that is not expected to conclude until the third quarter of the year.

3.10.4 The Need for Flexibility Mid-Cycle

Our experience in developing this TE Plan in a rapidly evolving market and regulatory framework points to the value of one particular element provided for in the revised Division 87 rules: the allowance for plan and budget updates mid-cycle. Indeed, with its 2023 MMC budget, PGE has already exercised this aspect of the new rules by submitting a budget and infrastructure measure applications that, while complementary to the full 2023-2025 TE Plan, also constitute an update to the currently accepted 2019 TE Plan.

In AR 654, PGE advocated a three-year TE planning cycle, to which we remain committed as a way to promote program continuity, allow meaningful time for implementation and evaluation, and avoid needlessly overextending Staff, utility, and stakeholder resources. PGE is also committed to the portfolio approach that was universally endorsed by parties in UM 2165, namely that utility activities in support of TE are best understood and evaluated as a complementary suite of programs and measures driving overall progress across agreed-upon performance areas.

That said, the rapidly evolving market for EVs and charging infrastructure demands agility, and that will require mid-cycle adjustments to this TE Plan. PGE fully expects that as we implement the programs and activities described in our plan we will seek feedback and encounter market realities—positive and negative—necessitating program and budget refinements. We will hear from our municipal partners and from representatives of underserved communities what works and doesn't work in our pole-charging pilot, for instance, and may need to make changes to reflect that information and improve customer experiences. We intend to remain true to the portfolio-level approach envisioned in the Division 87 rules yet adjust as needed to meet the needs of our customers and fulfill our mandate in support of TE.

3.10.5 PGE's Plan to Bring Forward Revision and New Activity

These mid-cycle adjustments are expected to be limited and strategic in nature and offered thoughtfully to avoid overtaxing Staff and stakeholder review capacity—and to ensure PGE's own program staff are able to implement, seek input, evaluate, and plan activities appropriately. Ultimately, we expect our work under the 2023 TE Plan to be transitional, with heavy emphasis on data and information gathering. We will be applying lessons learned from activities approved in the 2019 TE Plan, scaling up and back as needed, and driving toward a goal of service stability.

3.10.6 Current Vision for the 2025 Plan

At one point in the AR 654 rulemaking process, PGE offered a comment on Staff's draft rule revisions to clarify that the TE Plan should include program or infrastructure measure applications, if any are proposed. In the current environment it may seem difficult to imagine a utility TE plan that proposes no new programs or infrastructure measures; however, we believe that will come to pass. Our expectation is that the work we're doing now and will continue under the 2023 TEP will help us establish a more complete understanding of the mature role of the utility in the TE marketplace. This will likely involve transitioning away from proposing a multitude of new programs and measures with each new Plan, instead focusing on the application of more traditional utility tools like rates, line extension allowances and tariffs.