

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2022

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the Transition period from _____ to _____

Commission File Number 001-05532-99

PORTLAND GENERAL ELECTRIC COMPANY

(Exact name of registrant as specified in its charter)

Oregon
(State or other jurisdiction of
incorporation or organization)

93-0256820
(I.R.S. Employer
Identification No.)

121 S.W. Salmon Street
Portland, Oregon 97204
(503) 464-8000

(Address of principal executive offices, including zip code,
and Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

(Title of class)
Common Stock, no par value

(Trading symbol)
POR

(Name of exchange on which registered)
New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: None.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See definitions of “large accelerated filer,” “accelerated filer,” “smaller reporting company,” and “emerging growth company” in Rule 12b-2 of the Exchange Act.

| | | | |
|-------------------------|-------------------------------------|---------------------------|--------------------------|
| Large accelerated filer | <input checked="" type="checkbox"/> | Accelerated filer | <input type="checkbox"/> |
| Non-accelerated filer | <input type="checkbox"/> | Smaller reporting company | <input type="checkbox"/> |
| | | Emerging growth company | <input type="checkbox"/> |

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant has filed a report on and attestation to its management’s assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

As of June 30, 2022, the aggregate market value of voting common stock held by non-affiliates of the Registrant was \$4,297,974,093. For purposes of this calculation, executive officers and directors are considered affiliates.

As of February 8, 2023, there were 89,312,765 shares of common stock outstanding.

Documents Incorporated by Reference

Part III, Items 10 - 14

Portions of Portland General Electric Company’s definitive proxy statement to be filed pursuant to Regulation 14A for the Annual Meeting of Shareholders to be held on April 21, 2023.

PORTLAND GENERAL ELECTRIC COMPANY
FORM 10-K
FOR THE YEAR ENDED DECEMBER 31, 2022

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DEFINITIONS

The abbreviations or acronyms defined below are used throughout this Form 10-K:

| Abbreviation or Acronym | Definition |
|--------------------------------|--|
| AFUDC | Allowance for funds used during construction |
| ARO | Asset retirement obligation |
| AUT | Annual Power Cost Update Tariff |
| Beaver | Beaver natural gas-fired generating plant |
| Biglow Canyon | Biglow Canyon Wind Farm |
| Boardman | Boardman coal-fired generating plant |
| BPA | Bonneville Power Administration |
| Carty | Carty natural gas-fired generating plant |
| Colstrip | Colstrip Units 3 and 4 coal-fired generating plant |
| Coyote Springs | Coyote Springs Unit 1 natural gas-fired generating plant |
| Dth | Decatherm = 10 therms = 1,000 cubic feet of natural gas |
| EIM | Energy Imbalance Market |
| EPA | United States Environmental Protection Agency |
| ESS | Electricity Service Supplier |
| FERC | Federal Energy Regulatory Commission |
| FMB | First Mortgage Bond |
| FPA | Federal Power Act |
| GRC | General Rate Case for a specified test year |
| IRP | Integrated Resource Plan |
| ISFSI | Independent Spent Fuel Storage Installation |
| kV | Kilovolt = one thousand volts of electricity |
| Moody's | Moody's Investors Service |
| MW | Megawatts |
| MWa | Average megawatts |
| MWh | Megawatt hours |
| NRC | Nuclear Regulatory Commission |
| NVPC | Net Variable Power Costs |
| OATT | Open Access Transmission Tariff |
| OPUC | Public Utility Commission of Oregon |
| PCAM | Power Cost Adjustment Mechanism |
| PTC | Federal production tax credit |
| PW1 | Port Westward Unit 1 natural gas-fired generating plant |
| PW2 | Port Westward Unit 2 natural gas-fired flexible capacity generating plant |
| QF | Public Utility Regulatory Policies Act of 1978 (PURPA) qualifying facility |
| RAC | Renewable Adjustment Clause |
| RPS | Renewable Portfolio Standard |
| S&P | S&P Global Ratings |
| SEC | United States Securities and Exchange Commission |
| Trojan | Trojan nuclear power plant |
| Tucannon River | Tucannon River Wind Farm |
| USDOE | United States Department of Energy |
| Wheatridge | Wheatridge Renewable Energy Facility |

PART I

ITEM 1. BUSINESS.

General

Portland General Electric Company (PGE or the Company), a vertically-integrated electric utility with corporate headquarters located in Portland, Oregon, is engaged in the generation, wholesale purchase, transmission, distribution, and retail sale of electricity in the state of Oregon (State). The Company operates as a cost-based, regulated electric utility with revenue requirements and customer prices determined based on the forecasted cost to serve retail customers and a reasonable rate of return as determined by the Public Utility Commission of Oregon (OPUC). PGE meets its retail load requirement with both Company-owned generation and power purchased in the wholesale market. The Company participates in the wholesale market through the purchase and sale of electricity and natural gas in an effort to obtain reasonably-priced power to serve its retail customers. PGE is committed to developing products and service offerings for the benefit of retail and wholesale customers. PGE, incorporated in 1930, is publicly-owned, with its common stock listed on the New York Stock Exchange (NYSE). The Company operates as a single business segment, with revenues and costs related to its business activities maintained and analyzed on a total electric operations basis. The Company owns unregulated, non-utility real estate comprised primarily of PGE's corporate headquarters.

PGE's State-approved service area allocation of four thousand square miles is located entirely within Oregon and includes 51 incorporated cities. During 2022, the Company added nine thousand customers, and as of December 31, 2022, served a total of 926 thousand retail customers.

Available Information

PGE's periodic and current reports, and amendments to those reports, are available and may be accessed free of charge through the Investors section of the Company's website at PortlandGeneral.com as soon as reasonably practicable after the reports are electronically filed with, or furnished to, the United States Securities and Exchange Commission (SEC). It is not intended that PGE's website and the information contained therein or connected thereto be incorporated into this Annual Report on Form 10-K.

Regulation

Federal and State regulation each have a significant influence on PGE's business operations. In addition to the agencies and activities discussed below, the Company is subject to regulation by certain environmental agencies, as described in the Environmental Matters section in this Item 1.

Federal Regulation

Several federal agencies, including the Federal Energy Regulatory Commission (FERC), the U.S. Department of Transportation's Pipeline and Hazardous Materials Safety Administration (PHMSA), and the Nuclear Regulatory Commission (NRC), have regulatory authority over certain of PGE's operations and activities, as described in the discussion that follows.

PGE is a "licensee," a "public utility," and a "user, owner, and operator of the bulk power system," as those terms are defined in the Federal Power Act (FPA). As such, the Company is subject to regulation by the FERC in matters related to wholesale energy activities, transmission services, reliability and cybersecurity standards, natural gas pipelines, hydroelectric projects, accounting policies and practices, short-term debt issuances, and certain other matters.

Wholesale Energy—PGE has authority under its FERC Market-Based Rates tariff to charge market-based rates for wholesale energy sales in all markets in which it sells electricity except in its own Balancing Authority Area (BAA).

The BAA is the area in which PGE is responsible for balancing customer demand with electricity supply, in real time, and the tariff exception within PGE's BAA does not have a material impact on the Company.

Transmission—PGE offers wholesale electricity transmission service pursuant to its Open Access Transmission Tariff (OATT), which contains rates, terms, and conditions of service, as filed with, and approved by, the FERC.

Reliability and Cybersecurity Standards—The FERC has adopted mandatory reliability standards for owners, users, and operators of the bulk power system. Such standards, which are applicable to PGE, were developed by the North American Electric Reliability Corporation (NERC) and the Western Electricity Coordinating Council (WECC), which have responsibility for compliance and enforcement of these standards, and are intended to help protect critical cyber and physical assets used to support reliable operations.

Natural Gas Pipelines—The FERC has authority in matters related to the construction, operation, extension, enlargement, safety, and abandonment of jurisdictional interstate natural gas pipeline facilities, as well as transportation rates and accounting for interstate natural gas commerce. PGE is subject to such authority as the Company has a 79.5% ownership interest in the Kelso-Beaver (KB) Pipeline, a 17-mile, 20-inch diameter, interstate pipeline that provides natural gas to Port Westward Unit 1 (PW1), Port Westward Unit 2 (PW2), and Beaver, the Company's natural gas-fired generating plants located near Clatskanie, Oregon, to the North Mist storage facility (owned and operated by a local natural gas distribution company), and to one additional local delivery point that serves a manufacturing concern. As the operator of record of the KB Pipeline, PGE is subject to the requirements and regulations enacted under the Pipeline Safety Laws administered by the PHMSA, which include safety and operator qualification standards in addition to public awareness requirements.

Hydroelectric Licensing—As required under the FPA, PGE holds FERC licenses for all Company-owned and operated hydroelectric generating plants. The FERC license process includes an extensive public review process that involves the consideration of numerous natural resource issues and environmental conditions. For additional information, see the Environmental Matters section in this Item 1. and the *Generating Facilities* section in Item 2.—“Properties.”

Accounting Policies and Practices—PGE prepares periodic and current reports in accordance with accounting principles generally accepted in the United States of America (GAAP). In addition, the Company prepares, pursuant to applicable provisions of the FPA, financial statements in accordance with the accounting requirements of the FERC, as set forth in its applicable Uniform System of Accounts and published accounting releases. Such financial statements are included in annual and quarterly reports filed with the FERC.

Short-term Debt—Pursuant to applicable provisions of the FPA and FERC regulations, regulated public utilities are required to obtain FERC approval to issue certain securities. For additional information on the Company's Short-term Debt, see “*Short-term Debt*” in the Debt and Equity section of Liquidity and Capital Resources in Item 7.—“Management's Discussion and Analysis of Financial Condition and Results of Operations.”

Spent Fuel Storage—The NRC regulates the licensing and decommissioning of nuclear power plants, including PGE's decommissioned Trojan nuclear power plant (Trojan), which was closed in 1993. For additional information on spent nuclear fuel storage activities, see Note 8, Asset Retirement Obligations in the Notes to Consolidated Financial Statements in Item 8.—“Financial Statements and Supplementary Data” and “*Hazardous Material*” in the Environmental Matters section of this Item 1.

State Regulation

PGE is subject to the jurisdiction of the OPUC, which reviews and approves the Company's retail prices and reviews the Company's generation and transmission resource acquisition plans, pursuant to a biennial integrated resource planning process. The OPUC regulates the issuance of securities, prescribes accounting policies and practices, regulates the sale of utility assets, reviews transactions with affiliated companies, and has jurisdiction over the acquisition of, or exertion of substantial influence over, public utilities.

Retail customer prices are determined through formal public proceedings that generally include testimony by participating parties, discovery, public hearings, and the issuance of a final order by the OPUC. Participants in such proceedings may include PGE, OPUC staff, and intervenors representing PGE customer groups, as well as other interested parties. The following lists the more significant regulatory mechanisms and proceedings under which customer prices are determined:

- *General Rate Cases.* PGE periodically evaluates the need to update its retail electric price structure as part of a comprehensive general rate case process that reflects revenue requirements based on a forecasted test year. The OPUC authorizes the Company's debt-to-equity capital structure, return on equity, overall rate of return, and customer prices.
- *Annual Power Cost Updates.* The OPUC has approved an Annual Power Cost Update Tariff (AUT) by which PGE can adjust retail customer prices annually to reflect forecasted changes in the Company's net variable power costs (NVPC). NVPC consists of the cost of power purchased and fuel used to generate electricity, as well as the cost of settled electric and natural gas financial contracts (all classified as Purchased power and fuel expense in the Company's consolidated statements of income) and is net of wholesale revenues, which are classified in the consolidated statements of income as Revenues, net. The OPUC has also authorized a Power Cost Adjustment Mechanism (PCAM), under which PGE may share with customers a portion of actual cost variances associated with NVPC.
- *Renewable Energy.* The State has a Renewable Portfolio Standard (RPS) that requires PGE to serve a portion of its retail load with renewable resources. In conjunction with the RPS, the State established a Renewable Adjustment Clause (RAC) mechanism that allows for the recovery in retail customer prices, outside of a general rate case, of prudently incurred costs to comply with the RPS.
 - In 2016, the State also passed Oregon Senate Bill (SB) 1547, a law referred to as the Oregon Clean Electricity and Coal Transition Plan, which, among its provisions, increased the RPS percentages in certain future years and required the elimination of coal from Oregon utility customers' energy supply. For further information on SB 1547, see "*RPS standards and other laws*" in the Overview section of Item 7.—"Management's Discussion and Analysis of Financial Condition and Results of Operations."
 - During 2021, the State legislature passed House Bill (HB) 2021, which establishes clean energy targets and sets out a framework that includes, among other things, the development and submittal of clean energy plans for investor-owned utilities, including PGE, and electric service suppliers in the State. The targets are an 80% reduction in greenhouse gas (GHG) emissions by 2030, 90% by 2035, and 100% by 2040 and every year thereafter. For further information on HB 2021 and the baseline to which the target reductions apply, see "*HB 2021*" in the Laws and Regulations portion of the Overview section of Item 7.—"Management's Discussion and Analysis of Financial Condition and Results of Operations."

Regulatory Accounting

PGE prepares financial statements in accordance with GAAP and, as a regulated public utility, the effects of rate regulation are reflected in its financial statements. GAAP provides for the deferral, as regulatory assets, of certain actual or estimated costs that would otherwise be charged to expense, based on expected recovery from customers in future prices. Likewise, certain actual or anticipated credits that would otherwise be recognized as revenue or reduce expense can be deferred as regulatory liabilities, based on expected future credits or refunds to customers. PGE records regulatory assets or liabilities if it is probable that they will be reflected in future prices, based on regulatory orders or other available evidence.

The Company periodically assesses the applicability of regulatory accounting to its business, considering both the current and anticipated future regulatory environment and related accounting guidance. For additional information, see "*Regulatory Assets and Liabilities*" in Note 2, Summary of Significant Accounting Policies, and Note 7,

Regulatory Assets and Liabilities, in the Notes to Consolidated Financial Statements in Item 8.—“Financial Statements and Supplementary Data.”

Customers and Revenues

PGE generates revenue primarily through the sale and delivery of electricity to retail customers located exclusively in Oregon. In addition, the Company distributes power to customers that choose to purchase their energy from an Electricity Service Supplier (ESS). Although the Company includes such Direct Access customers in its customer counts and energy delivered to such commercial and industrial customers in its total retail energy deliveries, retail revenues include only delivery charges and applicable transition adjustments for these Direct Access customers, as the customers purchase energy directly from the ESSs. The Company conducts retail electric operations within its State-approved service territory and competes with ESSs to supply certain commercial and industrial customer energy needs. In addition, PGE competes with the local natural gas distribution company for the energy needs of residential and commercial space heating, water heating, and appliances. Energy efficiency, conservation measures, and the advancement of distributed generation, including rooftop solar, and storage resources also have an influence on customer demand.

Retail Revenues

Retail customers are classified as residential, commercial, or industrial, with no single customer representing more than 8% of PGE’s total retail revenues or 13% of total retail deliveries.

PGE’s Retail revenues, retail energy deliveries, and average number of retail customers consist of the following:

| | Years Ended December 31, | | | | | |
|--|--------------------------|--------------|-----------------|--------------|-----------------|--------------|
| | 2022 | | 2021 | | 2020 | |
| Retail revenues ⁽¹⁾ (dollars in millions): | | | | | | |
| Residential | \$ 1,158 | 52 % | \$ 1,118 | 54 % | \$ 1,030 | 53 % |
| Commercial | 735 | 33 | 708 | 34 | 634 | 33 |
| Industrial | 312 | 14 | 279 | 13 | 246 | 13 |
| Subtotal | 2,205 | 99 | 2,105 | 101 | 1,910 | 99 |
| Alternative revenue programs, net of amortization | 11 | 1 | (29) | (1) | (6) | — |
| Other accrued revenues, net ⁽²⁾ | 7 | — | 2 | — | 28 | 1 |
| Total retail revenues | <u>\$ 2,223</u> | <u>100 %</u> | <u>\$ 2,078</u> | <u>100 %</u> | <u>\$ 1,932</u> | <u>100 %</u> |
| Retail energy deliveries ⁽³⁾ (MWh in thousands): | | | | | | |
| Residential | 8,088 | 38 % | 7,978 | 39 % | 7,756 | 40 % |
| Commercial | 7,198 | 34 | 7,193 | 35 | 6,855 | 35 |
| Industrial | 5,945 | 28 | 5,361 | 26 | 4,932 | 25 |
| Total retail energy deliveries | <u>21,231</u> | <u>100 %</u> | <u>20,532</u> | <u>100 %</u> | <u>19,543</u> | <u>100 %</u> |
| Average number of retail customers: | | | | | | |
| Residential | 809,573 | 88 % | 800,372 | 88 % | 791,119 | 88 % |
| Commercial | 112,602 | 12 | 111,569 | 12 | 110,851 | 12 |
| Industrial | 269 | — | 268 | — | 267 | — |
| Total | <u>922,444</u> | <u>100 %</u> | <u>912,209</u> | <u>100 %</u> | <u>902,237</u> | <u>100 %</u> |

(1) Includes both revenues from customers who purchase their energy supplies from the Company and revenues from the delivery of energy to those commercial and industrial customers that purchase their energy from ESSs.

- (2) Amount for the year ended December 31, 2020 is primarily comprised of \$24 million of amortization, including interest, related to the deferral recorded in 2018 for the net tax benefits due to the change in corporate tax rate under the United States Tax Cuts and Jobs Act of 2017 (TCJA).
- (3) Includes both energy sold to retail customers and energy deliveries to those commercial and industrial customers that purchase their energy from ESSs.

The following table presents additional annual averages for retail customers. Certain supplemental tariff collections are excluded from revenues as they are not considered a part of the Company's base retail prices for these calculations.

| | Years Ended December 31, | | |
|---|--------------------------|--------------|------------|
| | 2022 | 2021 | 2020 |
| Residential | | | |
| Revenue per customer (in dollars): | \$ 1,362 | \$ 1,320 | \$ 1,226 |
| Usage per customer (in kilowatt hours): | 9,991 | 9,968 | 9,804 |
| Revenue per kilowatt hour (in cents): | 13.63 ¢ | 13.24 ¢ | 12.50 ¢ |
| Commercial | | | |
| Revenue per customer (in dollars): | \$ 6,491 | \$ 6,303 | \$ 5,684 |
| Usage per customer (in kilowatt hours): | 63,923 | 64,478 | 61,837 |
| Revenue per kilowatt hour (in cents): | 10.15 ¢ | 9.78 ¢ | 9.19 ¢ |
| Industrial | | | |
| Revenue per customer (in dollars): | \$ 1,156,371 | \$ 1,044,314 | \$ 921,540 |
| Usage per customer (in kilowatt hours): | 22,097,472 | 20,002,246 | 18,472,161 |
| Revenue per kilowatt hour (in cents): | 5.23 ¢ | 5.22 ¢ | 4.99 ¢ |

For additional information, see the Results of Operations section in Item 7.—“Management’s Discussion and Analysis of Financial Condition and Results of Operations.”

In addition to standard cost-of-service pricing, the Company offers different pricing options including a daily market price option, various time-of-use options, and several renewable energy options. For additional information on customer options, see “*Customer Choice Programs*” within this Customers and Revenues section of this Item 1.

Residential customers include single family housing, multiple family housing (such as apartments, duplexes, and town homes), mobile homes, and small farms. Residential demand is sensitive to the effects of weather. The Company had seen its highest peak demand during the winter heating season although increased use of air conditioning in PGE’s service territory has caused the summer peaks to increase over time. In recent years, including 2022, summer peaks have exceeded winter peaks and long-term load forecasts expect that trend to continue. An extreme winter temperature event on December 22, 2022, caused a new winter peak for the first time since 1998. Economic conditions can also affect residential demand as job growth and population growth in PGE’s service territory have led to increased customer growth rates. The COVID-19 pandemic has introduced additional behavioral patterns as residential customers spend more time at home. Residential demand is also impacted by energy efficiency measures and increased rooftop solar penetration in the service territory; however, the Company’s decoupling mechanism was intended to mitigate the financial effects of such measures. For further information regarding the decoupling mechanism, see “*Decoupling*” among the *Regulatory Matters* in the Overview section of Item 7.—“Management’s Discussion and Analysis of Financial Condition and Results of Operations.”

Commercial customers consist of non-residential customers who accept energy deliveries at voltages equivalent to those delivered to residential customers. This customer class includes most businesses, small industrial companies, and public street and highway lighting accounts. The Company’s commercial customer demand is somewhat less susceptible to weather conditions than residential customer demand. Economic conditions and fluctuations in total employment in the region can lead to changes in energy demand from commercial customers. Energy efficiency measures also impact commercial demand, as measures have focused in the commercial sector in recent years, although the Company’s decoupling mechanism was intended to partially mitigate the financial effects of such measures. For further information regarding the decoupling mechanism, see “*Decoupling*” among the *Regulatory*

Matters in the Overview section of Item 7.—“Management’s Discussion and Analysis of Financial Condition and Results of Operations.”

Industrial customers consist of non-residential customers who accept delivery at higher voltages than commercial customers, with pricing based on the amount of electricity delivered under the applicable tariff. Demand from industrial customers is primarily driven by economic conditions, with weather having little impact on this customer class.

Customer Choice Programs—Under cost-of-service pricing, residential and small commercial customers may select portfolio options from PGE that include time-of-use and renewable resource pricing.

Pricing options other than cost-of-service are available to certain commercial and industrial customers for a one-year period, including daily market index-based pricing under which the Company provides the electricity, and Direct Access, whereby customers purchase electricity directly from an ESS.

PGE receives revenue from Direct Access customers only for the transmission and delivery of the volume of electricity delivered, along with fixed transition adjustments intended to mitigate the shifting of excess charges to the Company’s cost-of-service customers. Certain large commercial and industrial customers may elect a fixed three-year or a minimum five-year term, to be served either by an ESS, or by the Company under the daily market index-based price option. Participation in the fixed three-year and minimum five-year opt-out programs for existing and planned load is capped at 300 average megawatts (MWa) in aggregate.

In 2020, the OPUC issued an order that required PGE to begin offering, to eligible customers, enrollment in the New Large Load Direct Access program, which is capped at 119 MWa in total, for unplanned, large, new loads and large load growth at existing sites.

For further information regarding Direct Access deliveries, see “Customers and demand” in the Overview section of Item 7.—“Management’s Discussion and Analysis of Financial Condition and Results of Operations.”

PGE’s customers have a desire for purchasing clean energy, as over 234 thousand residential and small commercial customers voluntarily participate in PGE’s Green Future Program, the largest renewable power program by participation in the nation. Oregon’s most populous city, Portland, and most populous county, Multnomah, have each passed resolutions to achieve 100 percent clean and renewable electricity by 2035 and 100 percent economy-wide clean and renewable energy by 2050. Other jurisdictions in PGE’s service area have set, or are considering, similar goals.

The Company implemented a new customer service option, the Green Future Impact Program, which allows for 100 MW of PGE-provided power purchase agreements for renewable resources and up to 200 MW of customer-provided renewable resources. Approved by the OPUC in 2019, the program provides business customers access to bundled renewable attributes from those resources. In March 2021, the OPUC issued an order that expanded the program by 200 MW and provided for the possibility of PGE ownership of the underlying renewable resources under certain conditions. Through this voluntary program, the Company seeks to align sustainability goals, cost and risk management, and reliable integrated power while providing customer choice and a cleaner energy system. In December 2021, the OPUC issued an order, which approved a petition to increase capacity under the customer-provided renewable resources by 250 MW, which brings the total available capacity under the program to 750 MW. For more information on the Company’s power purchase agreements that currently serve the Green Future Impact Program, see “*Green Future Impact Program*” within *Purchased Power* in the Power Supply section of this Item 1.

Wholesale Revenues

PGE participates in the wholesale electricity marketplace in order to balance its supply of power to meet the needs of its retail customers. Interconnected transmission systems in the western United States serve utilities with diverse load requirements and allow the Company to purchase and sell electricity, largely through bi-lateral agreements,

within the region to serve retail demand. PGE’s engagement in the wholesale electricity marketplace depends upon numerous factors, including the relative price and availability of power, hydro and wind conditions, and daily and seasonal retail demand. The Company also participates in the California Independent System Operator’s western Energy Imbalance Market (western EIM), which allows for load balancing with other western EIM participants in five-minute intervals. Wholesale revenues represented 14% of total revenues in 2022, 11% in 2021, and 8% in 2020.

Other Operating Revenues

Other operating revenues consist primarily of gains and losses on the sale of natural gas volumes purchased that exceeded what was needed to fuel the Company’s generating facilities, as well as revenues from transmission services, excess transmission capacity resales, pole attachment rentals, and other electric services provided to customers. Other operating revenues represented 2% of total revenues in 2022, 3% in 2021, and 2% in 2020.

Seasonality

Demand for electricity by PGE’s residential and, to a lesser extent, commercial customers is affected by seasonal weather conditions. The Company uses heating and cooling degree-days to determine the effect of weather on the demand for electricity. Heating and cooling degree-days, determined by taking the difference between the average daily temperature and a baseline of 65 degrees, provide cumulative variances over a period of time, to indicate the extent to which customers are likely to have used electricity for heating or cooling. The higher the number of degree-days, the greater the expected demand for electricity.

The following table presents the heating and cooling degree-days for the most recent three-year period, along with current 15-year averages for the most recent year provided by the National Weather Service, as measured at Portland International Airport:

| | <u>Heating Degree-Days</u> | <u>Cooling Degree-Days</u> |
|------------------------|--------------------------------|--------------------------------|
| 2022 | 4,103 | 865 |
| 2021 | 3,828 | 838 |
| 2020 | 3,836 | 600 |
| 15-year average | 4,103 | 569 |

In June 2021, PGE set a new all-time high net system load peak of 4,453 megawatts (MW), surpassing the previous all-time peak that occurred in December 1998 by more than 9%. While the Company’s previous summer peak of 3,976 MW had occurred in August 2017, that level has been exceeded now in each of the past two summers. In December 2022, a new winter peak of 4,113 MW occurred. The following table presents PGE’s average winter (defined as January, February, and December) and summer (defined as June through September) loads for the periods presented, along with the corresponding peak load (in MWs) and month in which such peak occurred. As illustrated, although the average winter loads continue to exceed average summer loads, the Company has seen its highest annual peak loads during the summer months in recent years:

| | <u>Winter Loads</u> | | | <u>Summer Loads</u> | | |
|-------------|---------------------|-------------|--------------|---------------------|-------------|--------------|
| | <u>Average</u> | <u>Peak</u> | <u>Month</u> | <u>Average</u> | <u>Peak</u> | <u>Month</u> |
| 2022 | 2,773 | 4,113 | December | 2,529 | 4,255 | July |
| 2021 | 2,659 | 3,629 | December | 2,492 | 4,453 | June |
| 2020 | 2,566 | 3,367 | December | 2,289 | 3,771 | July |

The Company tracks and evaluates both load growth and peak load requirements for purposes of long-term load forecasting, integrated resource planning, and preparing general rate case assumptions. Behavior patterns, conservation, energy efficiency initiatives and measures, weather effects, economic conditions, distributed generation including rooftop solar, transportation and building electrification, and demographic changes all play a

role in determining expected future customer demand and the resulting resources the Company may need to adequately meet those loads and maintain adequate capacity reserves.

Power Supply

PGE utilizes its generating resources, as well as wholesale power purchases from third parties to meet the needs of its retail customers. The volume of electricity the Company generates is dependent upon, among other factors, the capacity and availability of its generating resources and the price and availability of wholesale power and natural gas. As part of its power supply operations, the Company enters into short- and long-term power and fuel purchase and sale agreements. PGE executes economic dispatch decisions concerning its own generation and participates in the wholesale market in an effort to obtain reasonably-priced power for its retail customers, manage risk, and administer its long-term wholesale contracts. The Company also performs portfolio management and wholesale market sales services for third parties in the region. The Company also encourages energy efficiency measures to help meet its energy requirements and promotes the use of various demand side management products to reduce load during peak time usage.

PGE's resource and contracted capacity (in MW) was as follows:

| | As of December 31, | | | |
|--|--------------------|-------|----------|-------|
| | 2022 | | 2021 | |
| | Capacity | % | Capacity | % |
| Generation: | | | | |
| Thermal ⁽¹⁾ : | | | | |
| Natural gas | 1,842 | 32 % | 1,842 | 35 % |
| Coal | 296 | 4 | 296 | 5 |
| Total thermal | 2,138 | 37 | 2,138 | 40 |
| Wind ⁽²⁾ | 817 | 15 | 817 | 16 |
| Hydro ⁽³⁾ | 419 | 7 | 495 | 9 |
| Total generation | 3,374 | 59 | 3,450 | 65 |
| Purchased power: | | | | |
| Long-term contracts: | | | | |
| Hydro ⁽³⁾ | 871 | 15 | 803 | 15 |
| PURPA qualifying facilities ⁽⁴⁾ | 315 | 5 | 298 | 6 |
| Dispatchable standby generation | 130 | 2 | 130 | 2 |
| Capacity | 100 | 2 | 100 | 2 |
| Wind ⁽²⁾ | 300 | 5 | 300 | 6 |
| Solar ⁽⁵⁾ | 57 | 1 | 7 | — |
| Biomass | 10 | — | 10 | — |
| Total long-term contracts | 1,783 | 31 | 1,648 | 31 |
| Short-term contracts | 597 | 10 | 216 | 4 |
| Total purchased power capacity | 2,380 | 41 | 1,864 | 35 |
| Total resource capacity | 5,754 | 100 % | 5,314 | 100 % |

(1) Capacity represents the MW the plants are capable of generating under normal operating conditions, which is affected by ambient temperatures, net of electricity used in the operation of the plant.

(2) Capacity represents nameplate and differs from expected energy to be generated, which is expected to have a capacity factor range from 30 to 40%, dependent upon wind conditions.

(3) Capacity represents net capacity and differs from expected energy to be generated, which is expected to have a capacity factor range from 40 to 50%, dependent upon river flows.

(4) Capacity represents contracted capacity for power purchase agreements (PPAs) under the Public Utility Regulatory Policies Act of 1978 (PURPA).

- (5) Capacity includes 50 MW from the solar component of Wheatridge. The Wheatridge facility also includes 30 MW related to the battery component which is not reflected in the table above.

For information regarding actual generating output and purchases for the years ended December 31, 2022 and 2021, see the Results of Operations section of Item 7.—“Management’s Discussion and Analysis of Financial Condition and Results of Operations.”

Generation

PGE’s generating resources consist of six thermal plants (natural gas- and coal-fired), three wind farms, and seven hydroelectric facilities. The portion of PGE’s retail load requirements generated by its plants varies from year to year and is determined by various factors, including planned and unplanned outages, availability and price of coal and natural gas, precipitation and snow-pack levels, the market price of electricity, and wind variability. For a complete listing of these facilities, see “*Generating Facilities*” in Item 2.—“Properties.”

Thermal The Company has five natural gas-fired generating facilities: PW1, PW2, Beaver, Coyote Springs Unit 1 (Coyote Springs), and Carty Generating Station (Carty).

The Company operated, and continues to have a 90% ownership interest in the Boardman coal-fired generating plant (Boardman), which ceased coal-fired operations during the fourth quarter of 2020. The Company has begun decommissioning the facility. The Company also has a 20% ownership interest in the Colstrip Units 3 and 4 coal-fired generating plant (Colstrip), which is located in Colstrip, Montana and operated by a third party. For additional information on Colstrip as it relates to environmental laws and regulations in the State, see “*RPS standards and other laws*” in the Overview section in Item 7.—“Management’s Discussion and Analysis of Financial Condition and Results of Operations” and Note 19, Contingencies, in the Notes to Consolidated Financial Statements in Item 8.—“Financial Statements and Supplementary Data.”

Wind PGE owns and operates two wind farms, Biglow Canyon Wind Farm (Biglow Canyon) and Tucannon River Wind Farm (Tucannon River). Biglow Canyon, located in Sherman County, Oregon, consists of 217 turbines with a total nameplate capacity of 450 MW. Tucannon River, located in southeastern Washington, consists of 116 turbines with a total nameplate capacity of 267 MW. During 2020, the wind component of the Wheatridge Renewable Energy Facility (Wheatridge), located in Morrow County, Oregon, was placed into service. Although PGE does not operate Wheatridge, it owns 40 turbines with a total nameplate capacity of 100 MW and purchases the output of the remaining turbines, with a nameplate capacity of 200 MW through power purchase agreement. PGE and NextEra Energy Resources, LLC, a subsidiary of NextEra Energy, Inc. have entered into agreements to construct a 311 MW wind energy facility, which will be part of the larger Clearwater Wind development in Eastern Montana. This additional wind capacity is not reflected in the table above. For more information regarding the Clearwater Wind development, see “*The Resource Planning Process*” within the “*Overview*” section of Item 7 — “Management’s Discussion and Analysis of Financial Condition and Results of Operations.”

Hydro The Company’s FERC-licensed hydroelectric projects consist of Pelton/Round Butte on the Deschutes River near Madras, Oregon (discussed below), four plants on the Clackamas River, and one on the Willamette River.

As of December 31, 2021, PGE had a 66.67% ownership interest in the 455 MW Pelton/Round Butte hydroelectric project on the Deschutes River, with the remaining interest held by the Confederated Tribes of the Warm Springs Reservation of Oregon (CTWS). A 50-year joint license for the project, which is operated by PGE, was issued by the FERC in 2005. The CTWS had an option to purchase an additional undivided 16.66% ownership interest in Pelton/Round Butte in 2021, and closed on the purchase of this incremental undivided ownership interest on January 1, 2022. As a result, PGE’s ownership interest in the project is 50.01%. CTWS has a second option in

2036 to purchase an undivided 0.02% interest in Pelton/Round Butte. If the second option is exercised, CTWS's ownership percentage would exceed 50%. PGE purchases 100% of the CTWS's share of the project output. For more information see "CTWS" within *Purchased Power* in the Power Supply section of this Item 1.

Fuel Supply—PGE contracts for natural gas and coal supplies required to fuel the Company's thermal generating plants, with certain plants also able to operate on fuel oil, if needed. In addition, the Company uses forward, future, swap, and option contracts to manage its exposure to volatility in natural gas prices.

Natural Gas Physical supplies of natural gas are generally purchased up to twelve months in advance of delivery and based on anticipated operation of the plants. PGE manages the price risk of natural gas supply through the use of financial contracts up to 60 months in advance of expected need of energy.

PGE owns 79.5%, and is the operator of record, of the KB Pipeline, which directly connects PW1, PW2, and Beaver to the Northwest Pipeline, an interstate natural gas pipeline operating between British Columbia and New Mexico. Currently, PGE transports natural gas on the KB Pipeline for its own use under a firm transportation service agreement, with capacity offered to others on an interruptible basis to the extent not utilized by the Company. PGE has access to 111,805 Dth per day of firm natural gas transportation capacity on the Northwest Pipeline to serve the three plants.

PGE has access to 4.1 billion cubic feet of natural gas storage in Mist, Oregon from which it can draw when economic factors favor its use or in the event that natural gas supplies are interrupted. The storage facility, owned and operated by NW Natural, may be utilized to provide fuel to PW1, PW2, and Beaver.

To serve Coyote Springs and Carty, PGE has access to 120,000 Dth per day of firm natural gas transportation capacity on three pipeline systems accessing gas fields in Alberta, Canada.

Coal The Colstrip co-owners obtain coal to fuel the plant via conveyor belt from a mine that lies adjacent to the facility and is the sole source of coal supply for the plant. The coal supply contract with the owner of the mine is scheduled to expire at the end of 2025. The terms of the contract and the quality of coal are expected to allow the facility to operate within required emissions limits.

Purchased Power

PGE supplements its own generation with power purchased in the wholesale market to meet its retail load requirements. The Company utilizes short- and long-term wholesale power purchase contracts in an effort to provide the most favorable economic mix on a variable cost basis.

PGE's medium-term power cost strategy helps mitigate the effect of price volatility on its customers due to changing energy market conditions. The strategy allows the Company to take positions in power and fuel markets up to five years in advance of physical delivery. By purchasing a portion of anticipated energy needs for future years over an extended period, PGE mitigates a portion of the potential future volatility in the average cost of purchased power and fuel.

The Company's major power purchase contracts consist of the following (also see the preceding table which summarizes the average resource capabilities related to these contracts):

Hydro—During 2022, the Company had the following agreements:

- *Public Utility Districts*—PGE has long-term power purchase contracts with certain public utility districts (PUDs) in the state of Washington for a portion of the output of two hydroelectric projects on the mid-Columbia River. Although the projects currently provide PGE a total of 410 MW of capacity through contracts as shown below, actual energy received is dependent upon river flows and capacity amounts may decline over time:
 - 162 MW of capacity with Grant County PUD that expires in 2052;
 - 148 MW of capacity with Douglas County PUD that expires in 2028; and
 - 100 MW of capacity with Douglas County PUD that expires in 2025.
- *CTWS*—PGE has a long-term agreement under which the Company purchases output from CTWS' interest in the Pelton/Round Butte hydroelectric project. Although the agreement provides approximately 224 MW of net capacity, actual energy received is dependent upon river flows. The term of the agreement coincides with the term of the FERC license for this project, which expires in 2055. Under a separate PPA executed in 2014, PGE pays fixed capacity and energy charges to CTWS for 100% of its share of the project through 2024. On June 30, 2021 the CTWS notified PGE of their intent to exercise their option to purchase an additional undivided 16.66% ownership interest in Pelton/Round Butte and closed on the purchase on January 1, 2022. As a result of the sale, capacity from company-owned generation decreased by approximately 76 MW, and capacity from purchased power increased by a corresponding amount. Under the PPA, PGE purchases 100% of the CTWS's additional share of the project and payments under the PPA increase proportionately. In the fourth quarter of 2021, PGE and CTWS executed an additional 16-year PPA which begins on January 1, 2025, that effectively extends the term from 2024 to 2040 and increases the capacity payments in the extension period.
- *Other*—The remaining capacity is primarily comprised of two additional contracts that provide for the purchase of power generated from hydroelectric projects with capacity of 236 MW in total:
 - 200 MW of capacity with Bonneville Power Administration that expires in 2024; and
 - 36 MW of capacity with Portland Hydro that expires in 2032

PURPA qualifying facilities—PGE is required to purchase power from PURPA qualifying facilities (QFs), as mandated by federal law. QFs are generating facilities that fall within the following two categories: i) qualifying generation facilities with a capacity of 80 MW or less and whose primary energy source is renewable (hydro, wind, solar, biomass, waste, or geothermal); or ii) qualifying cogeneration facilities that sequentially produce electricity and another form of useful thermal energy (e.g., heat, steam) in a way that is more efficient than the separate production of each form of energy. As of December 31, 2022, PGE had contracts with 67 online QFs, providing a total of 315 MW of capacity. As of December 31, 2022, PGE has six contracts with QFs representing 127 MW of capacity that are not yet operational, of which two of the QF PPAs are in default because the QF has failed to complete construction and become operational by the date required by the PPA. The PPAs provide that the QF has one year to cure its default. If the QF has failed to cure, PGE is permitted to immediately terminate the QF PPA upon expiration of the cure period. The term of a QF PPA generally ranges from 15 to 23 years.

The expense and volume of purchases from QFs for the years ended December 31, 2022 and 2021 were as follows:

| | 2022 | 2021 |
|--|----------|----------|
| PURPA contract expense (in millions) | \$ 62 | \$ 55 |
| MWh purchased under PURPA contracts (in thousands) | 750 | 683 |
| Average cost per MWh from PURPA contracts | \$ 82.90 | \$ 79.89 |

Expenses incurred related to PURPA contracts are included in PGE's AUT.

Dispatchable Standby Generation (DSG)—PGE has a DSG program under which the Company can start, operate, and monitor customer-owned backup generators when needed to provide NERC-required operating reserves. As of December 31, 2022, there were 59 customer-owned sites with a total DSG capacity of 130 MW. PGE continues to pursue expansion of the program with the goal of having an additional 3 to 10 MW of customer-owned DSG projects online by the end of 2023.

Capacity—PGE has one capacity contract representing up to 100 MW of seasonal capacity during the summer and winter peak periods obtained from a natural gas-fired resource, which expires in 2024.

Wind—PGE has three contracts representing 300 MW of capacity to purchase power generated from renewable wind resources that extend to 2028, 2035, and 2051. The expected energy from these wind resources will vary from the nameplate capacity due to varying wind conditions. PGE and NextEra Energy Resources, LLC, a subsidiary of NextEra Energy, Inc. have entered into agreements to construct a 311 MW wind energy facility, which will be part of the larger Clearwater Wind development in Eastern Montana. This additional wind capacity is not reflected in the table above. For more information regarding the Clearwater Wind development, see “*The Resource Planning Process*” within the “*Overview*” section of Item 7— “*Management’s Discussion and Analysis of Financial Condition and Results of Operations.*”

Solar—PGE has four contracts representing 57 MW of capacity to purchase power generated from photovoltaic solar projects. Two of these projects extend to 2036 while the other two extend to 2037 and 2042. The expected energy from these solar resources will vary from the nameplate capacity due to varying solar conditions. Construction on the solar and battery components of Wheatridge was completed in 2022. The solar component of Wheatridge supplies the Company with 50 MW of capacity. The facility also includes 30 MW related to the battery component which is not reflected in the table above. Subsidiaries of NextEra Energy Resources, LLC own the solar and battery components, and sell their portion of the output to PGE.

Biomass—PGE has one contract to purchase biomass energy that is set to expire in June 2023.

Green Future Impact Program— PGE has three contracts representing 360 MW of capacity to purchase power generated from renewable resources to support the Green Future Impact Program:

- a 15-year contract with Avangrid Renewables representing 162 MW from a renewable solar facility in Gilliam County, Oregon that was placed in service in January 2023. This additional capacity is not reflected in the table above; and
- a 15-year contract with Avangrid Renewables representing 138 MW from a renewable solar facility in Wasco County, Oregon that is expected to be placed in service in December 2023. This additional capacity is not reflected in the table above.
- a 15-year contract with Avangrid Renewables representing 60 MW from a renewable solar facility in Wasco County, Oregon that is expected to be placed in service in December 2023. This additional capacity is not reflected in the table above.

For additional information on the Green Future Impact Program, see “*Customer Choice Programs*” within the Customers and Revenues section of this Item 1.

Short-term contracts—These contracts are for delivery periods of one month up to one year in length. They are entered into with various counterparties to provide additional firm energy to help meet the Company’s load requirements.

PGE also utilizes spot purchases of power in the open market to secure the energy required to serve its retail customers. Such purchases are made under contracts that range in duration from 15 minutes to less than one month. PGE is a market participant in the western EIM, which allows certain of the Company’s generating plants to receive automated dispatch signals from the California Independent System Operator (CAISO) for load balancing with other western EIM participants in five-minute intervals.

For additional information regarding PGE’s power purchase contracts, see Note 16, Commitments and Guarantees and Note 17, Leases, in the Notes to Consolidated Financial Statements in Item 8.—“Financial Statements and Supplementary Data.”

Future Energy Resource Strategy

PGE’s Integrated Resource Plan (IRP) outlines the Company’s plan to meet future customer demand and describes PGE’s future energy supply strategy. For a detailed discussion of the IRPs, see “*Investing in a Clean Energy Future*” within the Overview section of Item 7.—“Management’s Discussion and Analysis of Financial Condition and Results of Operations.”

Transmission and Distribution

Transmission systems deliver energy from generating facilities to distribution systems for final delivery to customers. PGE schedules energy deliveries over its transmission system in accordance with FERC requirements and operates one BAA in its service territory. In 2022, PGE delivered approximately 27 million megawatt hours (MWh) through 1,255 circuit miles of transmission lines operating at or above 115 kilovolts (kV).

PGE’s transmission system is part of the Western Interconnection, the regional grid in the western United States. The Western Interconnection includes the interconnected transmission systems of 11 western states, two Canadian provinces and parts of Mexico, and is subject to the reliability rules of the WECC and the NERC. PGE relies on transmission contracts with Bonneville Power Administration (BPA) to transmit a significant amount of the Company’s generation to serve its distribution system. PGE’s transmission system, together with contractual rights on other transmission systems, enables the Company to integrate and access generation resources to meet its customers’ energy requirements. PGE’s generation is managed on a coordinated basis to obtain maximum load-carrying capability and efficiency. PGE has announced its intention to join the Western Power Pool and a binding resource adequacy program for the region known as the Western Resource Adequacy Program (WRAP). For further information, see “*Operating Activities*” within the Overview section of Item 7.—“Management’s Discussion and Analysis of Financial Condition and Results of Operations.”

The Company’s wholesale transmission activities are regulated by the FERC and are offered on a non-discriminatory basis, with all potential customers provided equal access to PGE’s transmission system through PGE’s OATT. In accordance with its OATT, PGE offers several transmission services to wholesale customers, including:

- Network integration transmission service, a service that integrates generating resources to serve retail loads;
- Short- and long-term firm point-to-point transmission service, a service with fixed delivery and receipt points; and
- Non-firm point-to-point service, an “as available” service with fixed delivery and receipt points.

For additional information regarding the Company’s transmission and distribution facilities, see “*Transmission and Distribution*” in Item 2.—“Properties.”

Environmental Matters

PGE’s operations are subject to a wide range of environmental protection laws and regulations, which pertain to air and water quality, endangered species and wildlife protection, and hazardous material. Various state and federal agencies also regulate environmental matters that relate to the siting, construction, and operation of generation, transmission, and substation facilities and the handling, accumulation, clean-up, and disposal of toxic and hazardous substances. In addition, certain of the Company’s hydroelectric projects and transmission facilities are located on property under the jurisdiction of federal and state agencies, and/or tribal entities that have authority in environmental protection matters. The following discussion provides further information on certain environmental regulations that affect the Company’s operations and facilities.

Air Quality

Clean Air Act—PGE’s operations, primarily its thermal generating plants, are subject to regulation under the federal Clean Air Act (CAA), which addresses particulate matter, hazardous air pollutants, and GHG emissions, among other things. Oregon and Montana, the states in which PGE’s thermal facilities are located, also implement and administer certain portions of the CAA and have set standards that are at least as stringent as federal standards. PGE manages its air emissions at its thermal generating plants by the use of low sulfur fuel, emissions and combustion controls and monitoring, and sulfur dioxide allowances awarded under the CAA.

Climate Change—In 2015, the United States Environmental Protection Agency (EPA) released the Clean Power Plan (CPP), under which each state would have to reduce overall carbon dioxide emissions from its power sector on a state-wide basis. In 2016, the United States Supreme Court halted implementation and enforcement of the CPP. In 2018, the EPA proposed the more narrowly focused Affordable Clean Energy (ACE) rule, to repeal and replace the CPP and, in 2019, finalized the ACE rule, which established guidelines for states to develop plans to address GHG emissions from individual, existing coal-fired plants, such as Colstrip in the case of PGE. With the finalization of the ACE rule, the CPP was repealed. However, on January 19, 2021, the U.S. Court of Appeals for the D.C. Circuit vacated the ACE rule and remanded it, in full, back to the EPA. Notwithstanding objections that the EPA intended to issue a new rule that took recent changes in the electricity sector into account, on October 29, 2021, the U.S. Supreme Court agreed to hear an appeal of the D.C. Circuit decision. The Supreme Court, in a February 28, 2022 decision, determined that the broad approach in the CPP regulating emissions exceeded the powers granted to EPA by Congress. The Court did not expressly determine whether EPA can regulate power sector GHG emissions through its other regulatory authority and the EPA has indicated it intends to issue a proposed successor rule to the CPP in March 2023.

PGE will continue to assess the Supreme Court’s decision, as well as any further EPA response, for impacts on Colstrip and the Company’s existing natural gas fleet.

House Bill (HB) 2021—In June 2021, the Oregon Legislature passed HB 2021, which requires retail electricity providers to reduce GHG emissions associated with serving Oregon retail electricity consumers 80% by 2030, 90% by 2035, and 100% by 2040, compared to their baseline emissions levels. The baseline levels for PGE are the average annual emissions for the years 2010, 2011, and 2012 associated with the electricity sold to its retail electricity consumers as reported to the Oregon Department of Environmental Quality (ODEQ). See “*HB 2021*” in the *Laws and Regulations* section of the Overview for additional information.

Any laws that would impose taxes or mandatory reductions in GHG emissions may have a material impact on PGE’s operations, as the Company utilizes fossil fuels in its own power generation and other companies use such fuels to generate power that PGE purchases in the wholesale market. If incremental costs were incurred as a result of changes in the regulations regarding GHG emissions, the Company would seek recovery in customer prices.

For more information regarding GHG emissions and related environmental regulation, including Oregon’s RPS and the Company’s goals in this area, see “*Renewable Energy*” under *State Regulation* in the Regulation section of this Item 1. and “*Company Strategy*” in the Overview section of Item 7.—“*Management’s Discussion and Analysis of Financial Condition and Results of Operations.*”

Water Quality

The federal Clean Water Act requires that any federal license or permit to conduct an activity that may result in a discharge to waters of the United States must first receive a water quality certification or permit from the state in which the activity will occur. In Oregon, Montana, and Washington, the Department of Environmental Quality and Department of Ecology of each state are responsible for reviewing proposed projects under such requirements to ensure that federally approved activities will meet water quality standards and policies established by the respective state. PGE has obtained permits or certificates of compliance for its hydroelectric operations under the FERC licenses and continues to monitor and update equipment to meet federal and state standards.

Threatened and Endangered Species and Wildlife

Fish Protection—The federal Endangered Species Act (ESA) has granted protection to many populations of migratory fish species in the Pacific Northwest. Long-term recovery plans for these species continue to have operational impacts on many of the region’s hydroelectric projects. PGE continues to implement fish protection measures at its hydroelectric projects that were prescribed by the U.S. Fish and Wildlife Service and the National Marine Fisheries Service under their authority granted in the ESA and the FPA. Conditions required with the operating licenses are expected to result in a minor reduction in power production and continued capital spending to modify the facilities to enhance fish passage and survival.

Avian Protection—Various statutes, including the Migratory Bird Treaty Act and Bald and Golden Eagle Protection Act, contain provisions for civil, criminal, and administrative penalties resulting from the unauthorized take of migratory birds and eagles. Because PGE operates facilities that can pose risks to a variety of such birds and eagles, the Company developed an Avian Protection Plan to help address and reduce risks to avian species that may be affected by Company operations. PGE has implemented such a plan for its transmission, distribution, and thermal generation facilities and additional, specific plans for its wind generation facilities.

Hazardous Material

PGE has a comprehensive program to comply with requirements of both federal and state regulations related to the storage, handling, and disposal of hazardous materials. The handling and disposal of hazardous materials from Company facilities is subject to regulation under the federal Resource Conservation and Recovery Act. In addition, the use, disposal, and clean-up of polychlorinated biphenyls, contained in certain electrical equipment, are regulated under the federal Toxic Substances Control Act.

PGE is also subject to the Comprehensive Environmental Response Compensation and Liability Act, commonly referred to as Superfund, which provides authority to the EPA to assert joint and several liability for investigation and remediation costs for designated Superfund sites.

An investigation by the EPA that began in 1997 of a segment of the Willamette River in Oregon known as Portland Harbor, revealed significant contamination of river sediments and prompted the EPA to designate Portland Harbor as a Superfund site. The EPA has listed PGE among the more than one hundred Potentially Responsible Parties (PRPs) in this matter, as PGE historically owned or operated property near the river. For additional information regarding the EPA action on Portland Harbor, see Note 19, Contingencies, in the Notes to Consolidated Financial Statements in Item 8.—“*Financial Statements and Supplementary Data.*”

PGE is subject to regulation by the United States Department of Energy (USDOE), which, under the Nuclear Waste Policy Act of 1982, is responsible for the permanent storage and disposal of spent nuclear fuel. PGE has contracted

with the USDOE for permanent disposal of spent nuclear fuel from Trojan that is stored in the Independent Spent Fuel Storage Installation (ISFSI), an NRC-licensed interim dry storage facility that houses the fuel. The NRC approved the transfer of spent nuclear fuel from a spent fuel pool to the ISFSI where it is expected to remain until permanent off-site storage is available. Shipment of the spent nuclear fuel from the ISFSI to off-site storage is not expected to be completed prior to 2059. For additional information regarding this matter, see “*Trojan decommissioning activities*” in Note 8, Asset Retirement Obligations, in the Notes to Consolidated Financial Statements in Item 8. —“Financial Statements and Supplementary Data.”

Human Capital Management

PGE’s talent and culture are vital to its ability to execute its business strategy and realize continued success. Accordingly, the Company seeks to attract and retain a talented, motivated, and diverse workforce and maintain a culture that reflects PGE’s Guiding Behaviors, drive for performance, and commitment to acting with the highest levels of honesty, integrity, compliance, and safety.

Employees and Collective Bargaining Agreements—PGE had 2,873 employees in its workforce as of December 31, 2022, with 673 employees covered under one of two separate agreements with Local Union No. 125 of the International Brotherhood of Electrical Workers (IBEW). One agreement covers 610 employees, which expires March 2025, and the other covers 63 employees, which expires August 2027. The partnership with IBEW is key to a holistic labor relations approach. In addition, PGE utilizes independent contractors and temporary personnel to supplement its workforce.

Competitive Pay and Benefits—PGE is committed to pay equity among its employees and offers a wide range of market-competitive benefits, including comprehensive health and welfare benefits and a 401(k) retirement plan, designed to support the physical, mental, and financial well-being of its employees.

Talent Development—PGE provides a variety of training and development programs for employees, as well as tuition reimbursement for job-related coursework. PGE offers a mentorship program for all regular, non-represented PGE employees to help support their growth and development. The PGE Board of Directors oversees executive talent development with the assistance of the Nominating, Governance, and Sustainability Committee and the Compensation, Culture and Talent Committee in an effort to maximize the pool of internal candidates. At least annually, the Board conducts reviews of succession plans for senior management, which includes a review of the qualifications and development plans of potential internal candidates and diversity of the succession pipeline. The Compensation, Culture and Talent Committee regularly conducts more in-depth reviews of development plans for promising management talent. PGE conducts employee engagement surveys periodically to give employees the opportunity to share their perspectives and provide feedback. Survey results are shared with PGE management so that managers can take action towards improving the employee experience.

Health and Safety—PGE is committed to providing a safe and healthy place of business for employees, customers, and the public. Management has established an Executive Safety Council that has oversight of the Company’s efforts to create a safe workplace. In addition, PGE provides various safety resources to its employees, such as safety manuals, trainings, and incident reporting tools that are all designed to incorporate safe practices into all daily activities and promote in all employees a sense of personal commitment, responsibility, and obligation regarding safety. PGE also has an Employee Assistance Program that provides free and confidential wellness counseling to all employees and their families.

Diversity, Equity, and Inclusion—PGE promotes an inclusive workforce through pay equity practices, racial equity training, and development opportunities for women and people of color to advance into management. Black, Indigenous, and People of Color comprise over 26% of its employees and nearly 26% of management. One third of its employees and management, including its CEO, are female. PGE also promotes diversity and economic development through its suppliers. The Company’s supplier diversity program provides an opportunity in all competitive bid events for qualified minority-owned, women-owned, disabled veteran-owned, and emerging small business suppliers.

COVID-19—Since the beginning of the COVID-19 pandemic, PGE has taken steps to protect employees. The Company continues to prioritize the health and safety of its employees and be informed by federal, state and local officials to align its efforts with current information.

Information about Executive Officers

The following are PGE’s current executive officers:

| Name | Age | Current Position and Previous Experience | Year Appointed Officer |
|----------------------|-----|---|------------------------|
| James A. Ajello | 69 | Senior Vice President, Finance, Chief Financial Officer, Treasurer and Corporate Compliance Officer (January 2021 to present), Senior Advisor (November 2020 to December 2020), Executive Vice President and Chief Financial Officer at Hawaiian Electric Industries (January 2009 to April 2017 - retired), Senior Vice President, Business Development at Reliant Energy (January 2000 to January 2009), Managing Director, UBS Securities (January 1984 to August 1998). | 2021 |
| Larry N. Bekkedahl | 61 | Senior Vice President, Advanced Energy Delivery (July 2021 to present), Vice President, Grid Architecture, Integration and Systems Operations (January 2019 to July 2021), Vice President Transmission and Distribution (August 2014 to January 2019). Senior Vice President of Transmission Services at BPA (June 2012 to August 2014), Vice President of Engineering and Technical Services at BPA (2008 to June 2012). | 2014 |
| Nicholas G. Blosser | 52 | Vice President Public Affairs (August 2022 to present), Chief of Staff and Deputy Cabinet Secretary and Special Assistant to the President, Office of Cabinet Affairs at The White House (March 2021 to July 2022), Intergovernmental Affairs and State Lead, Biden-Harris Transition Team (November 2020-January 2021), Chief of Staff for Oregon Governor Kate Brown (February 2017 to November 2020), Co-Founder and CEO of Celilo Group Media, Inc. (January 2000 to February 2017) | 2022 |
| M. Angelica Espinosa | 45 | Vice President, General Counsel (March 2022 to present), Deputy General Counsel and Corporate Secretary (June 2021 to March 2022), Chief Risk Officer and Vice President of Safety and Compliance at Southern California Gas Company (January 2019 to June 2021), Vice President, Compliance & Governance and Corporate Secretary at Sempra Energy (November 2016 to January 2019) | 2022 |
| Bradley Y. Jenkins | 59 | Vice President, Utility Operations (January 2019 to present), Vice President, Generation and Power Operations (October 2017 to January 2019), Vice President, Power Supply Generation (September 2015 to October 2017), General Manager, Diversified Plant Operations, (November 2013 to August 2015), Plant General Manager, Boardman (September 2012 to November 2013), Operations Manager, Boardman (March 2012 to September 2012). | 2015 |
| John T. Kochavatr | 49 | Vice President, Information Technology and Chief Information Officer (February 2018 to present). Senior Vice President and Chief Information Officer at SUEZ Water Technologies & Solutions (formerly General Electric Water and Process Technologies) (October 2017 to January 2018), Chief Information Officer and Chief Digital Officer at General Electric Water and Process Technologies (November 2012 to September 2017). | 2018 |

| | | | |
|-------------------|----|---|------|
| Anne F. Mersereau | 60 | Vice President, Human Resources, Diversity, Equity and Inclusion (January 2016 to present), Employee Services Manager (January 2014 to January 2016), Change Management Consultant (January 2012 to January 2014), Human Resources Business Partner (July 2009 to December 2011). | 2016 |
| Maria M. Pope | 57 | President (October 2017 to present) and Chief Executive Officer (January 2018 to present), Senior Vice President, Power Supply, Operations and Resource Strategy (March 2013 to December 2017), Senior Vice President, Finance, Chief Financial Officer and Treasurer (January 2009 to February 2013). Board director (January 2006 to December 2008). Vice President and Chief Financial Officer for Mentor Graphics Corporation (July 2007 to December 2008). | 2009 |
| Brett M. Sims | 54 | Vice President, Strategy, Regulation and Energy Supply (October 2020 to present), Senior Director of Strategy, Commercial and Regulatory Affairs (September 2017 to October 2020), Director of Origination, Structuring & Resource Strategy (May 2001 to September 2017). | 2020 |

ITEM 1A. RISK FACTORS.

When evaluating PGE and any investment in its securities, investors should consider carefully the following risk factors and all other information contained in this Annual Report on Form 10-K and in the other documents that the Company files from time to time with the SEC. The events described in the risk factors could have material effects on PGE's business, financial condition, results of operations, or cash flows, or that materially adversely affect PGE's results and cause such results to differ materially from projected results. Risk and uncertainties not currently known to the Company or that are currently deemed to be immaterial may also harm PGE. If any of these risks occur, PGE's business, financial condition, results of operations, and/or cash flows could be materially adversely affected, and the trading prices of the Company's securities could substantially decline.

BUSINESS AND OPERATIONAL RISKS

The effects of unseasonable or severe weather and other natural phenomena can adversely affect the Company's financial condition and results of operations, and the effects of climate change could result in more intense, frequent, and extreme weather events.

Weather conditions can adversely affect PGE's revenues and costs, impacting the Company's results of operations. Variations in temperatures can affect customer demand for electricity, with warmer-than-normal winter seasons or cooler-than-normal summer seasons reducing the demand for energy. Weather conditions are the dominant cause of usage variations from normal seasonal patterns, particularly for residential customers. Rapid increases in load requirements resulting from unexpected weather changes, particularly if coupled with transmission constraints, could adversely impact PGE's cost and ability to meet the energy needs of its customers. Conversely, rapid decreases in load requirements could result in the sale of excess energy at depressed market prices.

Changes in the global and local climate could result in more intense, frequent, and extreme weather events such as ice and snowstorms, high wind, flooding, changes in regional rainfall and snowpack levels, high heat events, drought conditions, and increased risk of wildfires. These events may disrupt energy delivery, cause power outages, and damage the Company's facilities and transmission and distribution system. Such events could result in a reduction in revenue and an increase in additional costs to restore service, repair facilities, purchase power and fuel to serve PGE load, and procure insurance related to such impacts. In response to more intense, frequent, and severe weather events, PGE may need to make additional investments in generation, transmission, and distribution assets to enhance reliability and resiliency. Severe weather may also require increased PGE personnel availability, which could result in increased operating expenses as well increased safety risk. In certain instances, PGE relies on mutual aid support to assist in the recovery from severe weather. Lack of availability of mutual aid support could result in increased time to restore services to customers as well as increased costs and decreased customer satisfaction.

Wildfires of greater size and prevalence, such as those of a magnitude seen in Oregon in recent years, could negatively affect public safety, the resilience of the electric grid, customers' demand for power and PGE's ability and cost to procure adequate power and fuel supplies to serve its customers, PGE's ability to access the wholesale energy market, PGE's ability to operate its generating facilities and transmission and distribution systems, PGE's costs to maintain, repair, and replace such facilities and systems, and recovery of costs. PGE may be unable to effectively implement a public safety power shutoff (PSPS) and de-energize its system in the event of heightened wildfire risk, or the PSPS may not be able to prevent a wildfire, which could lead to potential liability if energized systems are determined to be the cause of wildfires that result in harm.

Capital investment and operating expenses related to this risk may not be recoverable through increases in customer prices.

Cybersecurity attacks, data security breaches, physical attacks and security breaches, acts of terrorism, or other similar events that could disrupt PGE's operations, require significant expenditures, or result in claims against the Company.

In the normal course of business, PGE collects, processes, and retains sensitive and confidential customer and employee information, as well as proprietary business information, and operates systems that directly impact the availability of electric power and the transmission of electric power in its service territory. PGE owns and operates generation, transmission, distribution, and other facilities that depend on information technology systems. A cyber-attack may cause large-scale disruption to the U.S. bulk power system or PGE operations and could target the Company's computer systems, software, or networks to achieve such disruption. Generation, transmission, and distribution facilities, in general, have been identified as potential targets of physical or cyber-attacks. In addition, physical attacks on transmission and distribution facilities have occurred in the United States. Despite the security measures in place, the Company's systems and assets, and those of third-party service providers, could be vulnerable to cybersecurity attacks, data security breaches, physical attacks and security breaches, acts of terrorism, or other similar events that could disrupt operations, cause damage to the Company's generation, transmission, or distribution facilities, impact reliability of the transmission and distribution system, information technology systems, inhibit the capability of equipment or systems to function as designed or expected, prevent service to customers or collection of revenues, or result in the release of sensitive or confidential customer, employee, or Company information. Such events could cause a shutdown of service, expose PGE to liability, or cause reputational damage. In addition, the Company may be required to expend significant capital and other resources to protect against security breaches or to alleviate problems caused by security breaches. A breach of certain business systems could impact PGE's ability to initiate, authorize, process, record, and report financial information. The cost of repairing damage to PGE's facilities and infrastructure caused by acts of terrorism, and the loss of revenue if such events prevent PGE from providing utility service to its customers, could adversely impact its financial condition and results of operations. PGE maintains insurance coverage against some, but not all, potential losses resulting from these risks. However, insurance is limited in scope and subject to exceptions, and may not be adequate to protect the Company against liability in all cases and insurers may dispute or be unable to perform their obligations to the Company, or may not be available at rates that are commercially reasonable.

Natural or human-caused disasters and other risks could damage the Company's facilities and disrupt delivery of electricity resulting in significant property loss, repair costs, and reduced customer satisfaction.

PGE has exposure to natural and human-caused disasters and other risks, including, but not limited to, a pandemic such as COVID-19, earthquake, accidents, equipment failure, acts of terrorism, acts of vandalism, computer system outages and other events. Such events, which may be amplified by the fact that PGE's business activities are concentrated in one region, could disrupt PGE operations, damage PGE facilities and systems, interrupt the delivery of electricity, increase repair and service restoration expenses, reduce revenues, cause the release of harmful materials, cause fires or flooding, and subject the Company to liability. Such events, if repeated or prolonged, can also affect customer satisfaction and the level of regulatory oversight.

Electric utility operations may pose risk to public and workers' safety.

The operation of electric generation, transmission, and distribution infrastructure involves inherent risks, including breakdown or failure of equipment, motor vehicle accidents, fires involving the utility's equipment, dam failure at company-owned hydroelectric facilities, public and worker safety, human contact with energized equipment, and operator error. A portion of the Company's operations relies on Company- or third party-owned natural gas transmission and distribution infrastructure and involves inherent risks, such as leaks, explosions, mechanical problems, and worker and public safety.

These risks could cause significant harm to workers and the public including loss of human life, significant damage to property, adverse impacts on the environment and impairment of PGE's operations, all of which could result in financial losses that would have a material adverse effect on the Company's results of operations and financial condition. PGE is also required to comply with new and changing regulatory standards involving safety compliance. The cost to comply with such requirements could be significant, and failure to meet these regulatory standards could result in substantial fines.

The inability to attract and retain a qualified workforce and to maintain satisfactory collective bargaining agreements without prolonged labor disruptions, may adversely affect PGE's results of operations.

PGE's workforce includes a diverse mix of skilled professional, managerial, and technical employees, including employees represented under collective bargaining agreements. Workforce management risks include the risk of retaining key employees, turnover due to demographic challenges as employees approach retirement age, and turnover due to macroeconomic trends such as the impacts of inflation on pensions and other retirement funding. PGE faces competition for employees within the industry and in local geographies. The Company faces the risk of labor disruption due to the outcomes of labor negotiations or the possibility that employees not currently subject to collective bargaining agreements may organize. PGE relies on a contracted workforce for specific business purposes, and may experience increased costs or inability to find contracted workforce, which may result in a negative impact on operations as well as financial impact.

The construction of new facilities and the modifications or replacements of existing facilities, is subject to risks that could result in the disallowance of certain costs for recovery in customer prices or higher operating costs.

Long-term increases in both the number of customers and demand for energy will require continued expansion and upgrade of PGE's generation, transmission, and distribution systems. Construction of new facilities and modifications or replacements of existing facilities could be affected by factors such as unanticipated delays and cost increases, including supply chain disruption and cost inflation, availability of skilled workforce, increases in interest rates, failure of counterparties to perform under agreements, and the failure to obtain, or delay in obtaining, necessary permits from state or federal agencies or tribal entities. Delays and cost increases could result in failure to complete the projects or the abandonment of capital projects, which could eliminate or impair PGE's ability to recover related costs in the rate determination process. In addition, failure to complete construction projects according to specifications could result in reduced plant efficiency, equipment failure, and plant performance that falls below expected levels, which could increase operating costs.

REGULATORY, LEGAL, AND COMPLIANCE RISKS

PGE is subject to extensive price regulation and relies on recovery of costs, the uncertainty of which affect the Company's operations and costs.

PGE is subject to ongoing regulation by the FERC, the OPUC and by certain federal, state, and local authorities under environmental, permitting, and other laws. Such regulation significantly influences the Company's operating environment and affects many aspects of its business. The Company cannot predict with certainty the future course

of such changes or the ultimate effect that they might have on its business, and such changes could delay or adversely affect business planning and transactions and substantially increase the Company's costs.

OPUC regulates the prices that PGE charges, which is a major factor in determining the Company's operating income, financial position, liquidity, and credit ratings. As a general matter, PGE relies on customer prices to recover most of the costs incurred in connection with the operation of its business, including, among other things, costs related to capital projects (such as the construction of new facilities or the modification of existing facilities), the costs of compliance with legislative and regulatory requirements (including environmental laws), and the costs of damage from storms and other natural disasters. Regulators may deny recovery of costs it considers imprudently incurred. Although the OPUC is required to establish customer prices that are fair, just, and reasonable, it has significant discretion in the interpretation of this standard. PGE attempts to manage its costs at levels consistent with OPUC-approved prices. However, if the Company is unable to do so, or if such cost management results in increased operational risk, the Company's financial and operating results could be adversely affected.

PGE is subject to various legal and regulatory proceedings, the outcome of which is uncertain, and resolution unfavorable to PGE could adversely affect its results of operations, financial condition, or cash flows.

In the normal course of its business, PGE is subject to regulatory proceedings, lawsuits, claims, and other matters, which could result in adverse judgments, settlements, fines, penalties, injunctions, or other relief. Such matters include governmental policies, legislative action, and regulatory audits, investigations, and actions, including those of the FERC and OPUC with respect to allowed rates of return, financings, electricity pricing and price structures, acquisition and disposal of facilities and other assets, construction and operation of plant facilities, transmission of electricity, recovery of power costs, operating expenses, deferrals, timely recovery of costs and capital investments, and current or prospective wholesale and retail competition. These matters are subject to many uncertainties, the ultimate outcome of which management cannot predict. The final resolution of certain matters in which PGE is involved could result in disallowance of operating expenses previously deferred or could require that the Company incur expenditures over an extended period and in a range of amounts that could have an adverse effect on its cash flows and results of operations. Similarly, the terms of resolution could require the Company to change its business practices and procedures, which could also have an adverse effect on its cash flows, financial position, or results of operations. New laws, changes in legal precedent, or novel interpretations of existing regulations could also result in adverse effects on cash flows and results of operations.

There are certain pending legal and regulatory proceedings that may have an adverse effect on results of operations and cash flows for future reporting periods. For additional information, see Item 3.—“Legal Proceedings,” *Regulatory Matters* within the “Overview” of Item 7.—“Management's Discussion and Analysis of Financial Condition and Results of Operations,” and Note 19, Contingencies, in the Notes to Consolidated Financial Statements in Item 8.—“Financial Statements and Supplementary Data.”

Compliance with environmental laws and regulations may result in capital expenditures, increased operating costs and various liabilities, and adverse impact on the Company's results of operations.

PGE is subject to various environmental laws, regulations, and other standards including federal, state and local environmental statutes, rules and regulations relating to air quality, water quality and usage, soil quality, emissions of greenhouse gases (GHG) such as carbon dioxide, waste management, hazardous wastes, fish, avian and other wildlife mortality and habitat protection, historical artifact preservation, natural resources, health, and safety. Compliance with such laws and regulations could, among other things, prevent or delay the development of power generation and transmission and distribution facilities, restrict output of facilities, limit the use of fuels required for power generation, require additional pollution control equipment, require investment in non-emitting resources, and otherwise increase costs and increase capital expenditures.

A portion of PGE's total system load is supplied with power generated from hydroelectric and wind generating resources. Operation of these facilities is subject to regulation related to the protection of fish and wildlife. Changes to the listing of various plants and species of fish, birds, and other wildlife as threatened or endangered could result in increased mitigation activities, which could have a material impact on PGE's financial condition and results of

operations. Salmon recovery plans could include further major operational changes to the region's hydroelectric projects, including those owned by PGE and those from which the Company purchases power under long-term contracts. In addition, laws relating to the protection of migratory birds and other wildlife could impact the development and operation of transmission and distribution lines and wind projects. Also, new interpretations of existing laws and regulations could be adopted or become applicable to such facilities, which could further increase required expenditures for salmon recovery and endangered species protection and reduce the availability of hydroelectric or wind generating resources to meet the Company's energy requirements.

Compliance with any new or additional GHG emissions reduction requirements could require PGE to incur significant expenditures, including those related to carbon capture and sequestration technology, purchase of emission allowances and offsets, fuel switching, and the retirement or replacement of high-emitting generation facilities with non-emitting facilities. The cost to comply with potential GHG emissions reduction requirements is subject to significant uncertainties, including those related to: the timing of the implementation of emissions reduction rules; required levels of emissions reductions; requirements with respect to the allocation of emissions allowances; the maturation, regulation, and commercialization of carbon capture, sequestration, and storage technology; and PGE's compliance alternatives. Although the Company cannot currently estimate the effect of future laws and regulations on its results of operations, financial condition, or cash flows, the costs of compliance with such legislation or regulations could be material.

Changes in tax laws may have an adverse impact on the Company's financial position, results of operations, and cash flows.

PGE makes judgments and interpretations about the application of tax law when determining the provision for taxes. Such judgments include the timing and probability of recognition of income, deductions, and tax credits, which are subject to challenge by taxing authorities. Additionally, treatment of tax benefits and costs for ratemaking purposes could be different than what the Company anticipates or requests from the State regulatory commission, which could have a negative effect on the Company's financial condition and results of operations.

PGE owns and operates renewable generating facilities, which generate federal production tax credits (PTCs) that PGE uses to reduce its federal tax obligations. The amount of PTCs earned depends on the level of electricity output generated and the applicable tax credit rate. A variety of operating and economic parameters, including adverse weather conditions and equipment reliability, could significantly reduce the PTCs generated by the Company's wind facilities resulting in a material adverse impact on PGE's financial condition and results of operations. These PTCs generate tax credit carryforwards that the Company plans to utilize in the future to reduce income tax obligations. If PGE cannot generate enough taxable income in the future to utilize all of the tax credit carryforwards before the credits expire, the Company may incur material charges to earnings.

ECONOMIC, FINANCIAL, AND MARKET RISKS

A decrease in customer demand for electricity may negatively impact PGE's business.

Unfavorable economic conditions in Oregon, such as, for example, increased inflation, may result in reduced demand for electricity and impair the financial stability of PGE's customers. Such reductions in demand could adversely affect PGE's results of operations and cash flows. Economic conditions could also result in an increased level of uncollectible customer accounts and cause the Company's vendors and service providers to experience cash flow problems and be unable to perform under existing or future contracts.

Customer demand could also be negatively impacted by PGE's ability to attract and retain customers, mandated energy efficiency measures, demand side management programs, potential formation of community choice aggregation programs, distributed generation resources, and economic and demographic conditions, such as population changes, job and income growth, new construction, new business formation and the overall level of economic activity. Development, improvement, and adoption of technological advances could lead to declines in energy use per customer. Some or all of these factors could impact the demand for electricity.

The decline in revenues due to decreased customer demand for electricity may increase customer prices for remaining customers, as PGE's revenue requirement is designed to cover its fixed utility operating expenses. Increased customer prices could further reduce customer demand for electricity and strain PGE's ability to attract and retain customers. The loss of customers, the inability to replace those customers with new customers, and the decrease in demand for electricity could negatively impact PGE's financial condition and results of operations.

Capital and credit market conditions could adversely affect the Company's access to capital, cost of capital, and ability to execute its strategic plan.

Access to capital and credit markets is important to PGE's ability to operate. The Company expects to issue debt and equity securities, as necessary, to fund its future capital requirements. Volatility of interest rates could negatively impact PGE's cost of debt and results of operations. In addition, contractual commitments and regulatory requirements may limit the Company's ability to delay or terminate certain projects.

If the capital and credit market conditions in the United States and other parts of the world deteriorate, the Company's future cost of debt and equity capital, as well as access to capital markets, could be adversely affected. In addition, sales or issuances of substantial amounts of PGE's common stock in the public market, including upon settlement of the forward sale agreements entered into in 2022, could cause the market price of PGE's common stock to decline. This could impair the Company's ability to raise additional capital through the sale of equity securities. Future sales or issuances of common stock or other equity-related securities could be dilutive to holders of common stock and could adversely affect their voting and other rights and economic interests.

PGE expects to raise additional capital in the future. PGE may raise additional funds through public or private equity or debt offerings or other financings, as well as additional borrowings under existing credit facilities.

Any new debt financing entered into may involve covenants that restrict operations more than PGE's current outstanding debt and credit facilities. These restrictive covenants could include limitations on additional borrowings, specific restrictions on the use of assets, and prohibitions or limitations on the Company's ability to create liens, pay dividends, receive distributions from subsidiaries, redeem or repurchase stock or make investments. These factors could hinder the Company's access to capital markets and limit or delay the ability to carry out the Company's capital expenditure plan or pursue other opportunities beyond the current capital expenditure plan.

The declaration of future dividends is at the discretion of the Board of Directors and is not guaranteed and, in some circumstances, the payment of dividends may be limited by the terms of PGE's debt instruments.

PGE has historically paid regular quarterly dividends on common stock. However, the declaration of dividends is at the discretion of PGE's Board of Directors and is not guaranteed. The amount of common stock dividends, if any, will depend upon results of operations and financial condition, future capital expenditures and investments, the rights of holders of any outstanding shares of preferred stock, and other factors that the Board of Directors considers relevant.

In addition, the terms of the Company's debt instruments may limit the payment of dividends. Under the Indenture of Mortgage and Deed of Trust, dated July 1, 1945, as amended and supplemented to date, between PGE and Wells Fargo Bank, National Association, so long as any of the first mortgage bonds are outstanding, the Company may not pay or declare dividends (other than stock dividends) on common stock or purchase or retire for a consideration (other than in exchange for other shares of PGE's capital stock or the proceeds from the sale of other shares of capital stock) any shares of capital stock of any class, if the aggregate amount distributed or expended after December 31, 1944 would exceed the aggregate amount of PGE's net income, as adjusted, available for dividends on common stock accumulated after December 31, 1944. At December 31, 2022, \$399 million of accumulated net income was available for payment of dividends under this provision.

Adverse changes in PGE's credit ratings could negatively affect its access to the capital markets and its cost of borrowed funds.

Credit rating agencies routinely evaluate the Company, and their ratings of long-term and short-term debt are based on a number of factors, including the perceived supportiveness of the regulatory environment affecting the utility operations, the Company's cash generating capability, level of indebtedness, overall financial strength, the status of certain capital projects, as well as factors beyond PGE's control, such as tax reform, the state of the economy and industry generally. A ratings downgrade could increase fees on PGE's syndicated unsecured revolving credit facility, commercial paper program, and letter of credit facilities, increasing the cost of funding day-to-day working capital requirements, and could also result in higher interest rates on future long-term debt. A ratings downgrade could also restrict the Company's access to the commercial paper market, a principal source of short-term financing, or result in higher interest costs.

In addition, if Moody's Investors Service (Moody's) and/or S&P Global Ratings (S&P) reduce their rating on PGE's unsecured debt to below investment grade, the Company could be subject to requests by certain wholesale counterparties to post additional performance assurance collateral, which could have an adverse effect on the Company's liquidity and ability to participate in the wholesale markets.

Under certain circumstances, banks participating in PGE's syndicated unsecured revolving credit facility could decline to fund advances requested by the Company or could withdraw from participation in the credit facility, which could adversely affect PGE's liquidity.

PGE currently has a syndicated unsecured revolving credit facility with several banks for an aggregate amount of \$650 million. The revolving credit facility provides a primary source of liquidity and may be used to supplement operating cash flow and as backup for commercial paper borrowings. The revolving credit facility represents commitments by the participating banks to make loans and, in certain cases, to issue letters of credit. The Company is required to make certain representations to the banks each time it requests an advance under the credit facility. However, in the event of a material adverse change in the business, financial condition, or results of operations of PGE, the Company may not be able to make such representations, in which case the banks would not be required to lend. PGE is also subject to the risk that one or more of the participating banks may default on their obligation to make loans under the credit facility.

Adverse capital market performance could result in reductions in the fair value of benefit plan assets and increase the Company's liabilities related to such plans. Sustained declines in the fair value of the plans' assets could result in significant increases in funding requirements, which could adversely affect PGE's liquidity and results of operations.

Performance of the capital markets affects the value of assets that are held in trust to satisfy future obligations under PGE's defined benefit pension and other postretirement plans. Sustained adverse market performance could result in lower rates of return for these assets than projected by the Company and could increase PGE's funding requirements related to the plans. Additionally, changes in interest rates affect PGE's liabilities under the plans. As interest rates decrease, the Company's liabilities increase, potentially requiring additional funding.

Performance of the capital markets also affects the fair value of assets that are held in trust to satisfy future obligations under the Company's non-qualified employee benefit plans, which include deferred compensation plans. As changes in the fair value of these assets are recorded in current earnings, decreases can adversely affect the Company's operating results. In addition, such decreases can require that PGE make additional payments to satisfy its obligations under these plans.

The volatility of market prices for power and natural gas could adversely affect PGE's costs and ability to manage its energy supply, which could negatively impact the Company's liquidity and results of operations.

As part of its normal business operations, PGE purchases and sells power and natural gas in the open market under short- and long-term contracts, which may specify variable prices or volumes. Market prices for power and natural gas are influenced primarily by factors related to supply and demand. These factors generally include the adequacy of generating capacity, scheduled and unscheduled outages of generating facilities, hydroelectric and wind generation levels, prices and availability of fuel sources for generation, disruptions or constraints to transmission facilities, weather conditions, economic growth, and changes in technology.

Volatility in these markets can affect the availability, price, and demand for power and natural gas. Disruption in power and natural gas markets could result in a deterioration of market liquidity, increase the risk of counterparty default, affect regulatory and legislative processes in unpredictable ways, affect wholesale power prices, and impair PGE's ability to manage its energy portfolio. Changes in power and natural gas prices can also affect the fair value of derivative instruments and cash requirements to purchase power and natural gas. If power and natural gas prices decrease from those contained in the Company's existing purchased power and natural gas agreements, PGE may be required to provide increased collateral, which could adversely affect the Company's liquidity. Conversely, if power and natural gas prices rise, especially during periods when the Company requires greater-than-expected volumes that must be purchased at market or short-term prices, PGE could incur greater costs than originally estimated. PGE's contract positions are not fully hedged against commodity prices, and hedges or other risk mitigations may not protect against significant losses.

The risk of volatility in power costs is partially mitigated through the AUT and the PCAM. Application of the PCAM requires that PGE absorb certain power cost increases before the Company is allowed to recover any amount from customers. Accordingly, the PCAM is expected to only partially mitigate the potentially adverse financial impacts of forced generating plant outages, reduced hydro and wind availability, interruptions in fuel supplies, and volatile wholesale energy prices.

PGE has put in place risk management policies, procedures, and controls to identify, quantify, and manage risk, however, these systems, processes, tools, and controls may not prevent material losses. Risk management procedures may not always be followed as intended, may not operate as designed, or may not identify all potential risks, including, without limitation, severe weather or employee misconduct. There is no assurance that PGE's risk management procedures will be effective in preventing or mitigating losses, and could have a material adverse effect on the Company's results of operation and financial condition.

Reduced river flows, unfavorable wind conditions, and forced outages at generating and battery storage facilities can increase the cost of power required to serve customers. The Company could be required to replace energy expected from these sources with higher cost power from other facilities or with wholesale market purchases, which could have an adverse effect on results of operations.

PGE derives a significant portion of its power supply from its own hydroelectric facilities and long-term purchase contracts with certain public utility districts in the state of Washington. Regional rainfall and snowpack levels affect river flows and the resulting amount of energy generated by these facilities. Shortfalls in energy expected from lower cost hydroelectric generating resources would require increased energy from the Company's other generating resources and/or power purchases in the wholesale market, which could have an adverse effect on results of operations.

PGE also derives a portion of its power supply from wind generating resources, for which the output is dependent upon wind conditions. Unfavorable wind conditions could require increased reliance on power from the Company's thermal generating resources or power purchases in the wholesale market, both of which could have an adverse effect on results of operations.

Forced outages at generating facilities and battery storage facilities, both PGE-owned or under purchased power agreements, could result in power costs greater than those included in customer prices, in addition to increased repair and maintenance costs.

Although the application of the PCAM could help mitigate adverse financial effects from any decrease in power supply, full recovery of any increase in power costs is not assured. Inability to fully recover such costs in future prices could have a negative impact on the Company's results of operations, as well as a reduction in renewable energy credits and loss of PTCs related to wind generating resources.

The capacity provided by the Company's generating resources and third-party purchased power may not be sufficient to meet its customers' energy demand requirements.

PGE meets its customers' energy demand requirements based on capacity obtained from its generating facilities and third-party power purchase agreements. The Company continuously evaluates how much capacity it will need to meet reasonably expected demands of customers and provide reasonable reserves. PGE is also required to file Integrated Resource Plans with the OPUC that detail the Company's plan to meet the future energy and capacity needs of its customers through a least-cost, least-risk combination of energy generation and demand reduction, while also aggressively reducing GHG emissions from the power supply. If the capacity provided by the Company's generating facilities and purchased power is not adequate to meet customers' energy demands, PGE may be required to purchase more power from third parties, invest in acquiring additional generating or battery storage facilities, or invest in extending the operating life of existing generating assets. Any failure to obtain adequate capacity to meet customers' energy demand requirements could increase its costs and negatively impact PGE's customer satisfaction, all of which could have an adverse impact on PGE's business and results of operations.

Advances in energy technology could make PGE's business less competitive.

A basic premise of PGE's business as a vertically integrated utility is the ability to produce electricity at competitive prices due to economies of scale. Furthermore, a key component of PGE's growth is its ability to construct, own, and operate facilities. Many companies and organizations conduct research and development activities to seek improvements in alternative technologies and distributed generation. Advancements in and creation of new technologies could include fuel cells and micro turbines, wind turbines, photovoltaic solar cells, distributed generation, nuclear energy, hydrogen, ongoing customer energy efficiency, two-way grid enabling customer-owned generation, and advances in batteries or energy storage. It is possible that advances in such technologies, or other current technologies, will reduce the cost of alternative methods of electricity production or storage to a level that is equal to or below that of existing methods.

The electricity industry is undergoing significant change, including increased deployment of distributed energy resources, technological advancements as described above, and political and regulatory developments. Electric utilities are experiencing increasing deployment of distributed energy resources, such as solar generation, energy storage, energy efficiency and demand response technologies. The deployment of these technologies supports PGE's decarbonization goals. The growth of new technologies will require modernization of the electric distribution grid to, among other things, accommodate increasing two-way flows of electricity and increase the grid's capacity to interconnect these resources. A higher penetration of distributed energy resources may result in decreased customer demand, or may have impacts on grid reliability. Increased distributed energy resources and renewable energy resources will require new and sustained investments in grid modernization and transmission. If all such costs are not recoverable in rates, PGE could experience material increases in its commodity costs, which could impact PGE's results of operations, financial condition, or cash flows.

It is also possible that alternative generation or storage resources are mandated, subsidized, or encouraged through legislation or regulation or otherwise are economically competitive and added to the available generation supply. Competitors may not be subject to the same operating, regulatory and financial requirements that the Company is, potentially causing a substantial competitive disadvantage for PGE. Changes in public policy, such as new tax incentives that PGE cannot take advantage of or efforts to deregulate the utility industry, could provide an advantage to competitors. Such alternative resources and regulatory or legislative actions could displace higher marginal cost generating units or make PGE less competitive in constructing, owning, and operating such facilities.

Such a development could limit the Company's future growth opportunities and limit growth in demand for PGE's electric service.

Changes in market conditions and environmental laws and regulations could negatively impact PGE's non-utility real estate investments.

PGE owns, through a wholly owned subsidiary, its corporate headquarters building located in Portland, Oregon. A significant change in real estate values could adversely affect PGE's results of operations.

PGE also owns unregulated properties that are currently or previously leased to third parties and located adjacent to PGE's T.W. Sullivan hydro generating facility. PGE has recorded a non-utility asset retirement obligation (ARO) for this site related to assets that are no longer in service. Significant changes in estimates for this non-utility ARO due to changes in environmental laws or regulations could adversely affect PGE's results of operations.

Rapidly changing stakeholder expectations and standards with respect to PGE's environmental, social, and governance (ESG) programs could result in increased costs and exposure to incremental risk.

Investors, lenders, rating agencies, customers, regulators, employees, and other stakeholders are increasing their focus on evaluating companies as corporate citizens based on their ESG programs and metrics. Based on PGE's ESG profile, investors and lenders may elect to increase their required returns on capital offered to the Company, reallocate capital, or not commit capital as a result of their assessment of the Company's ESG profile. Such actions by investors and lenders could increase PGE's cost of, or access to, capital and financing.

PGE is committed to the success of its ESG programs; however, if the Company fails to adapt or execute on its ESG strategies, or is perceived to have failed in addressing stakeholder ESG expectations or standards, which continue to evolve, PGE may suffer reputational damage, which could have a material adverse effect on its business, results of operations, and financial condition. Additionally, the cost of implementing and complying with such ESG programs could be material.

Actions of activist shareholders could have a negative impact on PGE's business.

Actions of activist shareholders, which can take many forms and arise in a variety of situations, could include engaging in proxy solicitations, advancing shareholder proposals, or otherwise attempting to effect changes and assert influence on the Company's board of directors and management. Dealing with such actions could result in substantial costs and divert management's and the Company's board's attention and resources from PGE's business and execution of its strategy.

Such shareholder activism could give rise to perceived uncertainties regarding PGE's future, adversely affecting PGE's business opportunities, ability to access capital markets, relationships with its customers and employees, and make it more difficult to attract and retain a qualified workforce. Any such actions could have a material adverse effect on the Company's financial condition and results of operations and could cause significant fluctuations in the trading prices of its common stock based on market perceptions or other factors.

PGE's business activities are concentrated in one region and future performance may be affected by events and factors unique to Oregon or the region.

The Company's industry and geographic concentrations may increase exposure to risks arising from regional regulation or legislation, such as legislative action related to carbon emissions. These concentrations may also increase exposure to credit and operational risks due to counterparties, suppliers, and customers being similarly affected by changing conditions.

ITEM 1B. UNRESOLVED STAFF COMMENTS.

None.

ITEM 2. PROPERTIES.

PGE’s principal property, plant, and equipment are generally located on land owned by the Company or land under the control of the Company pursuant to existing leases, federal or state licenses, easements, or other agreements. In some cases, meters and transformers are located on customer property. The Indenture securing the Company’s First Mortgage Bonds (FMBs) constitutes a direct first mortgage lien on substantially all utility property and franchises, other than expressly excepted property.

Generating Facilities

The following are generating facilities owned by PGE as of December 31, 2022 (in MW):

| Facility | Location | Net Capacity ⁽¹⁾ |
|--------------------------------------|-----------------------------|-----------------------------|
| Wholly-owned: | | |
| <i>Natural Gas or Oil:</i> | | |
| Beaver | Clatskanie, Oregon | 510 |
| Carty | Boardman, Oregon | 438 |
| Port Westward Unit 1 (PW1) | Clatskanie, Oregon | 411 |
| Coyote Springs | Boardman, Oregon | 258 |
| Port Westward Unit 2 (PW2) | Clatskanie, Oregon | 225 |
| <i>Wind:</i> | | |
| Biglow Canyon | Sherman County, Oregon | 450 |
| Tucannon River | Columbia County, Washington | 267 |
| Wheatridge | Morrow County, Oregon | 100 |
| <i>Hydro:</i> | | |
| North Fork | Clackamas River | 58 |
| Faraday | Clackamas River | 46 |
| Oak Grove | Clackamas River | 45 |
| River Mill | Clackamas River | 25 |
| T.W. Sullivan | Willamette River | 18 |
| Jointly-owned ⁽²⁾: | | |
| <i>Coal:</i> | | |
| Colstrip ⁽³⁾ | Colstrip, Montana | 296 |
| <i>Hydro:</i> | | |
| Round Butte ⁽⁴⁾ | Deschutes River | 172 |
| Pelton ⁽⁴⁾ | Deschutes River | 55 |
| Net capacity | | 3,374 |

(1) Represents net capacity of generating unit as demonstrated by actual operating or test experience, net of electricity used in the operation of a given facility. For wind-powered generating facilities, nameplate ratings are used in place of net capacity. A generator’s nameplate rating is its full-load capacity under normal operating conditions as defined by the manufacturer.

(2) Net capacity reflects PGE’s ownership share.

(3) PGE has a 20% ownership interest in the facility, which is operated by Talen Montana, LLC. The Company operated, and continues to have a 90% ownership interest in Boardman, which ceased coal-fired operations during the fourth quarter of 2020. For additional information on Colstrip as it relates to environmental laws and regulations in the State, see “RPS standards and other laws” in the Overview section in Item 7.—“Management’s Discussion and Analysis of Financial Condition and Results of Operations” and Note 19, Contingencies, in the Notes to Consolidated Financial Statements in Item 8.—“Financial Statements and Supplementary Data.”

(4) Effective January 1, 2022, PGE sold 16.66% interest to CTWS, resulting in PGE’s 50.01% ownership interest.

PGE's hydroelectric projects are operated pursuant to FERC licenses issued under the FPA. The licenses for the hydroelectric projects on the three different rivers expire as follows: Clackamas River, 2055; Willamette River, 2035; and Deschutes River, 2055.

Transmission and Distribution

PGE owns or has contractual rights associated with transmission lines that deliver electricity from its generation facilities to its distribution system in its service territory and also to the Western Interconnection. As of December 31, 2022, PGE-owned electric transmission system consisted of 1,255 circuit miles as follows: 269 circuit miles of 500 kV line; 413 circuit miles of 230 kV line; and 573 miles of 115 kV line. The Company also has 28,481 circuit miles of distribution lines that deliver electricity to its customers. The Company also has an ownership interest in, and capacity on, the following:

- 14% of the 2,260 MW transmission facilities between the Colstrip switchyard to the Broadview switchyard, near Billings, Montana, and 16% of the 1,930 MW transmission facilities between the Broadview switchyard and the interconnection point with BPA's transmission system near Townsend, Montana; and
- 20% of the Northwest AC Intertie, a 4,800 MW transmission facilities between the John Day Substation near the Columbia River in northern Oregon, and Malin, Oregon, near the California border. The Northwest AC Intertie is used primarily for the transmission of interstate purchases and sales of electricity among utilities, including PGE.

In addition, the Company has contractual rights to the total of 3,920 MW of BPA transmission systems.

Non-utility Real Estate

PGE owns, through a wholly owned subsidiary, its corporate headquarters building located in Portland, Oregon. As of December 31, 2022, the non-utility property, plant, and equipment balance, net of accumulated depreciation was \$73 million, recorded in Other noncurrent assets on the Company's consolidated balance sheets in Item 8.— "Financial Statements and Supplementary Data."

PGE also owns unregulated properties that are currently or previously leased to third parties and located adjacent to PGE's T.W. Sullivan hydro generating facility. PGE has recorded a non-utility ARO related to this site. For more information regarding the Company's AROs, see "Asset Retirement Obligations" within the "Critical Accounting Policies and Estimates" section of Item 7— "Management's Discussion and Analysis of Financial Condition and Results of Operations" and Note 8, Asset Retirement Obligations in the Notes to Consolidated Financial Statements in Item 8.— "Financial Statements and Supplementary Data."

ITEM 3. LEGAL PROCEEDINGS.

See Note 19, Contingencies in the Notes to Consolidated Financial Statements in Item 8.— "Financial Statements and Supplementary Data," for information regarding legal proceedings.

ITEM 4. MINE SAFETY DISCLOSURES.

Not applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES.

PGE's common stock is traded on the NYSE under the ticker symbol "POR". As of February 8, 2023, there were 748 holders of record of PGE's common stock.

While the Company expects to pay regular quarterly dividends on its common stock, the declaration of any dividends is at the discretion of the Company's Board of Directors. The amount of any dividend declaration will depend upon factors that the Board of Directors deems relevant and may include, but are not limited to, PGE's results of operations and financial condition, future capital expenditures and investments, and applicable regulatory and contractual restrictions.

For information with respect to securities authorized for issuance under equity-based plans, see Note 13, Equity-based Plans and Note 14, Stock-Based Compensation in the Notes to Consolidated Financial Statements in Item 8.—“Financial Statements and Supplementary Data.”

Share repurchase program

On February 11, 2022, the Company's Board of Directors authorized a share repurchase program, replacing and superseding the program previously authorized on February 17, 2021, which allowed the Company to repurchase up to 350,000 shares of its outstanding common stock through 2022 at a maximum share price of \$60, resulting in maximum aggregate purchase price of \$21 million. As of December 31, 2022, the Company had repurchased 350,000 shares at an average price of \$51.61 per share for a total cost of \$18.1 million under this program. All share repurchases were made under PGE's publicly announced program and there were no other programs under which the Company repurchased shares. PGE did not repurchase any shares of its common stock during the three-month period ended December 31, 2022.

ITEM 6. [RESERVED]

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.

Forward-Looking Statements

The information in this report includes statements that are forward-looking within the meaning of the Private Securities Litigation Reform Act of 1995. Such forward-looking statements include, but are not limited to, statements that relate to expectations, beliefs, plans, assumptions and objectives concerning future results of operations, business prospects, loads, outcome of litigation and regulatory proceedings, capital expenditures, market conditions, future events or performance, and other matters. Words or phrases such as “anticipates,” “believes,” “estimates,” “expects,” “intends,” “plans,” “predicts,” “projects,” “will likely result,” “will continue,” “should,” or similar expressions are intended to identify such forward-looking statements.

Forward-looking statements are not guarantees of future performance and involve risks and uncertainties that could cause actual results or outcomes to differ materially from those expressed. PGE's expectations, beliefs and projections are expressed in good faith and are believed by the Company to have a reasonable basis including, but not limited to, management's examination of historical operating trends and data contained either in internal records or available from third parties, but there can be no assurance that PGE's expectations, beliefs, or projections will be achieved or accomplished.

In addition to any assumptions and other factors and matters referred to specifically in connection with forward-looking statements, factors that could cause actual results or outcomes for PGE to differ materially from those discussed in such forward-looking statements include:

- governmental policies, legislative action, and regulatory audits, investigations and actions, including those of the FERC, the OPUC, the SEC, and the Division of Enforcement of the Commodity Futures Trading Commission (CFTC) with respect to allowed rates of return, financings, electricity pricing and price structures, acquisition and disposal of facilities and other assets, construction and operation of plant facilities, transmission of electricity, recovery of power costs, operating expenses, deferrals, timely recovery of costs, and capital investments, energy trading activities, and current or prospective wholesale and retail competition;
- economic conditions that result in decreased demand for electricity, reduced revenue from sales of excess energy during periods of low wholesale market prices, impaired financial stability of vendors and service providers and elevated levels of uncollectible customer accounts;
- inflation and interest rates;
- changing customer expectations and choices that may reduce customer demand for its services may impact PGE's ability to make and recover its investments through rates and earn its authorized return on equity, including the impact of growing distributed and renewable generation resources, changing customer demand for enhanced electric services, and an increasing risk that customers procure electricity from registered ESSs or the adoption of community choice aggregation;
- the timing or outcome of legal and regulatory proceedings and issues including, but not limited to, the matters described in Regulatory Matters of the "Overview" in this Item 7. and Note 19, Contingencies in the Notes to Consolidated Financial Statements in Item 8.— "Financial Statements and Supplementary Data" of this Annual Report on Form 10-K;
- natural or human-caused disasters and other risks, including, but not limited to, earthquake, flood, ice, drought, extreme heat, lightning, wind, fire, accidents, equipment failure, acts of terrorism, computer system outages and other events that disrupt PGE operations, damage PGE facilities and systems, cause the release of harmful materials, cause fires, and subject the Company to liability;
- unseasonable or severe weather and other natural phenomena, such as the greater size and prevalence of wildfires in Oregon in recent years, which could affect public safety, customers' demand for power and PGE's ability and cost to procure adequate power and fuel supplies to serve its customers, PGE's ability to access the wholesale energy market, PGE's ability to operate its generating facilities and transmission and distribution systems, the Company's costs to maintain, repair, and replace such facilities and systems, and recovery of costs;
- PGE's ability to effectively implement a PSPS and de-energize its system in the event of heightened wildfire risk, which could lead to potential liability if energized systems are involved in wildfires that cause harm;
- operational factors affecting PGE's power generating facilities and battery storage facilities, including forced outages, unscheduled delays, hydro and wind conditions, and disruption of fuel supply, any of which may cause the Company to incur repair costs or purchase replacement power at increased costs;
- default or nonperformance on the part of any parties from whom PGE purchases capacity or energy, which may cause the Company to incur costs to purchase replacement power and related renewable attributes at increased costs;
- complications arising from PGE's jointly-owned plant, including changes in ownership, adverse regulatory outcomes or legislative actions, or operational failures that result in legal or environmental liabilities or unanticipated costs related to replacement power or repair costs;
- delays in the supply chain and increased supply costs, failure to complete capital projects on schedule or within budget, failure of counterparties to perform under agreements, or the abandonment of capital

projects, any of which could result in the Company's inability to recover project costs, or impact PGE's competitive position, market share, or results of operations in a material way;

- volatility in wholesale power and natural gas prices, including but not limited to volatility caused by macroeconomic and international issues, that could require PGE to post additional collateral or issue additional letters of credit pursuant to power and natural gas purchase agreements;
- changes in the availability and price of wholesale power and fuels, including natural gas and coal, and the impact of such changes on the Company's power costs;
- capital market conditions, including availability of capital, volatility of interest rates, reductions in demand for investment-grade commercial paper, volatility of equity markets as well as changes in PGE's credit ratings, any of which could have an impact on the Company's cost of capital and its ability to access the capital markets to support requirements for working capital, construction of capital projects, the repayments of maturing debt, and stock-based compensation plans, which are relied upon in part to retain key executives and employees;
- future laws, regulations, and proceedings that could increase the Company's costs of operating its thermal generating plants, or affect the operations of such plants by imposing requirements for additional emissions controls or significant emissions fees or taxes, particularly with respect to coal-fired generating facilities, in order to mitigate carbon dioxide, mercury, and other gas emissions;
- changes in, and compliance with, environmental laws and policies, including those related to threatened and endangered species, fish, and wildlife;
- the effects of climate change, whether global or local in nature, including unseasonable or extreme weather and other natural phenomena that may affect energy costs or consumption, increase the Company's costs, cause damage to PGE facilities and system, or adversely affect its operations;
- changes in residential, commercial, or industrial customer growth, or demographic patterns, in PGE's service territory;
- the effectiveness of PGE's risk management policies and procedures;
- cybersecurity attacks, data security breaches, physical attacks and security breaches, or other malicious acts that cause damage to the Company's generation, transmission, or distribution facilities, information technology systems, inhibit the capability of equipment or systems to function as designed or expected, or result in the release of confidential customer, vendor, employee, or Company information;
- employee workforce factors, including potential strikes, work stoppages, transitions in senior management, the ability to recruit and retain key employees and other talent, and turnover due to macroeconomic trends such as voluntary resignation of large numbers of employees similar to that experienced by other employers and industries since the beginning of the COVID-19 pandemic;
- new federal, state, and local laws that could have adverse effects on operating results;
- failure to achieve the Company's greenhouse gas emission goals or being perceived to have either failed to act responsibly with respect to the environment or effectively respond to legislative requirements concerning greenhouse gas emission reductions, any of which could lead to adverse publicity and have adverse effects on the Company's operations and/or damage the Company's reputation;
- political and economic conditions;
- the impact of widespread health developments, including the global COVID-19 pandemic, and responses to such developments (such as voluntary and mandatory quarantines, including government stay at home orders, as well as shut downs and other restrictions on travel, commercial, social, and other activities), which could materially and adversely affect, among other things, demand for electric services, customers' ability to pay, supply chains, personnel, contract counterparties, liquidity and financial markets;
- changes in financial or regulatory accounting principles or policies imposed by governing bodies;

- risks and uncertainties related to 2021 All-Source RFP final shortlist projects, including, but not limited to regulatory processes, inflationary impacts, supply chain constraints, supply cost increases (including application of tariffs impacting solar module imports), and legislative uncertainty; and
- acts of war or terrorism.

Any forward-looking statement speaks only as of the date on which such statement is made, and, except as required by law, PGE undertakes no obligation to update any forward-looking statement to reflect events or circumstances after the date on which such statement is made or to reflect the occurrence of unanticipated events. New factors emerge from time to time and it is not possible for management to predict all such factors or assess the impact of any such factor on the business or the extent to which any factor, or combination of factors, may cause results to differ materially from those contained in any forward-looking statement.

Overview

Management's Discussion and Analysis of Financial Condition and Results of Operations (MD&A) is intended to provide an understanding of the business environment, results of operations, and financial condition of PGE. MD&A should be read in conjunction with the Company's consolidated financial statements contained in this report, and other periodic and current reports filed with the SEC.

PGE is a vertically-integrated electric utility engaged in the generation, transmission, distribution, and retail sale of electricity in the State. The Company participates in wholesale markets by purchasing and selling electricity and natural gas in an effort to meet the needs of, and obtain reasonably-priced power for, its retail customers. The Company generates revenues and cash flows primarily from the sale and distribution of electricity to retail customers in its service territory. In addition, PGE continues to develop products and service offerings for the benefit of retail and wholesale customers.

Company Strategy

The Company exists to power the advancement of society. PGE energizes lives, strengthens communities, and fosters energy solutions that promote social, economic, and environmental progress. The Company is committed to being a clean energy leader and delivering steady growth and returns to shareholders. PGE is focused on working with customers, communities, policy makers, and other stakeholders to deliver affordable, safe, reliable electricity service to all, while increasing opportunities to deliver clean and renewable energy, reducing greenhouse gas emissions, and responding to evolving customer expectations. At the same time, the Company is building an increasingly smart, integrated, and interconnected grid that spans from residential customers to other utilities within the region. PGE is transforming all aspects of its business to empower its workforce to be even more results oriented to serve customers well. To create a clean energy future, PGE is focused on the following strategic initiatives:

- *Decarbonize Power*—Reduce greenhouse gas emissions associated with electricity served to retail customers by at least 80% by 2030 and 100% by 2040;
- *Electrify the Economy*—Increase beneficial electricity use to capture the benefits of new technologies while building an increasingly clean, flexible and reliable grid; and
- *Advance our Performance*—Improve efficiency, safety, and system and equipment reliability while maintaining affordable energy service and growing earnings per share 5% to 7% annually.

Climate Change

State-mandated GHG emissions reduction targets—In June 2021, the Oregon legislature passed HB 2021, establishing a 100% clean electricity by 2040 framework for PGE and other investor-owned utilities and electric service suppliers in the State. A number of provisions in the bill align with PGE's strategic direction, and highlight Oregon's ambitious, economy-wide goals to combat climate change. The GHG emissions reduction targets applicable to these regulated entities are an 80% reduction in GHG emissions by 2030, 90% by 2035, and 100% by

2040 and every year thereafter. For more information regarding HB 2021 and the baseline to which the target reductions apply, see “*HB 2021*” in the *Laws and Regulations* section of this Overview.

Empowering customers and communities—PGE’s customers have a desire for purchasing clean energy, as over 234 thousand residential and small commercial customers voluntarily participate in PGE’s Green Future Program, the largest renewable power program by participation in the nation. In 2017, Oregon’s most populous city, Portland, and most populous county, Multnomah, each passed resolutions to achieve 100 percent clean and renewable electricity by 2035 and 100 percent economy-wide clean and renewable energy by 2050. Other jurisdictions in PGE’s service area have similar goals and continue to consider similar goals for the future.

The Company implemented a customer subscription option, the Green Future Impact Program, which is a renewable energy program that allows large business and municipality customers to have a choice in how they source their electricity. Under the Green Future Impact Program, customers can enroll in a Customer-Supplied Option (CSO) or PGE-Supplied Option (PSO). Under the CSO, participants are responsible for finding a renewable energy facility that meets established requirements and bringing those resources to PGE. Under the PSO, customers who enrolled in Phase I can receive energy from PGE-provided purchased power agreements (PPAs) for renewable resources and customers who enroll in Phase II can receive energy from PGE-provided PPAs for renewable resources or energy from renewable resources that are PGE owned, under certain conditions.

As of December 31, 2022, the Green Future Impact Program has an approved capacity of 750 MW nameplate. Through this voluntary program, the Company seeks to support the customers’ clean energy acceleration, achieve PGE sustainability goals, mitigate cost and manage risk, and reliably integrate power.

The Climate Pledge—In 2021, PGE joined The Climate Pledge, a commitment to be net-zero annual carbon emissions by 2040, which is a decade ahead of the Paris Agreement’s goal of 2050. As a signatory to The Climate Pledge, PGE agrees to: i) measure and report GHG emissions on a regular basis; ii) implement decarbonization strategies in line with the Paris Agreement through real business changes and innovations, including efficiency improvements, renewable energy, materials reductions, and other carbon emission elimination strategies; and iii) neutralize any remaining emissions with additional, quantifiable, real, permanent, and socially-beneficial offsets.

Severe weather—In recent years, PGE’s territory has experienced unprecedented heat, historic ice and snowstorms, and wildfires. Beginning December 27, 2022, strong, sustained winds and heavy precipitation caused approximately 180,000 power outages across PGE’s service territory. PGE incurred approximately \$5 million in operating expenses related to the storm, of which \$4 million has been deferred under PGE’s major storm damage recovery mechanism. On September 9 and 10, 2022, extreme fire conditions and hot, strong wind gusts led PGE to implement a proactive Public Safety Power Shutoff (PSPS) in ten identified PSPS areas and seven additional preventive outage areas. The PSPS event impacted approximately 37,000 customer homes and businesses. Power was restored to all customers impacted by the PSPS on September 11, 2022. PGE incurred approximately \$1 million in costs in preparation activities leading up to the event, which have been deferred under the wildfire mitigation deferral mechanism (see “*Wildfire mitigation*” in the “*Regulatory Matters*” section of this Overview for more information on the impact to PGE’s results of operations).

In June 2021, temperatures in the region reached all-time recorded highs, shattering the Company’s previous summer peak load demand reached in August 2017 and all time peak load established in December 1998. In 2021, Oregon also experienced an extreme wildfire season, following the 2020 destructive wildfire season, and a severe ice storm. The ice storm led to historic levels of customer power outages, and caused considerable expense for service restoration and damage repair (see “*February 2021 ice storms and damage*” in the “*Regulatory Matters*” section of this Overview for more information on the impact to PGE’s results of operation). The increase and severity of extreme weather events highlights the importance of combating the effects of climate change through decarbonizing the power supply and investing in a more reliable and resilient grid.

Investing in a Clean Energy Future

The Resource Planning Process— PGE’s resource planning process includes working with customers, stakeholders, and regulators to chart the course toward a clean, affordable, and reliable energy future. In 2020, the OPUC acknowledged, subject to conditions and directives, the Company’s 2019 IRP and associated Action Plan. With the passage of HB 2021, PGE is preparing a Clean Energy Plan (CEP), which will articulate the Company’s strategy to meet the 2030, 2035, and 2040 emission reduction targets through an equitable transition to a decarbonized grid. The CEP is based on, and is required to be filed in connection with, the Company’s IRP. In 2021, PGE filed an extension waiver for the next IRP, which the OPUC approved. PGE anticipates filing its first combined IRP and CEP with the OPUC on March 31, 2023. That filing will project PGE’s resource and capacity needs over the next 20 years and propose an Action Plan to meet near-term needs, subject to the new HB 2021 emissions reduction requirements.

PGE estimates a need of approximately 3,000 to 4,000 MW in order to meet the Company’s 2030 emissions reduction target. PGE estimates that this need will be met by targeted acquisition of approximately 2,000 to 3,000 MW of non-emitting resources and adding approximately 1,000 MW of non-emitting dispatchable capacity through new acquisition or extending existing capacity contracts. The Company is in the process of evaluating and updating these projections in anticipation of the upcoming IRP and CEP filing.

2021 All- Source RFP

In 2021, PGE initiated its 2021 All-Source RFP public process, seeking approximately 1,000 MW of renewable resources and non-emitting dispatchable capacity, to fill the need identified in the 2019 IRP action plan and to meet a portion of the Company’s estimated 2030 need. PGE issued the final 2021 All-Source RFP in December 2021, and proposals were submitted in January 2022. PGE submitted a request for acknowledgement of the final shortlist to the OPUC on May 5, 2022 that included seven distinct projects submitted by five bidders for renewable resources and six distinct projects by four bidders for capacity resources.

On July 14, 2022, during a public meeting, the OPUC acknowledged, with conditions, PGE’s proposed final shortlist of renewable resources and non-emitting dispatchable capacity. Subsequently, on August 31, 2022, the OPUC issued its order, memorializing its July 14, 2022 acknowledgement, with conditions. Following the passage of the Inflation Reduction Act, PGE provided an opportunity for all bidders selected to the final shortlist to refresh their pricing. Updated pricing was received in August 2022 and PGE, in collaboration with an Independent Evaluator, updated scoring and ranking to reflect pricing changes from bidders. An updated Independent Evaluator’s report was filed as an informational update to the OPUC on September 30, 2022.

Pursuant to the 2021 All-Source RFP process, PGE has entered into agreements to acquire the following:

- ***Clearwater Wind Development***—PGE and NextEra Energy Resources, LLC, a subsidiary of NextEra Energy, Inc. entered into agreements to construct a 311 MW wind energy facility, which will be part of the larger Clearwater Wind development in Eastern Montana. PGE will own 208 MW of production capacity of the 311 MW in these agreements, with an investment of approximately \$415 million, excluding an allowance for funds used during construction (AFUDC). Subsidiaries of NextEra Energy Resources, LLC will own the remaining 103 MW of production capacity and will sell their portion of the output to PGE under a 30-year PPA. Subsidiaries of NextEra Energy Resources, LLC plan to design, build, and operate the facility. The agreements signed by PGE and subsidiaries of NextEra Energy Resources, LLC will be subject to prudence review on customers’ behalf by the OPUC. The project has an estimated commercial operation date of December 31, 2023.

PGE continues to negotiate with remaining bidders on the final shortlist, with expectations to finalize negotiations in the first half of 2023. PGE filed a status report on December 1, 2022 with the OPUC on the current status of negotiations to meet the remaining 2021 All Source RFP targets, including:

- Approximately 75 to 200 MW of renewable resources;

- Approximately 375 MW of non-emitting dispatchable capacity resources that can be used to meet peak customer demand; and
- One or more resources for the Company’s Green Future Impact Program. Under the Green Future Impact Program, PGE plans to acquire up to 100 MW of new wind, solar, or hybrid renewable and battery storage resources to meet subscriber demand under the PGE supply option. The Company expects the Green Future Impact Program resources considered in the 2021 All-Source RFP to be incremental to the 150 MWA renewable energy target envisioned under the 2019 IRP Action Plan.

Renewable resources in PGE’s 2021 All-Source RFP must be eligible under Oregon’s RPS and qualify for the federal production tax credit (PTC) or the federal investment tax credit. All resources (dispatchable capacity or renewable) must be online by the end of 2024, with certain exceptions for long-lead time resources.

In February 2022, NewSun Energy LLC (NewSun) filed a petition for judicial review in the Marion County Circuit Court against the OPUC, challenging the scoring methodology in the 2021 All-Source RFP. PGE joined in the case as an intervenor. NewSun also filed a motion to stay the 2021 All-Source RFP process, which the Court subsequently denied. The OPUC filed a motion to dismiss the case and PGE joined the OPUC’s motion to dismiss. NewSun opposed the motion. In May 2022, the Court granted the motion to dismiss to which NewSun responded in June 2022 by filing a notice of appeal with the Court of Appeals of the State of Oregon. NewSun has requested multiple extensions to file opening briefs in the appeal.

On October 28, 2022, NewSun filed a petition in Deschutes County Circuit Court seeking review of the OPUC order acknowledging, with conditions, PGE’s 2021 All-Source RFP shortlist.

PGE cannot predict the outcome of these proceedings or potential impact, if any, to its ongoing 2021 All-Source RFP process.

2023 All-Source RFP

PGE filed notice with the OPUC on January 31, 2023 that an RFP in 2023 is needed to procure resources to meet a forecasted 2026 capacity shortfall and to make continued progress toward HB 2021’s decarbonization targets. These actions are consistent with the forthcoming 2023 IRP Action Plan and CEP. The filing includes PGE’s request for a waiver of the OPUC’s competitive bidding rules and outlines PGE’s recommended timeline for obtaining necessary regulatory approvals and issuing the RFP to the market in the third quarter of 2023. PGE desires to select a final shortlist and submit a request for acknowledgment to the OPUC in December of 2023.

Building a resilient grid—To serve communities with clean energy, PGE’s grid of the future will need to be smart and adaptive. Highlights of PGE’s key investments and plans for building a resilient grid include:

- ***Wildfire Mitigation***—PGE’s Wildfire Mitigation & Resiliency organization plans and implements the Wildfire Mitigation Program, developing and coordinating activities across the company. Under the 2022 Wildfire Mitigation Plan, PGE completed approximately \$15 million in capital projects that include installing weather stations and wildfire-detection cameras as well as further hardening the electricity grid in high risk fire areas. PGE expects 2023 capital project spend will be materially consistent with 2022.
- ***Virtual Power Plant (VPP)***—PGE’s customer offerings related to energy efficiency programs, rooftop solar, battery storage and electric vehicle chargers aim to support grid reliability and increase portfolio flexibility and resource diversity. These distributed energy resources are the foundation of PGE’s VPP that will provide a growing suite of grid and system services over time. When coordinated through a VPP platform, distributed energy resources and flexible loads can help the Company achieve cost-effective decarbonization, advance customer and community energy resiliency, promote customer engagement with the energy system, and unlock additional grid services that enable PGE’s distribution system plan (DSP) vision of a dynamic two-way system. In 2022, PGE successfully used batteries in the VPP to contribute to

system needs and improve grid reliability, demonstrating that, as distributed energy resources scale, PGE has the technology to use them to support resource adequacy and decarbonization goals.

- ***Distribution System Plan***—In 2021, PGE filed its inaugural DSP, which lays out plans to build a grid that empowers customers to make energy management choices to support decarbonization and supports a two-way energy ecosystem with resources like batteries, EV charging, and solar panels where communities—especially underserved Oregonians—need them. The plan consists of two parts, the first of which was acknowledged by the OPUC on March 8, 2022. Part Two was filed on August 15, 2022.

Electrify the economy—To help Oregon reach its decarbonization goals, PGE is working to build a safe, reliable, and affordable, economy-wide, clean energy future. The Company is committed to increase electrification of buildings and support the accelerating pace of vehicle electrification for our customers, as well as our own vehicle fleet. In 2022, PGE completed approximately \$11 million in capital projects related to electrifying PGE’s vehicle fleet.

Transportation electrification is one of the most significant ways to reduce GHG emissions in Oregon. PGE is engaged with customers and communities to develop infrastructure projects aimed at improving accessibility to electric vehicle charging stations, build fleet partnerships, and offer programs to encourage customers to advance transportation electrification.

In 2019, PGE filed with the OPUC its first Transportation Electrification plan, which considers current and planned activities, along with both existing and potential system impacts, in relation to Oregon’s GHG emissions reduction goals. In 2020, the OPUC accepted the plan and related costs and revenues associated with the Transportation Electrification and Electric Vehicle Charging pilot programs. In 2021, the Oregon legislature enacted HB 2165, ensuring the OPUC has clear and broad authority to allow electric company investments in infrastructure to support transportation electrification. PGE made a request to the OPUC to delay the filing of its next full Transportation Electrification plan until no later than June 1, 2023 to allow for time for review and evaluation of the plan in the context of the Company’s IRP and CEP filings. This request was approved by the OPUC on February 7, 2023.

Businesses and families continue to turn to electricity to serve their home and workplace needs and PGE continues to share information on the benefits of electric appliances, landscaping tools and equipment, and heat pumps, which provide efficient heating and cooling. In addition, the Company continues to pursue advanced technologies to enhance the grid, pursue distributed generation and energy storage, and develop microgrids and the use of data and analytics to better predict demand and support energy-saving customer programs.

Laws and Regulations

Infrastructure Investment and Jobs Act—On November 15, 2021, President Biden signed into law the \$1.2 trillion Infrastructure Investment and Jobs Act (IIJA), which includes approximately \$550 billion of new federal spending. PGE is pursuing multiple areas under the IIJA for potential grant funding of projects. These projects target improvements in electrical system reliability and resiliency, wildfire situational awareness and mitigation, greater communications capabilities, advancements in customer usage analytics using artificial intelligence, renewable resources and advanced electrical grid support, hydro generation operations, hydrogen production, and regional transmission capacity constraints. As of 2022, PGE has submitted two full applications. PGE cannot predict the ultimate timing and success of securing funding from programs under the IIJA.

Inflation Reduction Act of 2022—The Inflation Reduction Act of 2022 (IRA) was signed into law by President Biden on August 16, 2022 with a majority of the provisions effective for tax years beginning after December 31, 2022. Among other provisions, the bill includes:

- implementation of a new corporate alternative minimum tax (CAMT) for applicable corporations with average adjusted financial statement income over a three-year period in excess of \$1 billion per year;

- an excise tax of 1% of the fair market value of any stock which is repurchased, reduced by any stock issued during the taxable year; and
- significant tax incentives for energy and climate initiatives, including:
 - A three-year extension and modification of PTCs for facilities that begin construction before December 31, 2024;
 - The ability to transfer or sell PTCs to other taxpayers;
 - Reestablished solar PTC which would allow PGE the opportunity to be competitive in owning solar resources in renewable RFPs;
 - An opt-out of Investment Tax Credit (ITC) normalization requirements on certain stand-alone storage projects;
 - Beginning January 1, 2025, the traditional resource-specific PTCs and ITCs are replaced with technology-neutral clean electricity credits. Critical normalization alternatives are retained with these credits; and
 - Several provisions supporting expanded transportation electrification.

The Company does not expect the excise tax on stock repurchases and the new CAMT to have an impact on the Company's results of operations. PGE will be closely monitoring guidance from the IRS regarding the enhanced energy credits available under the IRA. Compared to previous resource planning processes, the Company believes the new tax incentives will provide additional investment opportunities for PGE and result in lower customer prices. Increased capital expenditures in such investment would likely result in additional financing needs through debt and equity instruments.

HB 2021—In June 2021, the Oregon Legislature passed HB 2021, which requires retail electricity providers to reduce GHG emissions associated with serving Oregon retail electricity consumers 80% by 2030, 90% by 2035, and 100% by 2040, compared to their baseline emissions levels. The baseline levels for PGE are the average annual emissions for the years 2010, 2011, and 2012 associated with the electricity sold to its retail electricity consumers as reported to the Oregon Department of Environmental Quality (ODEQ).

HB 2021 requires utilities to develop a CEP for meeting the targets, concurrent with each IRP, and to develop a DSP at reasonable costs to retail electricity consumers. In reviewing a CEP, the OPUC must ensure that utilities plan for equitable implementation and demonstrate continual progress and are taking actions as soon as practicable that facilitate rapid reduction of GHG emissions.

Regulated entities will continue to report annual GHG emissions to the ODEQ, as they do today. In threshold years, and every year thereafter, the OPUC will use the data reported to the ODEQ for that compliance year to determine whether the reduction targets are met. The preliminary percentage of 2022 retail load served by non-emitting resources is 39 percent. This amount excludes generation and purchases associated with power delivered outside of PGE service territory and is calculated utilizing methodology per the ODEQ's Greenhouse Gas Reporting Protocol for investor-owned utilities. The underlying information is subject to ODEQ review and approval.

HB 2021 also:

- Aligns with PGE decarbonization goals;
- Establishes clear decarbonization authority for the OPUC, including authority over ESSs;
- Modernizes competition provisions of Oregon's electricity restructuring law from 1999;
- Provides clear authority and process for a community-wide green tariff program for customers 30 kilowatts and smaller and allows utilities the ability to earn a return on investments in program resources; and
- Codifies non-bypassability of costs to ensure all customers pay their share of HB 2021 policy costs.

Governor executive orders—In 2020, the Governor of Oregon issued an executive order that directed State agencies to integrate climate change and the State’s GHG emissions reduction goals into their plans, budgets, investments, and decisions to the extent allowed by law. Among other things, the executive order directed the OPUC to:

- encourage electric companies to support transportation electrification infrastructure that supports GHG emissions reductions and zero-emission vehicle goals;
- prioritize proceedings and activities that advance decarbonization in the utility sector and exercise its broad statutory authority to reduce GHG emissions, mitigate energy burden on utility customers, and ensure reliability and resource adequacy; and
- determine whether utility portfolios and customer programs reduce risks and costs to utility customers by making rapid progress towards reducing GHG emissions consistent with Oregon’s reduction goals.

In addition, the executive order directed the ODEQ to adopt a program to cap and reduce GHG emissions within the State from large stationary sources, transportation fuels, and other liquid or gaseous fuels including natural gas. In December 2021, the ODEQ adopted the Climate Protection Plan, which provided an exemption for electricity generation from the Company’s natural gas-fired resources. The executive order also modified the reduction goals of the State’s Clean Fuels Program and extended the program, from the previous rule that required a ten percent reduction in average carbon intensity of fuels by 2025, to a 25 percent reduction by 2035.

PGE continues to monitor activities of State agencies that have utilized the executive order to shape State policy or seek to implement the order through their own regulatory authority.

RPS standards and other laws—In 2016, SB 1547 set a benchmark for how much electricity must come from renewable sources and required the elimination of coal from Oregon utility customers’ energy supply no later than 2030.

PGE ceased coal fired operation at its Boardman generating facility in 2020 and continues the process of decommissioning the plant. The Company has a 20% ownership share in Colstrip Units 3 and 4 and in response to SB 1547, the Company filed a tariff request in 2016 with the OPUC and received approval to accelerate recovery of PGE’s investment in Colstrip from 2042 to 2030. In 2020, the owners of Colstrip Units 1 and 2 permanently retired those two units. Although PGE has no direct ownership interest in those units, ongoing operations of Units 3 and 4 utilize certain common facilities with Units 1 and 2.

Effective May 9, 2022, PGE’s depreciation rates and associated customer prices changed as approved by the OPUC in the Company’s 2022 General Rate Case (2022 GRC) to reflect further accelerated depreciation of Colstrip Units 3 and 4 from 2030 to December 31, 2025. In order to meet PGE’s regulatory and legislative requirements, the Company continues to evaluate the possibility of exiting ownership of Units 3 and 4 to meet PGE’s regulatory and legislative requirements. See Note 19, Contingencies, in the Notes to Consolidated Financial Statements in Item 8.—“Financial Statements and Supplementary Data” for information regarding legal proceedings related to Colstrip.

Any reduction in generation from Colstrip has the potential to provide capacity on the Colstrip transmission facilities, which stretch from eastern Montana to near the western end of that state to serve markets in the Pacific Northwest and neighboring states. PGE has an approximate 15% ownership interest in, and capacity on, the Colstrip transmission facilities. See “*Investing in a Clean Energy Future*” in this Overview for information regarding development in eastern Montana.

Other provisions of SB 1547 include:

- An increase in RPS thresholds to 27% by 2025, 35% by 2030, 45% by 2035, and 50% by 2040;
- A limitation on the life of renewable energy credits (RECs) generated from facilities that become operational after 2022 to five years, but continued unlimited lifespan for all existing RECs and allowance

for the generation of additional unlimited RECs for a period of five years for projects online before December 31, 2022; and

- An opportunity to pursue recovery of energy storage costs related to renewable energy in the Company's RAC filings.

For a more comprehensive review of Environmental Matters, see "Environmental Matters" in Item 1.—Business.

Regulatory Matters

PGE focuses on providing reliable, clean power to customers at affordable prices while providing a fair return to investors. To achieve this goal the Company must execute effectively within its regulatory framework and maintain prudent management of key financial, regulatory, and environmental matters that may affect customer prices and investor returns. The following discussion provides detail on such matters.

General Rate Cases—In July 2021, PGE filed with the OPUC a GRC based on a 2022 test year. Following a public review process, on April 25, 2022, the OPUC issued Order 22-129, which authorized a:

- capital structure of 50% debt and 50% equity;
- return on equity of 9.5%; and
- cost of capital of 6.813%.

Order 22-129 resolved the annual revenue requirement reflecting an increase of \$74 million and an average rate base of \$5.6 billion. New customer prices, as approved by the OPUC, became effective May 9, 2022. Key elements of the OPUC's Order also:

- established a balancing account for the Company's major storm damage recovery mechanism;
- denied PGE's proposal for a secondary phase of the 2022 GRC regarding the Faraday capital improvement project. The Company had requested that recovery of the capital cost of improvements at the Faraday hydroelectric facility be included in the new rate base. However, as the project was not yet placed in-service, the capital-related revenue requirement was removed and PGE was allowed to pursue recovery in the Company's next GRC. As of December 31, 2022, the construction work-in-progress balance associated with Faraday was \$168 million, including AFUDC;
- required PGE to defer and refund, subject to an earnings test, the revenue requirement associated with Boardman included in customer prices following plant closure in 2020 (for more information see "*Deferral of Boardman revenue requirement*" within this "Overview" section); and
- created an earnings test for the deferrals for the 2020 Labor Day wildfire and the February 2021 ice storm and damage to be applied on a year-by-year basis.

Further, the parties agreed to eliminate PGE's decoupling mechanism, which provided a means of recovery (or refund) of margin lost (or gained) as a result of changes in weather-adjusted energy use per customer in comparison to levels projected when customer prices were set. From May 9 through the remainder of 2022, estimated collections from, or refunds to, customers were pro-rated and are expected to be amortized into customer prices in 2024 over a one-year period. For further information on the decoupling mechanism, see "*Decoupling*" in this Overview section.

As a result of the earnings tests outlined in the OPUC's Order, the Company released deferrals associated with the year ended 2020, resulting in a pre-tax, non-cash charge to earnings for 2022 in the amount of \$17 million. The amount recorded represents the Company's estimate based on its interpretation of the OPUC's earnings test. For the years 2021 and 2022, PGE does not expect to exceed its regulated return on equity under the earnings test methodology approved by the OPUC and as a result, no further release of deferrals or earnings test reserve is expected. The OPUC has significant discretion in making the final determination of the application of the earnings

test for 2020, 2021, and 2022 and the final determination could result in additional disallowances or refunds, which could be material, compared to the amount reserved by the Company as of December 31, 2022.

On February 15, 2023, PGE filed with the OPUC a GRC based on a 2024 test year (2024 GRC) requesting an increase that, when including Colstrip-related adjustments through a supplemental tariff, results in an overall average increase of approximately 14.0% in customer prices for 2024. The requested price increase includes an approximate 4.5% increase as a result of higher NVPC expected in 2024. The NVPC projection will be updated periodically during 2023.

The Company's 2024 GRC filing seeks recovery of capital investments made across the business to meet growing demand, improve reliability, resiliency, and capability to deliver safe, reliable, clean electricity to customers. A significant portion of the Company's capital is related to the continued investment in the transmission and distribution system to meet evolving customer expectations and growing demand while also replacing aging infrastructure. PGE's request also includes recovery of the capital costs to repower the original 1907 Faraday hydro facility, which was placed into service January 31, 2023.

PGE is seeking operations and maintenance increases critical for maintaining the ability to deliver safe, reliable, affordable power amid a period of record inflation. The Company has seen cost pressures in various areas of the business, including labor, wholesale electricity and natural gas commodity prices, and the increased cost-of-debt associated with higher interest rates on its long-term debt.

The Company is also proposing key changes to its PCAM and modifications to the AUT to better address highly dynamic and volatile power market uncertainties and evolving regional fundamental drivers.

PGE has requested a:

- capital structure of 50% debt and 50% equity;
- return on equity of 9.8%;
- cost of capital of 7.06%, which reflects updates for actual and forecasted debt costs; and
- a rate base of \$6.3 billion.

Complete details of the 2022 GRC filing (OPUC Docket UE 394), the resulting OPUC Order, are available on the OPUC website at www.oregon.gov/puc. Regulatory review of the 2024 GRC (OPUC Docket UE 416) will continue throughout 2023, with a final order expected to be issued by the OPUC in December 2023, for new customer prices effective January 1, 2024.

COVID-19 impacts—In March 2020, PGE filed an application with the OPUC for deferral of lost revenue and certain incremental costs, such as bad debt expense, related to COVID-19. PGE, other utilities under the OPUC's jurisdiction, intervenors, and OPUC staff held discussions regarding the scope of costs incurred by utilities that may qualify for deferral under Docket UM 2114. The result of such discussions was an Energy Term Sheet (Term Sheet), which dictates costs in scope for deferral but is silent to the timing of recovery of such costs. In September 2020, the OPUC adopted a proposed OPUC Staff motion for Staff to execute stipulations incorporating the terms of the Term Sheet. PGE's deferral application was approved by the OPUC in October 2020 with final stipulations for the Term Sheet approved in November 2020.

As of December 31, 2022 and December 31, 2021, PGE's deferred balance was \$22 million and \$36 million, respectively, comprised primarily of bad debt expense in excess of what is currently considered and collected in customer prices. PGE did not defer incremental bad debt expense associated with customers who are not on a time payment arrangement in 2022. The Company released deferrals associated with the year ended 2020, resulting in a pre-tax charge to earnings for 2022 in the amount of \$2 million. The amount recorded represents the Company's estimate based on its understanding of the OPUC's intent to apply an earnings test to certain elements of utility COVID deferrals. PGE filed a request for amortization of deferred amounts on December 16, 2022, which reflected a \$12 million adjustment primarily related to bad debt write-offs being lower than estimated. The request for amortization has an effective date of April 1, 2023, and is still pending the approval of the Commission.

Amortization of any deferred costs will remain subject to OPUC review prior to amortization in customer prices and would be subject to an earnings test. PGE believes the amounts deferred are probable of recovery as the Company's prudently incurred costs were in response to the unique nature of the COVID-19 pandemic health emergency. The OPUC has significant discretion in making the final determination of recovery. The OPUC's conclusion of overall prudence and the application of an earnings review could result in a portion, or all, of PGE's deferrals being disallowed for recovery. Such disallowance would be recognized as a charge to earnings.

2020 Labor Day wildfire—In 2020, Oregon experienced the most destructive wildfire season on record, with over one million acres of land burned. PGE's wildfire mitigation planning includes regular system-wide risk assessment, which led to the identification and activation of a PSPS in a zone near Mt. Hood that was identified as a region at high risk of wildfire in 2020. Additionally, in response to wildfires across Oregon in 2020, PGE cut power to eight additional high-risk fire areas in partnership with local and regional agencies. The Oregon Department of Forestry has opened an investigation into the causes of wildfires in Clackamas County. The Company has received a subpoena and is fully cooperating. The Company is not aware of any wildfires caused by PGE equipment.

In October 2020, the OPUC formally approved PGE's request for deferral of 2020 wildfire-related costs. As of December 31, 2022 and December 31, 2021, PGE's cumulative deferred costs related to the 2020 wildfire response was \$31 million and \$45 million, respectively. Pursuant to the earnings tests outlined in Order 22-129, the Company has released deferrals associated with the year ended 2020, resulting in a pre-tax charge to earnings for 2022 in the amount of \$15 million. The amount recorded represents the Company's estimate based on its interpretation of the OPUC's earnings test.

On July 27, 2022, PGE made a request for amortization with the OPUC that would allow the company to collect the deferred costs in customer prices over a seven-year amortization period beginning November 1, 2022. On October 24, 2022, PGE and parties submitted a stipulation with the OPUC reflecting an agreement that resolved all matters related to 2021 under this deferral and would allow PGE full recovery of the amounts deferred as of September 30, 2022, with amortization over a seven-year period. Order 22-435, issued November 3, 2022, adopted the stipulation approving amortization of amounts that began on January 1, 2023.

Wildfire mitigation—Represents incremental costs and investments made by PGE related to intensifying efforts on its system to increase wildfire safety and resiliency to weather and other disaster-related crises under SB 762, which was passed in the 2021 legislative session with an effective date of July 19, 2021. These efforts include enhanced tree and brush clearing, replacing equipment, and making emergency plans in close partnership with local, state, and federal land and emergency management agencies to further expand the use of a PSPS, if the need should arise. Pursuant to SB 762, PGE submitted a risk-based wildfire protection plan to the OPUC in December 2022. In Order 22-129, the OPUC did not adopt any rate adjustment mechanisms, but rather invited PGE to submit a filing proposing a cost recovery mechanism for incremental wildfire costs consistent with SB 762 and establishing an ongoing review for reasonableness. The outcome of PGE's 2022 GRC provided an annual amount of \$24 million to be collected in customer prices in regards to wildfire mitigation efforts. On July 1, 2022, PGE filed an application for reauthorization of OPUC Docket UM 2019 to defer incremental wildfire mitigation costs which exceed the amount granted in customer prices. As of December 31, 2022, PGE's deferred balance related to wildfire mitigation was \$28 million. While the Company believes the full amount of the deferral is probable of recovery, the OPUC has significant discretion in making the final determination of recovery. The OPUC's conclusions of overall prudence, could result in a portion, or all, of PGE's deferral being disallowed for recovery. Such disallowance would be recognized as a charge to earnings.

PGE submitted a tariff filing on August 19, 2022 for an automatic adjustment clause for incremental wildfire mitigation spending, as allowed under SB 762. The filing included a proposal to report semi-annually to show PGE's progress relative to its Wildfire Mitigation Plan, which is filed under docket UM 2208. On September 9, 2022, the OPUC suspended the tariff and opened docket UE 412 to investigate the filing. On January 13, 2023, PGE, Staff, and certain intervenors have entered into a partial stipulation that would establish a Wildfire Mitigation Mechanism that would allow recovery of PGE's prudently incurred wildfire mitigation costs, subject to a prudency review. The partial stipulation also supports the deferral of PGE's wildfire mitigation costs related to 2022 and 2023

that exceed the amount currently granted in customer prices, subject to a prudence review. The partial stipulation is pending OPUC approval which is targeted for May 10, 2023.

The Company's deferral application for expenses related to wildfire mitigation, filed in 2019 under OPUC Docket UM 2019, has not yet been approved by the OPUC.

February 2021 ice storms and damage—In February 2021, a historic set of storms involving heavy snow, winds and ice impacted the United States, including PGE's service territory. Oregon's Governor declared a state of emergency due to severe winter weather that resulted in heavy snow and ice accumulation, high winds, critical transportation failures, and loss of power and communications capabilities. The wind and ice from the storms caused significant damage to PGE's transmission and distribution systems, which resulted in over 750,000 outages, with many customers affected more than once. At peak activity during the recovery, PGE deployed over 400 repair crews across the service territory, with many of these crews provided through mutual aid arrangements from throughout the West.

On February 15, 2021, PGE filed an application for authorization to defer emergency restoration costs for the February storms (Docket UM 2156) and as of December 31, 2022, the Company has deferred a total of \$74 million, including interest, related to incremental operating expenses due to the storms. PGE incurred and deferred costs related to replacing and rebuilding PGE facilities damaged by the storms, as well as addressing vegetation and other resulting debris and hazards both in and outside of PGE's property and right-of-way. PGE received OPUC Order No. 22-020 approving the February storms deferral on January 26, 2022.

On October 24, 2022, PGE and parties submitted a stipulation with the OPUC reflecting an agreement that resolved all matters related to 2021 under this deferral and would allow PGE full recovery of the deferred amounts with amortization over a seven-year period. The OPUC adopted the stipulation approving amortization of amounts with amortization that began on January 1, 2023.

Declared states of emergency—In September 2021, the OPUC issued an order that approved a pre-authorized deferral of costs associated with declared states of emergency. Qualifying events would include federal or state declared emergencies with impacts on PGE's service territory. Previously the Company had to file a request for deferred accounting when an event of that nature occurred, and had to seek OPUC approval of such deferred accounting applications to be effective. With this order, PGE would provide notice of an event that qualifies within 30 days of the declared state of emergency and would not need to seek OPUC approval to apply deferred accounting treatment for incremental costs related to the emergency. The OPUC maintains responsibility to review utility requests to amortize deferred amounts in customer prices, including a review of utility prudence in a future proceeding, among other requirements. As of December 31, 2022, PGE has not recorded any costs under this deferral order.

Power costs—Pursuant to the AUT process, PGE annually files an estimate of power costs for the following year. As approved by the OPUC, the 2022 AUT included a final increase in power costs for 2022, and a corresponding increase in annual revenue requirement, of \$64 million from 2021 levels, which were reflected in customer prices effective January 1, 2022. The 2023 AUT contains a \$186 million increase in NVPC that will be recovered in customer prices beginning January 1, 2023. See "Power operations" within this Overview section of Item 7 for more information regarding the PCAM.

For 2021, actual NVPC was \$62 million above baseline NVPC, which was outside the established deadband range. Therefore, PGE deferred \$29 million, which represents 90% of the excess variance expected to be collected from customers for the year ended December 31, 2021. In conjunction with the OPUC's annual review of the Company's PCAM filing, on October 24, 2022, PGE and parties submitted a stipulation with the OPUC reflecting an agreement that resolved all matters related to this deferral and would allow PGE full recovery of deferred costs, except for \$2 million. The OPUC issued an order November 8, 2022 approving the stipulation. Amortization over a two-year period began January 1, 2023. See "Power operations" within this Overview section of Item 7 for more information regarding the PCAM.

Portland Harbor Environmental Remediation Account (PHERA) mechanism—The EPA has listed PGE as one of over one hundred Potentially Responsible Parties (PRPs) related to the remediation of the Portland Harbor Superfund site. As of December 31, 2022, significant uncertainties still remained concerning the precise boundaries for clean-up, the assignment of responsibility for clean-up costs, the final selection of a proposed remedy by the EPA, and the method of allocation of costs amongst PRPs. It is probable that PGE will share in a portion of these costs. In a Record of Decision (ROD) issued in 2017, the EPA outlined its selected remediation plan for clean-up of the Portland Harbor site, which had an estimated total cost of \$1.7 billion. Stakeholders have raised concerns that EPA’s cost estimates are understated, and PGE estimates undiscounted total remediation costs for Portland Harbor per the ROD could range from \$1.9 billion to \$3.5 billion. The Company does not currently have sufficient information to reasonably estimate the amount, or range, of its potential costs for investigation or remediation of Portland Harbor. However, the Company may obtain sufficient information, prior to the final determination of allocation percentages among PRPs, to develop a reasonable estimate, or range, of its potential liability that would require recording an estimate, or low end of the range. The Company’s liability related to the cost of remediating Portland Harbor could be material to PGE’s financial position. The impact of such costs to the Company’s results of operations is mitigated by the PHERA mechanism. As approved by the OPUC, the Company’s recovery mechanism allows the Company to defer and recover estimated liabilities and incurred environmental expenditures related to the Portland Harbor Superfund Site through a combination of third-party proceeds, including, but not limited to, insurance recoveries, and customer prices, as necessary. The mechanism established annual prudency reviews of environmental expenditures and third-party proceeds, and annual expenditures in excess of \$6 million, excluding contingent liabilities, are subject to an annual earnings test. PGE’s results of operations may be impacted to the extent such expenditures were to be deemed imprudent by the OPUC or disallowed per the prescribed earnings test. For further information regarding the PHERA mechanism, see “EPA Investigation of Portland Harbor” in Note 19, Contingencies in the Notes to Consolidated Financial Statements in Item 8.—“Financial Statements and Supplementary Data.”

Decoupling—The decoupling mechanism, previously authorized by the OPUC through 2022, was intended to provide for recovery of margin lost as a result of a reduction in electricity sales attributable to energy efficiency, customer-owned generation, and conservation efforts by residential and certain commercial customers. The mechanism provided for collection from (or refund to) customers if weather-adjusted use per customer was less (or more) than that projected in the Company’s most recent GRC.

Collections under the decoupling mechanism were subject to an annual limitation of 2% of revenues for each eligible customer class, based on the net prices in effect for the applicable tariff schedule at the time of collection. For estimated collections recorded in 2022, the Company did not reach the 2% limit for any applicable tariff schedule that would be applied when actually collected in 2024. No limit existed for any potential refunds under the decoupling mechanism, thus increased demand from residential customers since the onset of the COVID-19 pandemic resulted in larger estimated refunds under the decoupling mechanism, which largely offset the revenue increases that resulted from higher residential demand.

In the 2022 GRC, parties reached an agreement that has eliminated PGE’s decoupling mechanism upon the effective date of new customer prices pursuant to the case, which began May 9, 2022. Pursuant to the GRC Order, the OPUC adopted the agreement such that deferrals will not occur after 2022, although amortization of then previously recorded deferrals will continue as scheduled until collected or refunded in future customer prices and deferral continued through the end of 2022 on a prorated basis. In the 2024 GRC filing, the Company has included a concept proposal that could lead to resuming decoupling January 1, 2024, with certain modifications.

For the year ended December 31, 2022, the Company recorded an estimated refund of \$3 million to residential customers and a collection of \$6 million from commercial customers that resulted from variances between actual weather-adjusted use per customer and that projected in the 2019 GRC. The Company saw a decline in weather-adjusted use per customer from both residential and commercial customers during 2022 compared to 2021 levels, although residential usage continued to exceed the projections.

At December 31, 2021, PGE had recorded a total refund of \$10 million that will be refunded to customers over a one-year period, which began January 1, 2023.

Deferral of Boardman revenue requirement—In October 2020, intervenors filed a deferral application with the OPUC that would require PGE to defer and refund the revenue requirement associated with the Company’s Boardman coal-fired generating plant (Boardman) then included in customer prices as established in the Company’s 2019 GRC. The application stated a deferral was required for customers to adequately capture the reduction in revenue requirement beginning on October 15, 2020, the date Boardman ceased operations. PGE estimated the revenue requirement for Boardman to be \$14 million for the year ended December 31, 2020, an additional \$66 million for the year ended December 31, 2021, and \$23 million for the year ended December 31, 2022.

In the 2022 GRC Order, the OPUC found that the deferral was warranted with amortization subject to an earnings test. On July 27, 2022, the Company filed an application, which, subject to OPUC approval, showed that the Company did not exceed the earnings test threshold for 2020 or 2021 and consequently, no refund would be required for those years. Customer prices resulting from the 2022 GRC Order no longer include any revenue requirement related to Boardman after new customer prices took effect on May 9, 2022. Although still subject to OPUC review, PGE does not believe it exceeded its regulated return on equity under the earnings test for 2022.

On October 24, 2022, PGE and parties submitted a stipulation with the OPUC reflecting an agreement that resolved all matters related to 2021 under this deferral and states that no refund is necessary for that year. The stipulation remains subject to OPUC approval. Review and determination of potential refund for the periods related to 2020 and 2022 remain outstanding. In November 2022, the OPUC granted a motion by PGE to suspend the procedural schedule and directed the Company to file a status update no later than February 16, 2023. In granting the ruling the OPUC noted that it expects to resolve this matter, addressing both the 2020 and 2022 deferrals within the first half of 2023.

Based on the application of an earnings test, PGE has not recorded a refund related to Boardman for 2020, 2021, or 2022. The OPUC has significant discretion in making the final determination of the application of the earnings test for 2020, 2021, and 2022, and could require additional refunds that would be recognized as a charge to earnings, which could be material.

Renewable recovery framework—As previously authorized by the OPUC, a primary method available to recover costs associated with renewable resources is the RAC. The RAC allows PGE to recover prudently incurred costs of renewable resources through filings made each year, outside of a GRC. There were no significant filings made under the RAC during 2022. In the 2019 GRC Order, the OPUC authorized the inclusion of prudent costs of energy storage projects associated with renewables in future RAC filings, under certain conditions. PGE is requesting within its 2024 GRC that the OPUC clarify that energy storage used to integrate renewables on a utility’s system qualifies as associated energy storage.

Operating Activities

In addition to electricity provided by PGE’s own generation portfolio, to meet retail load requirements and balance energy supply with customer demand, the Company purchases and sells electricity in the wholesale market. PGE also performs portfolio management and wholesale market sales services for third parties in the region. The Company participates in the western EIM, which allows, among other things, more renewable energy integration into the grid by better complementing the variable output of renewable resources. In its ongoing effort to benefit retail and wholesale customers, PGE has announced its intention to join the Western Power Pool and a binding resource adequacy program for the region known as the WRAP. Ten other utilities in the western United States and Canada have recently signaled similar intent. The WRAP represents an effort to increase reliability and clean energy in the region through resource diversification and load sharing while managing overall costs. The Company also purchases natural gas in the United States and Canada to fuel its generation portfolio and sells excess gas back into the wholesale market.

PGE generates revenues and cash flows primarily from the sale and distribution of electricity to its retail customers. The impact of seasonal weather conditions on demand for electricity can cause the Company’s revenues, cash flows, and income from operations to fluctuate from period to period. Historically, PGE has experienced its highest MWh deliveries and retail energy sales during the winter heating season and did record a new winter peak load in December 2022. Summer peak deliveries have continued to exceed those of the winter months for several years, generally resulting from air conditioning demand and the trend toward a warmer overall climate. During the summer of 2021, demand reached a new all-time high, surpassing the previous mark, which was a winter peak. For further information regarding seasonal fluctuations, see “*Seasonality*” in the Customers and Revenues section in Item 1.—“Business.” Retail customer price changes and customer usage patterns, which can be affected by the economy and recently, by changes resulting from COVID-19, also have an effect on revenues. Wholesale power availability and price, hydro and wind generation, and fuel costs for thermal plants can also affect income from operations. PGE has taken measures to help ensure the availability of supply chain-constrained items that are needed to serve new and existing customers, such as advance ordering of critical materials, pre-securing manufacturing capacity with strategic partners, and evaluating availability with established and new suppliers. PGE has also taken measures to help mitigate cost increases through long term agreements, supplier engagement and expanding the supply base.

Customers and demand—The following tables present total energy deliveries and the average number of retail customers by customer type for 2022 and 2021.

| Energy deliveries (MWh in thousands) | 2022 | | 2021 | | % Increase/ (Decrease) |
|---|-------------|--|-------------|--|-----------------------------------|
| Retail: | | | | | |
| Residential | 8,088 | | 7,978 | | 1.4 % |
| Commercial (PGE sales only) | 6,650 | | 6,604 | | 0.7 |
| Direct Access | 548 | | 589 | | (7.0) |
| Total Commercial | 7,198 | | 7,193 | | 0.1 |
| Industrial (PGE sales only) | 4,167 | | 3,714 | | 12.2 |
| Direct Access | 1,778 | | 1,647 | | 8.0 |
| Total Industrial | 5,945 | | 5,361 | | 10.9 |
| Total (PGE sales only) | 18,905 | | 18,296 | | 3.3 |
| Total Direct Access | 2,326 | | 2,236 | | 4.0 |
| Total retail energy deliveries | 21,231 | | 20,532 | | 3.4 % |
| Wholesale energy deliveries | 6,000 | | 5,946 | | 0.9 |
| Total energy deliveries | 27,231 | | 26,478 | | 2.8 % |

| Average number of retail customers | 2022 | | 2021 | | % Increase/ (Decrease) |
|---|-------------|-------|-------------|-------|-----------------------------------|
| Residential | 809,573 | 88 % | 800,372 | 88 % | 1.1 % |
| Commercial | 112,127 | 12 | 111,062 | 12 | 1.0 |
| Industrial | 192 | — | 191 | — | 0.5 |
| Direct access | 552 | — | 584 | — | (5.5) |
| Total | 922,444 | 100 % | 912,209 | 100 % | 1.1 % |

In 2022, retail energy deliveries increased 3.4% from 2021, with increases reflected in all three customer categories, although driven by strong demand from industrial customers. The industrial class has experienced an increase in energy deliveries, due primarily to continued growth in the high-tech and digital services sectors. Residential usage continues to be elevated compared to levels seen before COVID-19, as remote and hybrid work schedules remain in place across the Company’s service area. Weather had a positive impact on deliveries with warmer than normal

temperatures experienced during the summer months and overall cooler weather seen during the heating seasons than in 2021.

In March 2020, the Governor of Oregon issued an order directing residents to stay at home except for essential activity and mandating closure of businesses for which close personal contact would be difficult or impossible to avoid. The Company saw a shift in retail demand in response, beginning with the second quarter of 2020. In particular, residential loads increased as a larger percentage of the population spent more time at home. Conversely, commercial energy deliveries declined as many businesses were disrupted in an attempt to maintain social distancing or have closed as a result of the lack of business as residents followed directives from state and federal authorities. The majority of state and local mandates were lifted by mid-2021, allowing for commercial recovery to begin, however as COVID-19 variants impacted communities in 2021, impacts to energy deliveries, particularly increases in residential average usage remained. In 2022, PGE began to see decreases in average residential usage on a weather-adjusted, year over year basis, however we expect that the shift that has occurred with respect to hybrid work schedules will have lasting impacts on average usage.

Residential energy deliveries, which are most sensitive to fluctuations in temperatures, were 1.4% higher in 2022 than 2021, due to a 0.2% increase in average usage per customer, which resulted largely from warmer summer and colder fourth quarter temperatures, and a 1.1% increase in the average number of customers.

Commercial energy deliveries were fairly stable in 2022 with the prior year, showing an increase of 0.1%. While COVID-19 related recovery has largely occurred, continued impacts of programmatic energy efficiency and uncertainty in economic conditions have tempered commercial growth in 2022.

Industrial energy deliveries increased 10.9% in 2022 due to continued strength in the high-tech manufacturing and digital service sector. Several large customers experienced continued growth in 2022 and new data center facilities came online.

Total heating degree-days, an indication of electricity use for heating, in 2022 were fairly consistent overall with the 15-year average although 7% above total heating degree-days in 2021. The Company experienced a new record winter peak load in December 2022 of 4,113 MW. Total cooling degree-days, a similar indication of the extent to which customers were likely to have used electricity for cooling, in 2022, exceeded the 15-year average by 52%, although were only 3% above the 2021 total, illustrating that the two most recent summer seasons have been exceedingly warm compared to historical averages. The following table presents the number of heating and cooling degree-days in 2022 and 2021, along with the current 15-year averages, reflecting the influence that weather had on comparative energy deliveries.

| | Heating Degree-Days | | | Cooling Degree-Days | | |
|--|---------------------|-------|-----------------|---------------------|------|-----------------|
| | 2022 | 2021 | 15-Year Average | 2022 | 2021 | 15-Year Average |
| 1st quarter | 1,761 | 1,805 | 1,846 | — | — | — |
| 2nd quarter | 760 | 498 | 625 | 75 | 238 | 100 |
| 3rd quarter | 6 | 54 | 72 | 745 | 600 | 467 |
| 4th quarter | 1,576 | 1,471 | 1,560 | 45 | — | 2 |
| Total | 4,103 | 3,828 | 4,103 | 865 | 838 | 569 |
| Increase (decrease) from the 15-year average | — % | (7)% | | 52 % | 47 % | |

On a weather-adjusted basis, total retail deliveries increased 2.0% from 2021. The increase was driven by a 10.6% growth in industrial deliveries, partially offset by a 0.5% decline in commercial energy deliveries and a 1.4% decrease in weather-adjusted deliveries to residential customers, as average use per customer has declined from the highs seen during the first two years of the COVID-19 pandemic. The Company projects that retail energy deliveries for 2023 will be between 2.5% and 3.0% above 2022 weather-adjusted levels, reflecting continued growth in industrial deliveries.

ESSs supplied Direct Access customers with energy representing 11% of PGE’s total retail energy deliveries during 2022 and 2021. The maximum retail load allowed to be supplied under the fixed three-year and minimum five-year opt-out programs represent 12% of the Company’s total retail energy deliveries for 2022. With the adoption of the New Large Load Direct Access program in 2020, as much as 17% of the Company’s 2022 energy deliveries could have been supplied by ESSs.

Power operations—PGE utilizes a combination of its own generating resources and wholesale market transactions to meet the energy needs of its retail customers. Based on numerous factors, including plant availability, customer demand, river flows, wind conditions, and current wholesale prices, the Company continuously makes economic dispatch decisions in an effort to obtain reasonably-priced power for its retail customers. PGE also purchases wholesale natural gas in the United States and Canada to fuel its generating portfolio and sells excess gas back into the wholesale market. As a result, the amount of power generated and purchased in the wholesale market to meet the Company’s retail load requirement can vary from period to period and impacts NVPC and income from operations.

The following table provides information regarding the performance of the Company’s generation portfolio.

| | Plant availability ⁽¹⁾ | | Actual energy provided compared to projected levels ⁽²⁾ | | Actual energy provided as a percentage of total retail load | |
|---------------------|-----------------------------------|------|--|-------|---|------|
| | 2022 | 2021 | 2022 | 2021 | 2022 | 2021 |
| Thermal: | | | | | | |
| Natural gas | 86 % | 89 % | 81 % | 114 % | 41 % | 48 % |
| Coal ⁽³⁾ | 89 | 81 | 100 | 103 | 11 | 11 |
| Wind ⁽⁴⁾ | 82 | 92 | 81 | 110 | 9 | 12 |
| Hydro | 94 | 83 | 81 | 73 | 5 | 6 |

(1) Plant availability represents the percentage of the year plants were available for operations, which is impacted by planned maintenance and forced, or unplanned, outages.

(2) Projected levels of energy are included as part of PGE’s AUT. Such projections establish the power cost component of retail prices for the following calendar year. Any shortfall is generally replaced with power from higher cost sources, while any excess generally displaces power from higher cost sources.

(3) Plant availability reflects Colstrip, which PGE does not operate.

(4) Plant availability includes Wheatridge, which PGE does not operate.

Energy received from PGE-owned and jointly-owned thermal plants in 2022 compared to 2021 decreased by 8%. This decrease is primarily related to PGE’s natural gas-fired plants which were displaced by higher hydroelectric generation and purchases, and economic dispatch decisions in response to higher natural gas prices. Energy expected to be received from thermal resources is projected annually in the AUT based on forecast market prices, variable costs to run the plant, and the constraints of the plant. PGE’s thermal generating plants require varying levels of annual maintenance, which is generally performed during the second quarter of the year.

Total energy received from all hydroelectric sources, both PGE-owned generation and purchased, increased 25% in 2022 compared to 2021 primarily due to increased runoff resulting from more favorable snowpack conditions. Energy received from mid-Columbia and other regional hydroelectric projects increased 31% while energy generated by the Company-owned facilities decreased 4% in 2022 largely as a result of PGE’s sale of 16.66% of its ownership interest in Pelton/Round Butte to the CTWS, effective January 1, 2022. PGE purchases 100% of the CTWS’s share of the project output. Energy expected to be received from hydroelectric resources is projected annually in the AUT based on a modified hydro study, which utilizes 80 years of historical stream flow data. See “*Purchased power and fuel*” in the Results of Operations section in this Item 7, for further detail on regional hydro results.

Energy received from PGE-owned wind resources and under contracts decreased 22% in 2022 compared to 2021 primarily due to unplanned plant outages during the period. Energy expected to be received from wind generating resources is projected annually in the AUT based on historical generation. Wind generation forecasts are developed using a 5-year rolling average of historical wind levels or forecast studies when historical data is not available.

Under the PCAM, PGE may share with customers a portion of cost variances associated with NVPC. Customer prices can be adjusted annually to absorb a portion of the difference between the forecasted NVPC included in customer prices (baseline NVPC) and actual NVPC for the year, if such differences exceed a prescribed “deadband” limit, which ranges from \$15 million below to \$30 million above baseline NVPC. To the extent actual NVPC, subject to certain adjustments, is outside the deadband range, the PCAM provides for 90% of the excess variance to be collected from, or refunded to, customers. Pursuant to a regulated earnings test, a refund will occur only to the extent that it results in PGE’s actual regulated return on equity (ROE) for the given year being no less than 1% above the Company’s latest authorized ROE, while a collection will occur only to the extent that it results in PGE’s actual regulated ROE for that year being no greater than 1% below the Company’s authorized ROE. The following is a summary of the results of the Company’s PCAM as calculated for regulatory purposes for 2022 and 2021:

- For 2022, actual NVPC was above baseline NVPC by \$23 million, which was within the established deadband range. Accordingly, no estimated collection from customers was recorded as of December 31, 2022. A final determination regarding the 2022 PCAM results will be made by the OPUC through a public filing and review in 2023.
- For 2021, actual NVPC was above baseline NVPC by \$62 million, which was outside the established deadband range. Pursuant to the PCAM, as PGE’s preliminary regulatory ROE was below 8.5% pursuant to the related earnings test, as of December 31, 2021, PGE deferred \$30 million, which represented 90% of the excess variance expected to be collected from customers. On October 24, 2022, PGE and Parties submitted a stipulation with the OPUC that resolved all matters related to the 2021 PCAM and resulted in a deferred balance as of December 31, 2022 of \$28 million, including interest. The OPUC issued Order 22-440 approving the stipulation and amortization began January 1, 2023 over a two-year period. See “*Power costs*” within “*Regulatory Matters*” in this Overview section of Item 7 for more information.

The AUT filing, which serves to reset the baseline NVPC for PCAM purposes, indicated that a \$64 million increase was expected in 2022 over 2021. The 2023 AUT anticipates a \$186 million increase in NVPC that will be recovered in customer prices beginning January 1, 2023.

Results of Operations

The following tables provide financial and operational information to be considered in conjunction with management's discussion and analysis of results of operations.

The results of operations are as follows for the years presented (dollars in millions):

| | <u>Years Ended December 31,</u> | | <u>% Increase (Decrease)</u> |
|---|---------------------------------|---------------|----------------------------------|
| | <u>2022</u> | <u>2021</u> | |
| | <u>Amount</u> | <u>Amount</u> | |
| Total revenues | \$ 2,647 | \$ 2,396 | 10 % |
| Operating expenses: | | | |
| Purchased power and fuel | 988 | 822 | 20 |
| Generation, transmission and distribution | 348 | 310 | 12 |
| Administrative and other | 340 | 336 | 1 |
| Depreciation and amortization | 417 | 404 | 3 |
| Taxes other than income taxes | 157 | 146 | 8 |
| Total operating expenses | <u>2,250</u> | <u>2,018</u> | <u>11</u> |
| Income from operations | 397 | 378 | 5 |
| Interest expense, net * | 156 | 137 | 14 |
| Other income: | | | |
| Allowance for equity funds used during construction | 14 | 17 | (18) |
| Miscellaneous income, net | 17 | 9 | 89 |
| Other income, net | <u>31</u> | <u>26</u> | <u>19</u> |
| Income before income taxes | 272 | 267 | 2 |
| Income tax expense | 39 | 23 | 70 |
| Net income | <u>\$ 233</u> | <u>\$ 244</u> | <u>(5)%</u> |

* Includes an allowance for borrowed funds used during construction of \$7 million in 2022 and \$8 million in 2021.

2022 Compared to 2021

Net income for 2022 decreased \$11 million from 2021 as the impact of higher natural gas and electricity prices coupled with increased customer demand drove Purchased power and fuel expense up. Increases in Retail revenues were led by the increase in customer prices to cover anticipated higher net variable power costs, as authorized by the OPUC in the AUT, although such increase fell considerably short of covering the incremental expense that the Company experienced, as well as higher customer demand. Retail energy deliveries increased 3.4% as energy deliveries to Industrial cost-of-service customers increased 12.2% in 2022 compared to 2021. Retail revenues were impacted by a slightly lower average price mix in 2022 as a result of the increased demand in the industrial sector. Wholesale revenues were the largest contributor to higher revenues in 2022 as wholesale power prices rose considerably along with marginally greater volumes. Increases in Operating expenses reflect the impact of the earnings tests outlined in OPUC Order 22-129, expenses related to service restoration costs, and continued vegetation management activities.

Other income increased primarily due to a buyout of a retiree medical benefit plan in 2022, resulting in an \$11 million settlement gain, partially offset by unfavorable market changes on the non-qualified benefit trust and lower AFUDC equity income on lower construction work-in-progress balances. Income taxes increased due primarily to higher Income before income tax expense combined with lower tax credits and a true up adjustment recorded in 2021 that reduced income tax expense.

Total revenues consist of the following for the years presented (in millions):

| | 2022 | 2021 | % Increase (Decrease) |
|---|----------|----------|--------------------------|
| Retail: * | | | |
| Residential | \$ 1,158 | \$ 1,118 | 4 % |
| Commercial | 723 | 690 | 5 |
| Industrial | 289 | 250 | 16 |
| Direct Access | 35 | 47 | (26) |
| Subtotal | 2,205 | 2,105 | 5 |
| Alternative revenue programs, net of amortization | 11 | (29) | (138) |
| Other accrued revenues, net | 7 | 2 | 250 |
| Total retail revenues | 2,223 | 2,078 | 7 |
| Wholesale revenues | 363 | 255 | 42 |
| Other operating revenues | 61 | 63 | (3) |
| Total revenues | \$ 2,647 | \$ 2,396 | 10 % |

* Includes both revenues from customers who purchase their energy supplies from the Company and revenues from the delivery of energy to those customers that purchase their energy from ESSs. Commercial revenues from ESS customers were \$12 million for 2022 and \$18 million in 2021. Industrial revenues from ESS customers were \$23 million and \$29 million for 2022 and 2021, respectively.

Total retail revenues—The following items contributed to the increase in Total retail revenues for the year ended December 31, 2022 compared to the year ended December 31, 2021 (dollars in millions):

| | |
|--|----------|
| Year ended December 31, 2021 | \$ 2,078 |
| Change as a result of the AUT, approved by the OPUC (partially offset in Purchased power and fuel) | 69 |
| Retail energy deliveries driven by higher industrial demand, increase in customers, and the effects of weather | 66 |
| Alternative revenue programs related to the decoupling mechanism due primarily to prorated elimination of the mechanism in 2022 and anticipated refunds recorded in 2021 | 13 |
| Recovery in Revenues of storm related expenses | 9 |
| Combination of various supplemental tariffs and adjustments | (2) |
| Average price of energy deliveries due primarily to shift in mix among customer classes resulting from increased industrial demand | (10) |
| Year ended December 31, 2022 | 2,223 |
| Change in Total retail revenues | \$ 145 |

Wholesale revenues result from sales of electricity to utilities and power marketers made in the Company's efforts to secure reasonably priced power for its retail customers, manage risk, and administer its current long-term wholesale contracts. Such sales can vary significantly from year to year as a result of economic conditions, power and fuel prices, hydro and wind availability, and customer demand.

In 2022, a \$108 million, or 42%, increase from 2021 in wholesale revenues resulted from a \$106 million increase in average prices received when the Company sold power into the wholesale market. Although wholesale prices for electricity increased considerably during 2021 from the prior year, 2022 saw even higher prices. The higher sales prices in 2022 resulted from several factors including the overall economic recovery and macroeconomic factors impacting the energy commodity markets, although were driven largely by higher natural gas prices. In addition, sales volumes increased 1%, which contributed another \$2 million.

Other operating revenues decreased \$2 million, or 3%, in 2022 from 2021, primarily as a result of market conditions in 2021 that allowed the Company to sell excess natural gas in excess of amounts needed for the Company's generation portfolio back into the wholesale market at gains that have exceeded those experienced during 2022. The gains were considerably higher in early 2021 due in part to the impact of unusual weather events on the demand for natural gas.

Purchased power and fuel expense includes the cost of power purchased and fuel used to generate electricity to meet PGE's retail load requirements, as well as the cost of settled electric and natural gas financial contracts.

The following items contributed to the increase in Purchased power and fuel for the year ended December 31, 2022 compared to the year ended December 31, 2021 (dollars in millions, except for average variable power cost per MWh):

| | | |
|---------------------------------------|----|--------|
| Year ended December 31, 2021 | \$ | 822 |
| Average variable power cost per MWh | | 13 |
| Total system load | | 124 |
| 2021 PCAM deferral | | 29 |
| Year ended December 31, 2022 | | 988 |
| Change in Purchased power and fuel | \$ | 166 |
| Average variable power cost per MWh: | | |
| Year ended December 31, 2021 | \$ | 33.63 |
| Year ended December 31, 2022 | \$ | 37.71 |
| Total system load (MWh in thousands): | | |
| Year ended December 31, 2021 | | 25,295 |
| Year ended December 31, 2022 | | 26,215 |

For the year ended December 31, 2022, the \$15 million increase related to the change in average variable power cost per MWh was primarily driven by a 5% increase in the average cost for purchased power, offset by a 13% decrease in the average cost of power from the Company's own generation. The \$124 million increase related to total system load was primarily due to a 23% increase in purchased power, driven largely by the economic displacement of gas facilities in 2022, offset by a 10% decrease in the company's own generation.

PGE's sources of energy, total system load, and retail load requirement for the years presented are as follows:

| | Years Ended December 31, | | | |
|--|--------------------------|-------|---------|-------|
| | 2022 | | 2021 | |
| Sources of energy (MWh in thousands): | | | | |
| Generation: | | | | |
| Thermal: | | | | |
| Natural gas | 8,242 | 31 % | 9,306 | 37 % |
| Coal | 2,186 | 8 | 2,060 | 8 |
| Total thermal | 10,428 | 39 | 11,366 | 45 |
| Hydro | 1,027 | 4 | 1,073 | 4 |
| Wind | 1,765 | 7 | 2,316 | 9 |
| Total generation | 13,220 | 50 | 14,755 | 58 |
| Purchased power: | | | | |
| Hydro | 6,297 | 24 | 4,789 | 19 |
| Wind | 824 | 3 | 989 | 4 |
| Solar | 723 | 3 | 501 | 2 |
| Natural Gas | 33 | — | 63 | — |
| Waste, Wood and Landfill Gas | 168 | 1 | 167 | 1 |
| Source not specified | 4,961 | 19 | 4,031 | 16 |
| Total purchased power | 13,006 | 50 | 10,540 | 42 |
| Total system load | 26,226 | 100 % | 25,295 | 100 % |
| Less: wholesale sales | (6,000) | | (5,946) | |
| Retail load requirement | 20,226 | | 19,349 | |

Purchased power in the table above includes power received from qualifying facilities under the Public Utility Regulatory Policies Act of 1978 (PURPA) as follows:

| | Years Ended December 31, | |
|---|--------------------------|------|
| | 2022 | 2021 |
| Sources of energy (MWhs in thousands): | | |
| PURPA purchased power: | | |
| Hydro | 36 | 15 |
| Wind | 25 | 30 |
| Solar | 588 | 472 |
| Waste, Wood, Landfill Gas, and Other | 101 | 102 |
| Total | 750 | 619 |

The following table presents the forecasted April-to-September 2023 and actual April-to-September 2022 and 2021 runoff at particular points of major rivers relevant to PGE's hydro resources:

| Location | Runoff as a Percent of Normal* | | |
|--|--------------------------------|----------------|----------------|
| | 2023 Forecast | 2022 Actual | 2021 Actual |
| Columbia River at The Dalles, Oregon | 83 % | 107 % | 82 % |
| Mid-Columbia River at Grand Coulee, Washington | 83 | 110 | 89 |
| Clackamas River at Estacada, Oregon | 90 | 139 | 70 |
| Deschutes River at Moody, Oregon | 78 | 92 | 84 |

* Volumetric water supply forecasts and historical averages for the Pacific Northwest region are prepared by the Northwest River Forecast Center, with the Natural Resources Conservation Service and other cooperating agencies.

Actual NVPC, which consists of Purchased power and fuel expense net of Wholesale revenues, increased \$59 million in 2022 compared with 2021. The increase attributable to changes in Purchased power and fuel expense was the result of a 12% increase in the average variable power cost per MWh and a 4% increase in total system load. The increase in actual NVPC was also a result of the 41% higher average price per MWh sold and a 1% increase in the volume of wholesale energy deliveries.

The following items contributed to the increase in Actual NVPC for the year ended December 31, 2022 compared to the year ended December 31, 2021 (in millions):

| | | |
|----------------------------------|----|-------|
| Year ended December 31, 2021 | \$ | 567 |
| Purchased power and fuel expense | | 138 |
| Wholesale revenues | | (108) |
| 2021 PCAM Deferral | | 29 |
| Year ended December 31, 2022 | | 626 |
| Change in NVPC | \$ | 59 |

For further information regarding NVPC in relation to the PCAM, see “*Power operations*” in the Overview section of this Item 7.

Generation, transmission, and distribution expense increased \$38 million or 12% for the year ended December 31, 2022 compared to the year ended December 31, 2021, with the change attributed largely to the following items (in millions):

| | | |
|---|----|-----|
| Year ended December 31, 2021 | \$ | 310 |
| Release of previously deferred amounts pursuant to earnings test created in OPUC 2022 GRC Order | | 16 |
| Higher service restoration and storm response costs | | 5 |
| Higher distribution vegetation management, inspection, and maintenance expenses | | 4 |
| Higher employee compensation and benefits expenses | | 4 |
| Increase in generation facility maintenance expenses driven by major maintenance activities | | 3 |
| Miscellaneous expenses | | 6 |
| Year ended December 31, 2022 | | 348 |
| Change in Generation, transmission and distribution | \$ | 38 |

For the year ended December 31, 2022, PGE deferred \$27 million and \$7 million in incremental wildfire mitigation costs and storm response costs, respectively.

Administrative and other expense increased \$4 million or 1% for the year ended December 31, 2022 compared to the year ended December 31, 2021 due largely to the following items (in millions):

| | | |
|--|----|-----|
| Year ended December 31, 2021 | \$ | 336 |
| Regulatory program amortization | | 6 |
| Higher facility maintenance, insurance, and licensing expenses | | 4 |
| Higher bad debt expense | | 1 |
| Lower professional service expenses | | (5) |
| Lower employee compensation and benefits expenses | | (5) |
| Miscellaneous expenses | | 3 |
| Year ended December 31, 2022 | | 340 |
| Change in Administrative and other | \$ | 4 |

Depreciation and amortization expense increased \$13 million or 3% for the year ended December 31, 2022 compared to year ended December 31, 2021, with the change largely resulting from the following items (in millions):

| | | |
|--|----|------|
| Year ended December 31, 2021 | \$ | 404 |
| Accelerated depreciation of the Colstrip facility as approved by the OPUC's 2022 GRC Order | | 15 |
| Capital additions, net of retirements | | 8 |
| Activity related to regulatory programs (offset elsewhere on the income statement) | | (10) |
| Year ended December 31, 2022 | | 417 |
| Change in Depreciation and amortization | \$ | 13 |

Taxes other than income taxes expense increased \$11 million, or 8%, in 2022 compared with 2021, primarily due to higher franchise fees and property tax expenses.

Interest expense increased \$19 million, or 14%, in 2022 compared with 2021 driven by higher average balances of outstanding debt as well as higher leasing expenses from the January 1, 2022 commencement of the Pelton/Round Butte financing arrangement.

Other income, net increased \$5 million, or 19%, in 2022 compared to 2021, with the difference driven by the execution of a buyout of the Non-represented Retiree Medical Plan in 2022, resulting in a \$11 million settlement gain. For more information, see Note 11, Employee Benefits, in the Notes to Consolidated Financial Statements in Item 8.—“Financial Statements and Supplemental Data.” An additional \$4 million reduction in pension and other post-retirement employee benefit non-service cost expenses also contributed to the increase. The favorable drivers were partially offset by \$9 million unfavorable market changes on the non-qualified benefit trust and as well as \$3 million lower AFUDC equity income driven by lower construction work-in-progress balances in 2022.

Income tax expense increased \$16 million, or 70%, in 2022 compared to 2021 primarily driven by a \$9 million cumulative catch-up adjustment recorded in 2021 to defer and recognize a regulatory asset for previously recorded deferred income tax expenses on a certain local flow-through tax; lower production tax credit benefits in 2022 compared to 2021; higher expenses from flow-through items; and higher pre-tax income. The increases were partially offset by higher research and development tax credit benefits.

See Note 12, Income Taxes, in the Notes to Consolidated Financial Statements in Item 8.—“Financial Statements and Supplementary Data,” for more information.

2021 Compared to 2020

For a comparison of the Company’s results of operations for the fiscal year ended December 31, 2021 to the year ended December 31, 2020, see Item 7.—“Management’s Discussion and Analysis of Financial Condition and Results of Operations” in the Company’s Annual report on Form 10-K for the year ended December 31, 2021, filed with the SEC on February 16, 2022.

Liquidity and Capital Resources

Discussions, forward-looking statements, and projections in this section, and similar statements in other parts of this Annual Report on Form 10-K, are subject to PGE’s assumptions regarding the availability and cost of capital. See “Capital and credit market conditions could adversely affect the Company’s access to capital, cost of capital, and ability to execute its strategic plan.” in Item 1A.—“Risk Factors,” for further information.

Capital Requirements

The following table presents actual capital expenditures and debt maturities for 2022 and projected capital expenditures and future debt maturities for 2023 through 2027 (in millions, excluding AFUDC):

| | Years Ending December 31, | | | | | |
|---|---------------------------|-----------------|---------------|---------------|---------------|---------------|
| | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 |
| Ongoing capital expenditures ⁽¹⁾ | \$ 801 | \$ 785 | \$ 725 | \$ 750 | \$ 775 | \$ 800 |
| Integrated Operations Center | 10 | 10 | 5 | — | — | — |
| Clearwater Wind project | \$ — | \$ 415 | \$ — | \$ — | \$ — | \$ — |
| Total capital expenditures ⁽²⁾ | <u>\$ 811</u> | <u>\$ 1,210</u> | <u>\$ 730</u> | <u>\$ 750</u> | <u>\$ 775</u> | <u>\$ 800</u> |
| Long-term debt maturities | <u>\$ —</u> | <u>\$ 260</u> | <u>\$ 80</u> | <u>\$ —</u> | <u>\$ —</u> | <u>\$ 160</u> |

(1) Consists primarily of upgrades to, and replacement of, generation, transmission, and distribution infrastructure, as well as new customer connects. Includes accrued capital additions, preliminary engineering, removal costs, and certain intangible working capital assets.

(2) Amounts subsequent to 2022 are estimates as of the date of this report and may be affected by economic conditions, including but not limited to, impacts of inflation, changes to the cost of materials and labor, and financing costs.

During 2022, PGE funded its capital expenditures through a combination of cash from operations in the amount of \$674 million, and net proceeds from the issuance of FMBs in the total amount of \$100 million and a term loan in the amount of \$260 million. Capital expenditures in 2023 are expected to be approximately \$1.2 billion. PGE plans to fund the 2023 capital expenditures with cash from operations during 2023, which is expected to range from \$700 million to \$750 million, the issuance of debt securities of up to \$350 million, which includes \$100 million issued in November 2022 and funded in January 2023, issuances of shares pursuant to an equity forward sale agreement (EFSA), and the issuance of commercial paper, as needed. The actual timing and amount of any other issuances of debt or commercial paper will be dependent upon the timing and amount of capital expenditures. For a discussion concerning PGE’s ability to fund its future capital requirements, see “Debt and Equity Financings” in the Liquidity and Capital Resources section of this Item 7.

Liquidity

PGE's access to short-term debt markets, including revolving credit from banks, helps provide necessary liquidity to support the Company's current operating activities, including the purchase of power and fuel. Long-term capital requirements are driven largely by capital expenditures for distribution, transmission, and generation facilities to support both new and existing customers, information technology systems, and debt refinancing activities. PGE's liquidity and capital requirements can also be significantly affected by other working capital needs, including margin deposit requirements related to wholesale market activities, which can vary depending upon the Company's forward positions and the corresponding price curves.

The following summarizes PGE's cash flows for the periods presented (in millions):

| | Years Ended December 31, | |
|--|--------------------------|--------------|
| | 2022 | 2021 |
| Cash and cash equivalents, beginning of year | \$ 52 | \$ 257 |
| Net cash provided by (used in): | | |
| Operating activities | 674 | 532 |
| Investing activities | (758) | (656) |
| Financing activities | 197 | (81) |
| Net change in cash and cash equivalents | 113 | (205) |
| Cash and cash equivalents, end of year | <u>\$ 165</u> | <u>\$ 52</u> |

2022 Compared to 2021

Cash Flows from Operating Activities—Cash flows from operating activities are generally determined by the amount and timing of cash received from customers and payments made to vendors, as well as the nature and amount of non-cash items, including depreciation and amortization, deferred income taxes, and pension and other postretirement benefit costs included in net income during a given period. The following items contributed to the net change in cash flows from operations for 2022 compared to 2021 (dollars in millions):

| | Increase/ (Decrease) |
|--|-------------------------|
| Net income | \$ (11) |
| Other post retirement benefits settlement gain - non-cash | (11) |
| Decoupling mechanism deferrals, net of amortization | (40) |
| Deferral of incremental storm costs in 2021 | 62 |
| Deferral of incremental wildfire costs | (28) |
| 2020 Labor Day wildfire earnings test reserve non-cash adjustment to Net income | 15 |
| Deferral of wildfire mitigation costs | 30 |
| Accounts receivable and Unbilled revenue | (2) |
| Margin deposits paid to wholesale counterparties due to natural gas commodity prices | (51) |
| Accounts payable | 96 |
| Margin deposits received from wholesale counterparties due to natural gas commodity prices | 24 |
| Other miscellaneous changes | 58 |
| Net change in cash flow from operations | <u>\$ 142</u> |

For additional information regarding changes in Net income, see the Results of Operations section in this Item 7.

Cash provided by operations includes the recovery in customer prices of non-cash charges for depreciation and amortization. The Company estimates that such charges in 2023 will range from \$445 million to \$465 million.

Combined with all other sources, cash provided by operations in 2023 is estimated to range from \$700 million to \$750 million.

Cash provided by operations includes the recovery in customer prices of cash charges related to various long-term contractual obligations such as interest on long-term debt and purchased power and fuel contracts. PGE’s anticipated employer contributions for its defined benefit pension plan and other postretirement plans is \$3 million in 2023, \$47 million in 2024, \$28 million in 2025, \$27 million in 2026 and \$27 million in 2027. Contributions are expected to be covered by cash provided by operations. For additional information regarding contractual obligations, see Note 16, Commitments and Guarantees, in the Notes to Consolidated Financial Statements in Item 8.—“Financial Statements and Supplementary Data.”

Cash Flows from Investing Activities—Cash flows used in investing activities consist primarily of capital expenditures related to new construction and improvements to PGE’s distribution, transmission, and generation facilities. The \$102 million increase in net cash used in investing activities in 2022 compared with 2021 is primarily due to capital expenditures related to new construction and improvements to PGE’s distribution, transmission, and generation facilities, which increased \$130 million, offset by a \$9 million decrease related to proceeds from the sale of property and a \$21 million decrease in other costs of removal related to the 2021 winter storm restoration.

The Company plans for \$1.2 billion of capital expenditures in 2023 related to upgrades to and replacement of generation, transmission, and distribution infrastructure. PGE plans to fund the 2023 capital expenditures with cash from operations during 2023, as discussed above, as well as with the issuance of debt and equity securities, and short-term debt as necessary. For additional information, see “*Capital Requirements*” and “*Debt and Equity Financings*” in the Liquidity and Capital Resources section of this Item 7.

Cash Flows from Financing Activities—Financing activities provide supplemental cash for both day-to-day operations and capital requirements as needed. During 2022, cash provided by financing activities consisted primarily of the issuance of a \$260 million term loan and funding of \$100 million in FMBs. In addition, the Company paid dividends in the amount of \$158 million, executed a \$18 million common stock repurchase, and received proceeds from the Pelton/Round Butte financing arrangement in the amount of \$25 million.

2021 Compared to 2020

For a comparison of liquidity and capital resources and the Company’s cash flow activities for the fiscal year ended December 31, 2021 and 2020, see Item 7.—“Management’s Discussion and Analysis of Financial Condition and Results of Operations” in the Company’s Annual Report on Form 10-K for the year ended December 31, 2021, which was filed with the SEC on February 16, 2022.

Credit Ratings and Debt Covenants

PGE’s secured and unsecured debt is rated investment grade by Moody’s and S&P, with current credit ratings and outlook as follows:

| | Moody’s | S&P |
|-----------------------|----------------|----------------|
| First Mortgage Bonds | A1 | A |
| Senior unsecured debt | A3 | BBB+ |
| Commercial paper | P-2 | A-2 |
| Outlook | Stable | Stable |

In the event Moody’s and/or S&P reduce their credit rating on PGE’s unsecured debt below investment grade, the Company could be subject to higher fees paid on its revolving credit facility. The Company could also be subject to requests by certain of its wholesale, commodity, and transmission counterparties to post additional performance assurance collateral in connection with its price risk management activities. The performance assurance collateral can be in the form of cash deposits or letters of credit, depending on the terms of the underlying agreements, and are

based on the contract terms and commodity prices and can vary from period to period. Cash deposits provided as collateral are classified as Margin deposits in PGE’s consolidated balance sheets, while any letters of credit issued are not reflected in the Company’s consolidated balance sheets.

As of December 31, 2022, PGE had posted \$149 million of collateral with these counterparties, consisting of \$116 million in cash and \$33 million in bank letters of credit. Based on the Company’s energy portfolio, estimates of energy market prices, and the level of collateral outstanding as of December 31, 2022, the amount of additional collateral that could be requested upon a single agency downgrade to below investment grade is \$55 million and decreases to \$1 million by December 31, 2023. The amount of additional collateral that could be requested upon a dual agency downgrade to below investment grade is \$174 million and decreases to \$106 million by December 31, 2023 and \$74 million by December 31, 2024.

PGE’s financing arrangements do not contain ratings triggers that would result in the acceleration of required interest and principal payments in the event of a ratings downgrade. However, the cost of borrowing and issuing letters of credit under the credit facilities would increase.

The Indenture securing PGE’s outstanding FMBs constitutes a direct first mortgage lien on substantially all regulated utility property, other than expressly excepted property. Interest is payable semi-annually on FMBs. The issuance of FMBs requires that PGE meet earnings coverage and security provisions set forth in the Indenture of Mortgage and Deed of Trust securing the bonds. PGE estimates that on December 31, 2022, under the most restrictive issuance test in the Indenture of Mortgage and Deed of Trust, the Company could have issued up to \$599 million of additional FMBs. Any issuances of FMBs would be subject to market conditions and amounts could be further limited by regulatory authorizations or by covenants and tests contained in other financing agreements. PGE also has the ability to release property from the lien of the Indenture of Mortgage and Deed of Trust under certain circumstances, including bond credits, deposits of cash, or certain sales, exchanges, or other dispositions of property.

PGE’s credit facilities contain customary covenants and credit provisions, including a requirement that limits consolidated indebtedness, as defined in the credit agreements, to 65.0% of total capitalization (debt to total capital ratio). As of December 31, 2022, the Company’s debt to total capital ratio, as calculated under the credit agreements, was 56.9%.

Debt and Equity Financings

PGE’s ability to secure sufficient short- and long-term capital at a reasonable cost is determined by its financial performance and outlook, its credit ratings, its capital expenditure requirements, alternatives available to investors, market conditions, and other factors, such as the volatility in the capital markets in response to COVID-19. Management believes that the availability of its revolving credit facility, the expected ability to issue short- and long-term debt and equity securities, and cash expected to be generated from operations provide sufficient cash flow and liquidity to meet the Company’s anticipated capital and operating requirements for the foreseeable future.

Short-term Debt—Pursuant to an order issued by the FERC on January 20, 2022, PGE has authorization to issue short-term debt up to a total of \$900 million through February 6, 2024. The following table shows available liquidity as of December 31, 2022 (in millions):

| | December 31, 2022 | | |
|--|--------------------------|--------------------|------------------|
| | Capacity | Outstanding | Available |
| Revolving credit facility ⁽¹⁾ | \$ 650 | \$ — | \$ 650 |
| Letters of credit ⁽²⁾ | 220 | 97 | 123 |
| Total credit | <u>\$ 870</u> | <u>\$ 97</u> | 773 |
| Cash and cash equivalents | | | 165 |
| Total liquidity | | | <u>\$ 938</u> |

- (1) Scheduled to expire September 2027.
- (2) PGE has three letter of credit facilities under which the Company can request letters of credit for an original term not to exceed one year.

In September 2022, PGE amended its existing revolving credit facility. As of December 31, 2022, PGE had a \$650 million unsecured revolving credit facility scheduled to expire in September 2027. The facility allows for unlimited extension requests, provided that lenders with a pro-rata share of more than 50% of the facility approve the extension request. The revolving credit facility supplements operating cash flows and provides a primary source of liquidity. In addition, the credit facility offers the potential for adjustments to interest rate margins and fees based on PGE's achievement of certain annual sustainability-linked metrics related to its non-emitting generation capacity and the percentage of management comprised of women and employees who identify as black, indigenous, and people of color. Pursuant to the terms of the agreement, the revolving credit facility may be used as backup for commercial paper borrowings, to permit the issuance of standby letters of credit, and to provide cash for general corporate purposes. PGE may borrow for one, three, or six months at a fixed interest rate established at the time of the borrowing, or at a variable interest rate for any period up to the then remaining term of the applicable credit facility.

The Company has a commercial paper program under which it may issue commercial paper for terms of up to 270 days, limited to the unused amount of credit under the revolving credit facility. The Company has elected to limit its borrowings under the revolving credit facility to cover any potential need to repay commercial paper that may be outstanding at the time. As of December 31, 2022, PGE had no commercial paper outstanding.

PGE typically classifies borrowings under the revolving credit facility and outstanding commercial paper as Short-term debt in the consolidated balance sheets.

Under the revolving credit facility, as of December 31, 2022, PGE had no borrowings or commercial paper outstanding, and no letters of credit issued. As a result, as of December 31, 2022, the aggregate unused available credit capacity under the revolving credit facility was \$650 million.

In addition, PGE has three letter of credit facilities under which the Company has total capacity of \$220 million. The issuance of such letters of credit is subject to the approval of the issuing institution. Under these facilities, which are considered off-balance sheet arrangements, letters of credit for a total of \$97 million were outstanding as of December 31, 2022. PGE works to optimize its use of its letter of credit facility to manage energy trading margin.

Long-term Debt—During 2022, PGE issued and funded a total of \$100 million of FMBs.

On November 30, 2022, PGE entered into a Bond Purchase Agreement related to the sale of \$200 million in FMBs. The Bonds consist of:

- a series, due in 2029, in the amount of \$100 million that will bear interest at an annual rate of 5.47%; and
- a series, due in 2033, in the amount of \$100 million that will bear interest at an annual rate of 5.56%.

The 2029 and 2033 Bonds were issued in 2022 and funded in full on November 30, 2022 and January 13, 2023, respectively.

On October 21, 2022, PGE obtained a 366-day term loan from lenders in the aggregate principal of \$260 million under a 366-Day Bridge Credit Agreement. The term loan bears interest for the relevant interest period at the Term Secured Overnight Financing Rate (SOFR) plus Term SOFR Adjustment Rate of 10 basis points and Applicable Margin of 87.5 basis points. The interest rate is subject to adjustment pursuant to the terms of the loan. The loan is prepayable, in whole or in part, without penalty, at any time. The credit agreement expires on October 22, 2023, with any outstanding balance due and payable on such date. The term loan is classified as Current portion of long-term debt on PGE's consolidated balance sheet.

As of December 31, 2022, total long-term debt outstanding, net of \$13 million of unamortized debt expense, was \$3,646 million, \$260 million of which is scheduled to mature in 2023.

Equity—On October 25, 2022, PGE entered into an EFSA in connection with the public offering of 10,100,000 shares of its common stock. Effective October 28, 2022, pursuant to the terms of the EFSA, the forward counterparties borrowed 11,615,000 shares of PGE’s common stock with an initial value of \$499 million, including 1,515,000 shares in connection with the underwriters’ exercise of their option to purchase additional shares, from third parties in the open market and sold the shares to a group of underwriters. PGE receives proceeds from the sale of the common stock when the EFSA is physically settled. As of December 31, 2022, PGE had not transacted under the EFSA.

As of December 31, 2022, the Company could have physically settled the EFSA by delivering 11,615,000 shares of PGE common stock to the forward counterparty in exchange for cash of \$483 million. The Company anticipates physical settlement of the EFSA by delivery of newly issued shares on or before October 25, 2024. For additional information on the EFSA, see Note 12, Equity-based Plans, in the Notes to Consolidated Financial Statements in Item 8.—“Financial Statements and Supplementary Data.”

Capital Structure—PGE’s financial objectives include maintaining a common equity ratio (common equity to total consolidated capitalization, including current debt maturities and excluding lease obligations) of approximately 50% over time. Achievement of this objective helps the Company maintain investment grade debt ratings and provides access to long-term capital at favorable interest rates. The Company’s common equity ratio was 43.3% and 45.2% as of December 31, 2022 and 2021, respectively.

Critical Accounting Policies and Estimates

The preparation of consolidated financial statements in conformity with GAAP requires that management apply accounting policies and make estimates and assumptions that affect amounts reported in the statements. The following accounting policies represent those that management believes are particularly important to the consolidated financial statements and that require the use of estimates, assumptions, and judgments to determine matters that are inherently uncertain.

Regulatory Accounting

As a rate-regulated enterprise, PGE applies regulatory accounting, which includes the recognition of regulatory assets and liabilities on the Company’s consolidated balance sheets. Regulatory assets represent probable future revenue associated with certain incurred costs that are expected to be recovered from customers through the ratemaking process. Regulatory liabilities represent probable future reductions in revenues associated with amounts that are expected to be credited or refunded to customers through the ratemaking process. Regulatory accounting is appropriate as long as prices are established or subject to approval by independent third-party regulators, prices are designed to recover the specific enterprise’s cost-of-service, and, in view of demand for service, it is reasonable to assume that prices set at levels that will recover costs can be charged to and collected from customers. Amortization of regulatory assets and liabilities is reflected in the statement of income over the period in which they are included in customer prices.

If future recovery of regulatory assets is not probable, PGE would expense such items in the period such determination is made. Further, if PGE determines that all or a portion of its utility operations no longer meet the criteria for continued application of regulatory accounting, the Company would be required to write off those regulatory assets and liabilities related to operations that no longer meet requirements for regulatory accounting. Discontinued application of regulatory accounting would have a material impact on the Company’s results of operations and financial position.

For additional information on PGE’s regulatory assets and liabilities, see “*Regulatory Matters*” in the Overview section in this Item 7., and Note 7, Regulatory Assets and Liabilities in Notes to Consolidated Financial Statements in Item 8.—“Financial Statements and Supplementary Data.”

Asset Retirement Obligations

PGE recognizes AROs for legal obligations related to dismantlement and restoration costs associated with the future retirement of tangible long-lived assets. Upon initial recognition of AROs that are measurable, the probability-weighted future cash flows for the associated retirement costs, discounted using a credit-adjusted risk-free rate, are recognized as both a liability and as an increase in the capitalized carrying amount of the related long-lived assets. Due to the long lead time involved, a market-risk premium cannot be determined for inclusion in future cash flows. In estimating the liability, management must utilize significant judgment and assumptions in determining whether a legal obligation exists to remove assets. Other estimates may be related to lease provisions, ownership agreements, licensing issues, cost estimates, inflation, and certain legal requirements. Estimates for ARO liabilities are generally based on site-specific studies and are periodically subject to updates and changes that may arise over time.

Capitalized asset retirement costs related to electric utility plant are depreciated over the estimated life of the related asset and included in Depreciation and amortization expense in the consolidated statements of income. For revisions to ARO liabilities in which the related asset is no longer in service, the corresponding offset is recorded as a Regulatory asset on the consolidated balance sheets, except for those AROs related to non-utility assets which is charged to Depreciation and amortization on the consolidated statements of income. Accretion of the ARO liability is classified as Depreciation and amortization expense in the consolidated statements of income. Accumulated asset retirement removal costs that do not qualify as AROs have been reclassified from accumulated depreciation to regulatory liabilities in the consolidated balance sheets.

As a co-owner of Colstrip, PGE has provided surety bonds, which are considered off-balance sheet arrangements, of \$23 million as of December 31, 2022 on behalf of the operator to ensure the operation and maintenance of remedial and closure actions are carried out related to the Administrative Order on Consent Regarding Impacts Related to Wastewater Facilities Comprising the Closed-Loop System at Colstrip Steam Electric Station, Colstrip Montana (the AOC) as required by the Montana Department of Environmental Quality. It is possible that each co-owner of Colstrip will be required, at some future point, to post additional financial assurance to support further performance by the operator of closure and remediation actions under the AOC.

For additional information on AROs, see Note 8, Asset Retirement Obligations, in the Notes to Consolidated Financial Statements in Item 8.—“Financial Statements and Supplementary Data.”

Contingencies

PGE has various unresolved legal and regulatory matters about which there is inherent uncertainty, with the ultimate outcome contingent upon several factors. Such contingencies are evaluated using the best information available. A loss contingency is accrued, and disclosed if material, when it is probable that an asset has been impaired, or a liability incurred, and the amount of the loss can be reasonably estimated. If a range of probable loss is established, the minimum amount in the range is accrued, unless some other amount within the range appears to be a better estimate. If the probable loss cannot be reasonably estimated, no accrual is recorded, but the loss contingency and the reasons to the effect that it cannot be reasonably estimated are disclosed. A loss contingency will also be disclosed when it is reasonably possible that a liability has been incurred if the estimate or range of potential loss is material. Established accruals reflect management’s assessment of inherent risks, credit worthiness, and complexities involved in the process. There can be no assurance as to the ultimate outcome of any particular contingency.

For additional information on contingencies, see Note 19, Contingencies, in the Notes to Consolidated Financial Statements in Item 8.—“Financial Statements and Supplementary Data.”

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.

PGE is exposed to various forms of market risk, consisting primarily of fluctuations in commodity prices, foreign currency exchange rates, and interest rates, as well as credit risk. Any variations in the Company’s market risk or credit risk may affect its future financial position, results of operations, or cash flows, as discussed below.

Energy Risk Management

PGE has an Executive Risk Committee (ERC) whose primary purpose is to oversee, guide, and support the prudent management of the Company’s risks, as well as review and recommend energy portfolio risk limits that are subject to approval by the Audit and Risk Committee of the PGE Board of Directors, and in some instances, the full Board. The ERC’s responsibilities include risk reporting to provide visibility into portfolio risk and manage alignment with the Company’s risk strategy and tolerances, providing oversight of the adequacy and effectiveness of corporate policies, guidelines, and procedures for market, liquidity and credit risk management related to the Company’s energy portfolio management activities. The ERC consists of officers and Company representatives with responsibility for risk management, finance and accounting, information technology, utility operations, legal, and rates and regulatory affairs.

Commodity Price Risk

PGE is exposed to commodity price risk as its primary business is to provide electricity to its retail customers. The Company engages in price risk management activities to manage exposure to volatility in net power costs for its retail customers. The Company uses power purchase and sale contracts to supplement its own generation and to respond to fluctuations in the demand for electricity and variability in generating plant operations. The Company also enters into contracts for the purchase and sale of fuel for the Company’s natural gas- and coal-fired generating plants. These contracts for the purchase of power and fuel expose the Company to market risk. The Company uses instruments such as: i) forward contracts, which may involve physical delivery of an energy commodity; ii) financial swap and futures agreements, which may require payments to, or receipt of payments from, counterparties based on the differential between a fixed and variable price for the commodity; and iii) option contracts to mitigate risk that arises from market fluctuations of commodity prices. The Company does not intend to engage in trading activities for non-retail purposes.

Assuming no changes in market prices and interest rates, the following table presents the years in which the net unrealized (gains)/losses recorded as of December 31, 2022 related to PGE’s derivative activities would become realized as a result of the settlement of the underlying derivative instrument (in millions):

| | 2023 | 2024 | 2025 | 2026 | 2027 | Thereafter | Total |
|----------------------------|-----------------|-------------|--------------|-------------|---------------|----------------|-----------------|
| Commodity contracts: | | | | | | | |
| Electricity | \$ (19) | \$ 10 | \$ 21 | \$ (3) | \$ (3) | \$ (16) | \$ (10) |
| Natural gas | (177) | (8) | (2) | 3 | — | — | (184) |
| Net unrealized (gain)/loss | <u>\$ (196)</u> | <u>\$ 2</u> | <u>\$ 19</u> | <u>\$ —</u> | <u>\$ (3)</u> | <u>\$ (16)</u> | <u>\$ (194)</u> |

PGE reports energy commodity derivative fair values as a net asset or liability, which combines purchases and sales expected to settle in the years noted above. Energy commodity fair values exposed to commodity price risk are primarily related to purchase contracts, which are slightly offset by sales.

PGE’s energy portfolio activities are subject to regulation, with related costs included in retail prices approved by the OPUC. The timing differences between the recognition of gains and losses on certain derivative instruments and their realization and subsequent recovery in prices are deferred as regulatory assets and liabilities to reflect the effects of regulation, significantly mitigating commodity price risk for the Company. As contracts are settled, these deferrals reverse and are recognized as Purchased power and fuel or Revenues, net in the statements of income and expected to be included in the PCAM. PGE remains subject to cash flow risk in the form of collateral requirements

based on the value of open positions and regulatory risk if recovery is disallowed by the OPUC. PGE attempts to mitigate both types of risks through prudent energy procurement practices.

Foreign Currency Exchange Rate Risk

PGE is exposed to foreign currency risk associated with natural gas forward and swap contracts denominated in Canadian dollars. Foreign currency risk is the risk of changes in value of pending financial obligations in foreign currencies that could occur prior to the settlement of the obligation due to a change in the value of that foreign currency in relation to the U.S. dollar. PGE mitigates its exposure to fluctuations in the Canadian exchange rate with an appropriate hedging strategy.

As of December 31, 2022, a 10% change in the value of the Canadian dollar would result in an immaterial change in exposure for transactions that will settle over the next twelve months.

Interest Rate Risk

To meet short-term cash requirements, PGE has the ability to issue commercial paper for terms of up to 270 days and has a revolving credit facility that permits same day borrowings. Although any borrowings under the commercial paper program or the revolving credit facility carry a fixed rate during their respective terms, the short-term nature of such borrowings subjects the Company to fluctuations in interest rates that result from changes in market conditions. As of December 31, 2022, PGE had no borrowings outstanding under its revolving credit facility and no commercial paper outstanding.

PGE currently has no financial instruments to mitigate risk related to changes in short-term interest rates, including those on commercial paper; however, it may consider such instruments in the future as considered necessary.

As of December 31, 2022, the total fair value and carrying amounts, excluding unamortized debt expense, by maturity date of PGE's long-term debt are as follows (in millions):

| | Total Fair Value | Carrying Amounts by Maturity Date | | | | | | There- after |
|---------------------------------|------------------------|-----------------------------------|---------------|--------------|-------------|-------------|---------------|-----------------|
| | | Total | 2023 | 2024 | 2025 | 2026 | 2027 | |
| First Mortgage Bonds | \$ 2,882 | \$ 3,280 | \$ — | \$ 80 | \$ — | \$ — | \$ 160 | \$ 3,040 |
| Unsecured Term Bank Loans | 260 | 260 | 260 | — | — | — | — | — |
| Pollution Control Revenue Bonds | 103 | 119 | — | — | — | — | — | 119 |
| Total | <u>\$ 3,245</u> | <u>\$ 3,659</u> | <u>\$ 260</u> | <u>\$ 80</u> | <u>\$ —</u> | <u>\$ —</u> | <u>\$ 160</u> | <u>\$ 3,159</u> |

As of December 31, 2022, PGE had no long-term debt instruments subject to interest rate risk exposures except for the term loan which bears interest for the relevant interest period at the Term Secured Overnight Financing Rate (SOFR) plus Term SOFR Adjustment Rate of 10 basis points and Applicable Margin of 87.5 basis points.

Credit Risk

PGE is exposed to credit risk in its commodity price risk management activities related to potential nonperformance by counterparties. The Company manages the risk of counterparty default according to its credit policies by performing financial credit reviews, setting limits and monitoring exposures, and requiring collateral (in the form of cash, letters of credit, and guarantees) when needed. PGE also uses standardized enabling agreements and, in certain cases, master netting agreements, which allow for the netting of positive and negative exposures under multiple agreements with counterparties. Despite such mitigation efforts, defaults by counterparties may periodically occur. Based upon periodic review and evaluation, allowances are recorded as needed to reflect credit risk related to wholesale accounts receivable.

The large number and diversified base of residential, commercial, and industrial customers, combined with the Company’s ability to discontinue service, within certain limits, contribute to reduce credit risk with respect to trade accounts receivable from retail sales. Estimates are used to provide an allowance for uncollectible accounts receivable related to retail sales to address such risk.

As of December 31, 2022, PGE’s credit risk exposure is \$340 million for commodity activities, of which \$335 million is with externally-rated investment grade counterparties. The underlying transactions that make up the exposure will mature from 2023 to 2026. The exposure is included in accounts receivable and price risk management assets, offset by related accounts payable and price risk management liabilities.

Investment grade counterparties include those with a minimum credit rating on senior unsecured debt of Baa3 (as assigned by Moody’s) or BBB- (as assigned by S&P), and also those counterparties whose obligations are guaranteed or secured by an investment grade entity. The credit exposure includes activity for electricity and natural gas forward, swap, and option contracts. Posted collateral may be in the form of cash or letters of credit, and may represent prepayment or credit exposure assurance.

Omitted from the market risk exposures discussed above are long-term power purchase contracts with certain public utility districts in the state of Washington. These contracts currently provide PGE with a percentage share of hydro facility output in exchange for an equivalent percentage share of operating and debt service costs. These contracts expire at varying dates through 2052. For additional information, see “*Public utility districts*” in Note 16, Commitments and Guarantees, in the Notes to Consolidated Financial Statements in Item 8.—“Financial Statements and Supplementary Data.” Management believes that circumstances that could result in the nonperformance by these counterparties are remote.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA.

The following financial statements and report are included in Item 8:

| | |
|---|--------------------|
| Report of Independent Registered Public Accounting Firm (PCAOB ID 34) | 69 |
| Consolidated Statements of Income for the years ended December 31, 2022, 2021, and 2020 | 73 |
| Consolidated Statements of Comprehensive Income for the years ended December 31, 2022, 2021, and 2020 | 74 |
| Consolidated Balance Sheets as of December 31, 2022 and 2021 | 75 |
| Consolidated Statements of Shareholders’ Equity for the years ended December 31, 2022, 2021, and 2020 | 77 |
| Consolidated Statements of Cash Flows for the years ended December 31, 2022, 2021, and 2020 | 78 |
| Notes to Consolidated Financial Statements | 80 |

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholders and the Board of Directors of Portland General Electric Company

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Portland General Electric Company and subsidiaries (the “Company”) as of December 31, 2022 and 2021, the related consolidated statements of income, comprehensive income, shareholders’ equity, and cash flows, for each of the three years in the period ended December 31, 2022, and the related notes (collectively referred to as the “financial statements”). We also have audited the Company’s internal control over financial reporting as of December 31, 2022, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2022 and 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2022, in conformity with accounting principles generally accepted in the United States of America. Also, in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2022, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by COSO.

Basis for Opinions

The Company’s management is responsible for these financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management’s Annual Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on these financial statements and an opinion on the Company’s internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the financial statements included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures to respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control over Financial Reporting

A company’s internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company’s internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail,

accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current-period audit of the financial statements that was communicated or required to be communicated to the audit committee and that (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of the critical audit matter does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Regulatory Accounting — Refer to Notes 2 and 7 to the consolidated financial statements

Critical Audit Matter Description

The Company is subject to rate regulation by the Public Utility Commission of Oregon (the "OPUC"), which has jurisdiction with respect to the rates for retail electricity in the state of Oregon, and to wholesale rate regulation by the Federal Energy Regulatory Commission ("the FERC"). Management has determined it meets the requirements under accounting principles generally accepted in the United States of America to prepare its financial statements applying the specialized rules to account for the effects of cost-based rate regulation. Accounting for the economics of rate regulation impacts multiple financial statement line items and disclosures.

The Company's rates are subject to regulatory rate-setting processes and annual earnings oversight. Because the OPUC and the FERC set the rates the Company is allowed to charge customers based on allowable costs, including a reasonable return on equity, the Company applies accounting standards that require the financial statements to reflect the effects of rate regulation. The Company's rates for retail customers are determined and approved in regulatory proceedings based on an analysis of the Company's cost of providing service to retail customers. The OPUC has the authority to disallow the recovery of any costs that it considers imprudently incurred. Although the OPUC is required to establish customer prices that are fair, just and reasonable, it has significant discretion in the interpretation of this standard. The Company assesses whether the regulatory assets and regulatory liabilities continue to meet the criteria for probable future recovery or settlement at each balance sheet date and when regulatory events occur. This assessment includes consideration of recent rate orders, historical regulatory treatment for similar costs, and factors such as changes in applicable regulatory and political environments. While the Company has indicated it expects to recover costs from customers through regulated rates, there is a risk that the OPUC and the FERC will not approve: (1) full recovery of the costs of providing utility service, or (2) full recovery of amounts invested in the utility business and a reasonable return on that investment.

We identified the impact of rate regulation as a critical audit matter due to its pervasive impact on the Company's financial statements and the significant judgments made by management to support its assertions about impacted account balances and disclosures. Given that management's accounting judgments are based on assumptions about the outcome of future decisions by the OPUC or FERC, including decisions regarding the prudence of costs which have been deferred as regulatory assets, auditing these judgments required specialized knowledge of accounting for rate regulation and the rate setting process due to its inherent complexities and significant auditor judgment to evaluate management estimates and the subjectivity of audit evidence.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the uncertainty of future decisions by the OPUC included the following, among others:

- We tested the effectiveness of management’s controls over the evaluation of the likelihood of (1) the recovery in future rates of costs incurred as electric utility plant and deferred as regulatory assets, and (2) a refund or a future reduction in rates that should be reported as regulatory liabilities. We also tested the effectiveness of management’s controls over the initial recognition of amounts as electric utility plant; regulatory assets or liabilities; and the monitoring and evaluation of regulatory developments that may affect the likelihood of recovering costs in future rates or of a refund or future reduction in rates.
- We evaluated the Company’s disclosures related to the impacts of rate regulation, including the balances recorded and regulatory developments.
- We read relevant regulatory orders issued by the OPUC and the FERC for the Company, filings made by intervenors, regulatory statutes, and other publicly available information to assess the likelihood of recovery in future rates or of a future reduction in rates based on precedents of the OPUC’s and the FERC’s treatment of similar costs under similar circumstances. We evaluated the external information and compared to management’s recorded regulatory asset and liability balances for completeness.
- For regulatory matters in process, we inspected the Company’s filings with the OPUC and the FERC, and considered the filings with the OPUC and FERC by intervenors that may impact the Company’s future rates, for any evidence that might contradict management’s assertions.
- We obtained an analysis from management and support from internal and external legal counsel, as appropriate, regarding probability of recovery for electric utility plant and regulatory assets and or future reduction in rates for regulatory liabilities, not yet addressed in a regulatory order to assess management’s assertion that amounts are probable of recovery or a future reduction in rates.
- We performed substantive audit procedures by selecting individual items within the detail of selected regulatory assets and regulatory liabilities and evaluated whether the selected items were probable of recovery or a future reduction in rates based on existing regulatory orders or past precedent for similar items.

/s/ Deloitte & Touche LLP

Portland, Oregon
February 15, 2023

We have served as the Company’s auditor since 2004.

PORTLAND GENERAL ELECTRIC COMPANY AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF INCOME

(Dollars in millions, except per share amounts)

| | Years Ended December 31, | | |
|--|--------------------------|---------------|---------------|
| | 2022 | 2021 | 2020 |
| Revenues: | | | |
| Revenues, net | \$ 2,636 | \$ 2,425 | \$ 2,151 |
| Alternative revenue programs, net of amortization | 11 | (29) | (6) |
| Total Revenues | 2,647 | 2,396 | 2,145 |
| Operating expenses: | | | |
| Purchased power and fuel | 988 | 822 | 708 |
| Generation, transmission and distribution | 348 | 310 | 293 |
| Administrative and other | 340 | 336 | 283 |
| Depreciation and amortization | 417 | 404 | 454 |
| Taxes other than income taxes | 157 | 146 | 138 |
| Total operating expenses | 2,250 | 2,018 | 1,876 |
| Income from operations | 397 | 378 | 269 |
| Interest expense, net | 156 | 137 | 136 |
| Other income: | | | |
| Allowance for equity funds used during construction | 14 | 17 | 16 |
| Miscellaneous income (expense), net | 17 | 9 | 6 |
| Other income, net | 31 | 26 | 22 |
| Income before income taxes | 272 | 267 | 155 |
| Income tax expense | 39 | 23 | — |
| Net income | \$ 233 | \$ 244 | \$ 155 |
| Weighted-average shares outstanding (in thousands): | | | |
| Basic | 89,290 | 89,481 | 89,485 |
| Diluted | 89,643 | 89,627 | 89,645 |
| Earnings per share: | | | |
| Basic | \$ 2.61 | \$ 2.72 | \$ 1.73 |
| Diluted | \$ 2.60 | \$ 2.72 | \$ 1.72 |

See accompanying notes to consolidated financial statements.

PORTLAND GENERAL ELECTRIC COMPANY AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

(In millions)

| | <u>Years Ended December 31,</u> | | |
|--|---------------------------------|---------------|---------------|
| | <u>2022</u> | <u>2021</u> | <u>2020</u> |
| Net income | \$ 233 | \$ 244 | \$ 155 |
| Other comprehensive income (loss)—Change in compensation retirement benefits liability and amortization, net of taxes of an immaterial amount in all three years | 6 | 1 | (1) |
| Comprehensive income | <u>\$ 239</u> | <u>\$ 245</u> | <u>\$ 154</u> |

See accompanying notes to consolidated financial statements.

PORTLAND GENERAL ELECTRIC COMPANY AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS

(In millions)

| | As of December 31, | |
|---|--------------------|-----------------|
| | 2022 | 2021 |
| ASSETS | | |
| Current assets: | | |
| Cash and cash equivalents | \$ 165 | \$ 52 |
| Accounts receivable, net | 398 | 329 |
| Inventories, at average cost: | | |
| Materials and supplies | 63 | 51 |
| Fuel | 32 | 27 |
| Regulatory assets—current | 54 | 24 |
| Other current assets | 498 | 205 |
| Total current assets | 1,210 | 688 |
| Electric utility plant: | | |
| In service | 12,421 | 11,838 |
| Accumulated depreciation and amortization | (4,423) | (4,146) |
| In service, net | 7,998 | 7,692 |
| Construction work-in-progress | 467 | 313 |
| Electric utility plant, net | 8,465 | 8,005 |
| Regulatory assets—noncurrent | 473 | 533 |
| Nuclear decommissioning trust | 39 | 47 |
| Non-qualified benefit plan trust | 38 | 45 |
| Other noncurrent assets | 234 | 176 |
| Total assets | \$ 10,459 | \$ 9,494 |

See accompanying notes to consolidated financial statements.

PORTLAND GENERAL ELECTRIC COMPANY AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS, continued

(In millions, except share amounts)

| | As of December 31, | |
|---|---------------------------|-----------------|
| | 2022 | 2021 |
| LIABILITIES AND SHAREHOLDERS' EQUITY | | |
| Current liabilities: | | |
| Accounts payable | \$ 457 | \$ 244 |
| Liabilities from price risk management activities—current | 118 | 47 |
| Current portion of long-term debt | 260 | — |
| Current portion of finance lease obligations | 20 | 20 |
| Accrued expenses and other current liabilities | 641 | 457 |
| Total current liabilities | 1,496 | 768 |
| Long-term debt, net of current portion | 3,386 | 3,285 |
| Regulatory liabilities—noncurrent | 1,389 | 1,360 |
| Deferred income taxes | 439 | 413 |
| Unfunded status of pension and postretirement plans | 170 | 206 |
| Liabilities from price risk management activities—noncurrent | 75 | 90 |
| Asset retirement obligations | 257 | 238 |
| Non-qualified benefit plan liabilities | 83 | 95 |
| Finance lease obligations, net of current portion | 294 | 273 |
| Other noncurrent liabilities | 91 | 59 |
| Total liabilities | 7,680 | 6,787 |
| Commitments and contingencies (see notes) | | |
| Shareholders' equity: | | |
| Preferred stock, no par value, 30,000,000 shares authorized; none issued and outstanding | — | — |
| Common stock, no par value, 160,000,000 shares authorized; 89,283,353 and 89,410,612 shares issued and outstanding as of December 31, 2022 and 2021, respectively | 1,249 | 1,241 |
| Accumulated other comprehensive loss | (4) | (10) |
| Retained earnings | 1,534 | 1,476 |
| Total shareholders' equity | 2,779 | 2,707 |
| Total liabilities and shareholders' equity | \$ 10,459 | \$ 9,494 |

See accompanying notes to consolidated financial statements.

PORTLAND GENERAL ELECTRIC COMPANY AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

(In millions, except share and per share amounts)

| | Common Stock | | Accumulated Other Comprehensive Loss | Retained Earnings | Total |
|--|--------------|----------|---|----------------------|----------|
| | Shares | Amount | | | |
| Balance as of December 31, 2019 | 89,387,124 | \$ 1,220 | \$ (10) | \$ 1,381 | \$ 2,591 |
| Shares issued pursuant to equity-based plans | 150,207 | 2 | — | — | 2 |
| Stock-based compensation | — | 9 | — | — | 9 |
| Dividends declared (\$1.5850 per share) | — | — | — | (143) | (143) |
| Net income | — | — | — | 155 | 155 |
| Other comprehensive (loss) | — | — | (1) | — | (1) |
| Balance as of December 31, 2020 | 89,537,331 | 1,231 | (11) | 1,393 | 2,613 |
| Shares issued pursuant to equity-based plans | 123,281 | — | — | — | — |
| Stock-based compensation | — | 13 | — | — | 13 |
| Repurchase of common stock | (250,000) | (3) | — | (9) | (12) |
| Dividends declared (\$1.6975 per share) | — | — | — | (152) | (152) |
| Net income | — | — | — | 244 | 244 |
| Other comprehensive income | — | — | 1 | — | 1 |
| Balance as of December 31, 2021 | 89,410,612 | 1,241 | (10) | 1,476 | 2,707 |
| Shares issued pursuant to equity-based plans | 222,741 | 2 | — | — | 2 |
| Stock-based compensation | — | 11 | — | — | 11 |
| Repurchase of common stock | (350,000) | (5) | — | (13) | (18) |
| Dividends declared (\$1.7875 per share) | — | — | — | (162) | (162) |
| Net income | — | — | — | 233 | 233 |
| Other comprehensive income | — | — | 6 | — | 6 |
| Balance as of December 31, 2022 | 89,283,353 | \$ 1,249 | \$ (4) | \$ 1,534 | \$ 2,779 |

See accompanying notes to consolidated financial statements.

PORTLAND GENERAL ELECTRIC COMPANY AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS

(In millions)

| | Years Ended December 31, | | |
|---|--------------------------|--------------|--------------|
| | 2022 | 2021 | 2020 |
| Cash flows from operating activities: | | | |
| Net income | \$ 233 | \$ 244 | \$ 155 |
| Adjustments to reconcile net income to net cash provided by operating activities: | | | |
| Depreciation and amortization | 417 | 404 | 454 |
| Deferred income taxes | 6 | 5 | (23) |
| Allowance for equity funds used during construction | (14) | (17) | (16) |
| Pension and other postretirement benefits | 13 | 24 | 22 |
| Other post retirement benefits settlement gain | (11) | — | — |
| Decoupling mechanism deferrals, net of amortization | (11) | 29 | 6 |
| Amortization of net benefits due to Tax Reform | — | — | (23) |
| Stock-based compensation | 15 | 14 | 11 |
| Deferral of incremental storm costs | (5) | (67) | — |
| 2020 Labor Day Wildfire deferral | — | (30) | (15) |
| 2020 Labor Day Wildfire earnings test reserve | 15 | — | — |
| Deferral of wildfire mitigation costs | (28) | — | — |
| Other non-cash income and expenses, net | 54 | (10) | 23 |
| Changes in working capital: | | | |
| Increase in receivables and unbilled revenues | (66) | (64) | (24) |
| (Increase) decrease in margin deposits | (80) | (29) | 8 |
| Increase in payables and accrued liabilities | 157 | 61 | 26 |
| Increase in margin deposits from wholesale counterparties | 82 | 58 | — |
| Other working capital items, net | (22) | (21) | 17 |
| Contribution to non-qualified employee benefit trust | (9) | (11) | (11) |
| Asset retirement obligation settlements | (27) | (18) | (18) |
| Other, net | (45) | (40) | (25) |
| Net cash provided by operating activities | 674 | 532 | 567 |
| Cash flows from investing activities: | | | |
| Capital expenditures | (766) | (636) | (784) |
| Purchases of nuclear decommissioning trust securities | (3) | (10) | (6) |
| Sales of nuclear decommissioning trust securities | 3 | 12 | 9 |
| Proceeds from sale of properties | 13 | 4 | — |
| Other, net | (5) | (26) | (6) |
| Net cash used in investing activities | (758) | (656) | (787) |

See accompanying notes to consolidated financial statements.

PORTLAND GENERAL ELECTRIC COMPANY AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS, continued

(In millions)

| | <u>Years Ended December 31,</u> | | |
|--|---------------------------------|--------------|---------------|
| | <u>2022</u> | <u>2021</u> | <u>2020</u> |
| Cash flows from financing activities: | | | |
| Proceeds from issuance of long-term debt | \$ 360 | \$ 400 | \$ 549 |
| Payments on long-term debt | — | (160) | (98) |
| Borrowings on short-term debt | — | 200 | 275 |
| Payments on short-term debt | — | (350) | (125) |
| Proceeds from Pelton/Round Butte financing arrangement | 25 | — | — |
| Dividends paid | (158) | (150) | (140) |
| Repurchase of common stock | (18) | (12) | — |
| Other | (12) | (9) | (14) |
| Net cash provided by (used in) financing activities | <u>197</u> | <u>(81)</u> | <u>447</u> |
| Increase (decrease) in cash and cash equivalents | <u>113</u> | <u>(205)</u> | <u>227</u> |
| Cash and cash equivalents, beginning of year | <u>52</u> | <u>257</u> | <u>30</u> |
| Cash and cash equivalents, end of year | <u>\$ 165</u> | <u>\$ 52</u> | <u>\$ 257</u> |
| Supplemental disclosures of cash flow information: | | | |
| Cash paid for: | | | |
| Interest, net of amounts capitalized | \$ 128 | \$ 120 | \$ 113 |
| Income taxes | 37 | 16 | 17 |
| Non-cash investing and financing activities: | | | |
| Accrued capital additions | 111 | 87 | 72 |
| Accrued dividends payable | 42 | 40 | 38 |

See accompanying notes to consolidated financial statements.

PORTLAND GENERAL ELECTRIC COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1: BASIS OF PRESENTATION***Nature of Operations***

Portland General Electric Company (PGE or the Company) is a single, vertically-integrated electric utility engaged in the generation, purchase, transmission, distribution, and retail sale of electricity in the state of Oregon (State). The Company also participates in the wholesale market by purchasing and selling electricity and natural gas in an effort to obtain reasonably-priced power for its retail customers. PGE continues to develop products and service offerings for the benefit of retail and wholesale customers. PGE operates as a single segment, with revenues and costs related to its business activities maintained and analyzed on a total electric operations basis. The Company owns unregulated, non-utility real estate comprised primarily of PGE's corporate headquarters. The Company's corporate headquarters is located in Portland, Oregon and its approximately four thousand square mile, State-approved service area is located entirely within the State. PGE's allocated service area includes 51 incorporated cities. As of December 31, 2022, PGE served approximately 926 thousand retail customers with a service area population of approximately 1.9 million.

As of December 31, 2022, PGE had 2,873 employees in its workforce, with 673 employees covered under one of two separate agreements with Local Union No. 125 of the International Brotherhood of Electrical Workers. One agreement covers 610 employees and expires March 2025, and the other covers 63 employees and expires August 2027. PGE also utilizes independent contractors and temporary personnel to supplement its workforce.

PGE is subject to the jurisdiction of the Public Utility Commission of Oregon (OPUC) with respect to retail prices, utility services, accounting policies and practices, issuances of securities, and certain other matters. Retail prices are based on the Company's cost to serve customers, including an opportunity to earn a reasonable rate of return, as determined by the OPUC. The Company is also subject to regulation by the Federal Energy Regulatory Commission (FERC) in matters related to wholesale energy transactions, transmission services, reliability standards, natural gas pipelines, hydroelectric project licensing, accounting policies and practices, short-term debt issuances, and certain other matters.

Consolidation Principles

The consolidated financial statements include the accounts of PGE and its wholly-owned subsidiaries. The Company's ownership share of direct expenses and costs related to jointly-owned generating plants are also included in its consolidated financial statements. For further information on PGE's jointly-owned plant, see Note 18, Jointly-Owned Plant. Intercompany balances and transactions have been eliminated.

Use of Estimates

The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America (GAAP) requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, and disclosures of gain or loss contingencies, as of the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ materially from those estimates.

Reclassifications

To conform with current year presentation, the Company has reclassified \$2 million from Debt extinguishment costs to Other in the financing activities section of the consolidated statements of cash flows for the year ended December 31, 2020 and \$2 million from Contribution to pension and other postretirement plans to Other, net in the operating activities section of the consolidated statements of cash flows for the years ended December 31, 2021 and 2020, respectively.

NOTE 2: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES***Cash Equivalents***

Highly liquid investments with maturities of three months or less at the date of acquisition are classified as cash equivalents, of which PGE had \$150 million as of December 31, 2022 and \$44 million as of December 31, 2021 included within Cash and cash equivalents in the consolidated balance sheets.

Accounts Receivable

Accounts receivable are recorded at invoiced amounts based on prices that are subject to federal (FERC) and State (OPUC) regulations. Balances do not bear interest; however, late fees are assessed beginning 8 business days after the invoice due date. Accounts that are inactivated due to nonpayment are charged-off in the period in which the receivable is deemed uncollectible, but no sooner than 45 business days after the due date of the final invoice. During 2020, 2021, and much of 2022, the Company took steps to support customers during the COVID-19 pandemic, including suspending late fees and developing time payment arrangements. COVID-19 protections ended in September 2022.

Provisions for uncollectible accounts receivable and unbilled revenues related to retail sales are charged to Administrative and other expense and are recorded in the same period as the related revenues, with an offsetting credit to the allowance for uncollectible accounts. Such estimates for credit losses are based on management's assessment of the current and forecasted probability of collection, aging of accounts receivable, bad debt write-offs experience, actual customer billings, economic conditions, and other factors that help determine credit loss estimates for accounts receivable and unbilled revenues. For more information on PGE's provision for uncollectible accounts receivable and unbilled revenues see "*Accounts Receivable, Net*" in Note 4, Balance Sheet Components. A portion of PGE's provision for uncollectible accounts receivable and unbilled revenues is deferred as a regulatory asset, for more information see "*COVID-19*" in Note 7, Regulatory Assets and Liabilities.

Provisions for uncollectible accounts receivable related to wholesale sales are charged to Purchased power and fuel expense and are recorded periodically based on a review of counterparty non-performance risk and contractual right of offset when applicable. There have been no material write-offs of accounts receivable related to wholesale sales in 2022, 2021, or 2020.

Price Risk Management

PGE engages in price risk management activities, utilizing financial instruments such as forward, future, swap, and option contracts for electricity, natural gas, and foreign currency. These instruments are measured at fair value and recorded on the consolidated balance sheets as assets or liabilities from price risk management activities. Changes in fair value are recognized in the consolidated statements of income, offset by the effects of regulatory accounting when it is expected that the gain or loss upon settlement will be reflected in future retail rates. Certain electricity forward contracts that were entered into in anticipation of serving the Company's regulated retail load may meet the requirements for treatment under the normal purchases and normal sales scope exception. Such contracts are not recorded at fair value and are recognized under accrual accounting.

Price risk management activities are utilized as economic hedges to protect against variability in expected future cash flows due to associated price risk and to manage exposure to volatility in net variable power costs (NVPC).

In accordance with ratemaking and cost recovery processes authorized by the OPUC, PGE recognizes a regulatory asset or liability to defer unrealized losses or gains, respectively, on derivative instruments until settlement. At the time of settlement, the Company recognizes a realized gain or loss on the derivative instrument.

PORTLAND GENERAL ELECTRIC COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS, continued

Physically settled electricity and natural gas sale and purchase transactions are recorded in Revenues, net and Purchased power and fuel expense, respectively, upon settlement, while transactions that are not physically settled (financial transactions) are recorded on a net basis in Purchased power and fuel expense upon financial settlement.

Pursuant to transactions entered into in connection with PGE's price risk management activities, the Company may be required to provide collateral to certain counterparties. The collateral requirements are based on the contract terms and commodity prices and can vary period to period. Cash deposits provided as collateral are included within Other current assets in the consolidated balance sheets and were \$116 million as of December 31, 2022 and \$37 million as of December 31, 2021. Letters of credit provided as collateral are not recorded on the Company's consolidated balance sheets and were \$33 million and \$18 million as of December 31, 2022 and 2021, respectively.

Inventories

PGE's inventories, which are recorded at average cost, consist primarily of materials and supplies for use in operations, maintenance, and capital activities, as well as fuel, which includes natural gas, coal, and oil for use in the Company's generating plants. Periodically, the Company assesses inventory for purposes of determining that inventories are recorded at the lower of average cost or net realizable value.

Electric Utility Plant

Capitalization Policy

Electric utility plant is capitalized at original cost, which includes direct labor, materials and supplies, and contractor costs, as well as indirect costs such as engineering, supervision, employee benefits, and an allowance for funds used during construction (AFUDC). Plant replacements are capitalized, with minor items charged to expense as incurred. Periodic major maintenance inspections and overhauls at PGE's generating plants are charged to expense as incurred, subject to regulatory accounting as applicable. Costs to purchase or develop software applications for internal use only are capitalized and amortized over the estimated useful life of the software. Costs of obtaining FERC licenses for the Company's hydroelectric projects are capitalized and amortized over the related license period.

During the period of construction, costs expected to be included in the final value of the constructed asset, and depreciated once the asset is complete and placed in service, are classified as Construction work-in-progress in Electric utility plant on the consolidated balance sheets. If the project becomes probable of being abandoned, such costs are expensed in the period such determination is made. If any costs are expensed, PGE may seek recovery of such costs in customer prices, although there can be no guarantee such recovery would be granted. Costs disallowed for recovery in customer prices, if any, are charged to expense at the time such disallowance becomes probable.

PGE records AFUDC, which is intended to represent the Company's cost of funds used for construction purposes, based on the rate granted in the latest general rate case for equity funds and the cost of actual borrowings for debt funds. In 2020, the FERC issued a waiver that allowed jurisdictional utilities to apply an alternative AFUDC calculation formula that excluded the actual outstanding short-term debt balance and replaced it with the simple average of the actual 2019 short-term debt balance. PGE adopted the waiver in the second quarter of 2020. The purpose of the waiver, which ultimately expired March 31, 2022, was to allow relief from the detrimental impacts of issuing short-term debt on the allowance for equity funds used during construction in response to COVID-19.

AFUDC is capitalized as part of the cost of plant and credited to the consolidated statements of income. The average rate used by PGE was 6.5% in 2022, 6.7% in 2021, and 6.9% in 2020. AFUDC from borrowed funds, reflected as a reduction to Interest expense, net, was \$7 million in 2022 and \$8 million in both 2021 and 2020. AFUDC from equity funds, included in Other income, net, was \$14 million in 2022, \$17 million in 2021, and \$16 million in 2020.

Depreciation and Amortization

Depreciation is computed using the straight-line method, based upon original cost, and includes an estimate for cost of removal and expected salvage. Depreciation expense as a percent of the related average depreciable plant in service was 3.4% in 2022, 3.4% in 2021, and 3.5% in 2020. A component of depreciation expense includes estimated asset retirement removal costs allowed in customer prices.

Periodic studies are conducted to update depreciation parameters (i.e. retirement dispersion patterns, average service lives, and net salvage rates), including estimates of asset retirement obligations (AROs) and asset retirement removal costs. The studies are conducted at a minimum of every five years and are filed with the OPUC for approval and inclusion in a future rate proceeding. In 2021, PGE completed a depreciation study based on 2019 data, with an order received from the OPUC in December 2021 authorizing new depreciation rates effective May 9, 2022.

Thermal generation plants are depreciated using a life-span methodology which ensures that plant investment is recovered by the estimated retirement dates, which range from 2025 to 2061. Depreciation is provided on PGE's other classes of plant in service over their estimated average service lives, which are as follows (in years):

| | |
|--------------------------------|----|
| Generation, excluding thermal: | |
| Hydro | 97 |
| Wind | 30 |
| Transmission | 61 |
| Distribution | 51 |
| General | 16 |

When property is retired and removed from service, the original cost of the depreciable property units, net of any related salvage value, is charged to accumulated depreciation. Cost of removal expenditures are recorded against AROs or to accumulated asset retirement removal costs, if applicable, and included in Regulatory liabilities.

Intangible plant consists primarily of computer software development costs, which are amortized over either five or ten years, and hydro licensing costs, which are amortized over the applicable license term, which range from 30 to 50 years. Accumulated amortization was \$499 million and \$446 million as of December 31, 2022 and 2021, respectively, with amortization expense of \$58 million in 2022, \$58 million in 2021 and \$64 million in 2020. Future estimated amortization expense as of December 31, 2022 is as follows: \$54 million in 2023; \$49 million in 2024; \$37 million in 2025; \$28 million in 2026; and \$23 million in 2027.

Marketable Securities

Nuclear decommissioning trust

Reflects assets held in trust to cover general decommissioning costs and operation of the Independent Spent Fuel Storage Installation (ISFSI) at the decommissioned Trojan nuclear power plant (Trojan), which was closed in 1993. The Nuclear decommissioning trust (NDT) includes contributions made by the Company, less qualified expenditures, plus any realized and unrealized gains and losses on the investments held therein.

Non-qualified benefit plan trust

Reflects assets held in trust to cover the obligations of PGE's non-qualified benefit plans (NQBP) and represents contributions made by the Company, less qualified expenditures, plus any realized and unrealized gains and losses on the investments held therein.

All of PGE's investments in marketable securities included in NDT and NQBP trust on the consolidated balance sheets, are classified as equity or trading debt securities. These securities are classified as noncurrent because they are not available for use in operations. Such securities are stated at fair value based on quoted market prices. Realized and unrealized gains and losses on the NQBP trust assets are included in Other income, net. Realized and unrealized gains and losses on the NDT fund assets are recorded as regulatory liabilities or assets, respectively, for future ratemaking treatment. The cost of securities sold in the NDT and the NQBP are based on the first in first out method.

Regulatory Accounting

Regulatory Assets and Liabilities

As a rate-regulated enterprise, PGE applies regulatory accounting, which results in the creation of regulatory assets and regulatory liabilities. Regulatory assets represent: i) probable future revenue associated with certain actual or estimated costs that are expected to be recovered from customers through the ratemaking process; or ii) probable future collections from customers resulting from revenue accrued for completed alternative revenue programs, provided certain criteria are met. Regulatory liabilities represent probable future reductions in revenue associated with amounts that are expected to be credited to customers through the ratemaking process. Regulatory accounting is appropriate as long as: i) prices are established by, or subject to, approval by independent third-party regulators; ii) prices are designed to recover the specific enterprise's cost-of-service; and iii) in view of demand for service, it is reasonable to assume that prices set at levels that will recover costs can be charged to and collected from customers. Once the regulatory asset or liability is reflected in prices, the respective regulatory asset or liability is amortized to the appropriate line item in the consolidated statement of income over the period in which it is included in prices.

Circumstances that could result in the discontinuance of regulatory accounting include: i) increased competition that restricts PGE's ability to establish prices to recover specific costs; and ii) a significant change in the manner in which prices are set by regulators from cost-based regulation to another form of regulation. The Company periodically reviews the criteria of regulatory accounting to ensure that its continued application is appropriate. Based on a current evaluation of the various factors and conditions, management believes that recovery of PGE's regulatory assets is probable.

For additional information concerning the Company's regulatory assets and liabilities, see Note 7, Regulatory Assets and Liabilities.

Power Cost Adjustment Mechanism

PGE is subject to a Power Cost Adjustment Mechanism (PCAM), as approved by the OPUC. Pursuant to the PCAM, future customer prices can be adjusted to reflect a portion of the difference between: i) NVPC forecast each year and included in customer prices (baseline NVPC); and ii) actual NVPC for the year. NVPC consists of the cost of power purchased and fuel used to generate electricity to meet PGE's retail load requirements, as well as the cost of settled electric and natural gas financial contracts, all of which is classified as Purchased power and fuel in the Company's consolidated statements of income, and is net of wholesale sales, which are classified as Revenues, net in the consolidated statements of income.

The Company is subject to a portion of the business risk or benefit associated with the difference between actual and baseline NVPC by application of an asymmetrical deadband, which ranges from \$15 million below to \$30 million above baseline NVPC.

To the extent actual NVPC, subject to certain adjustments, is outside the deadband range, the PCAM provides for 90% of the excess variance to be collected from, or refunded to, customers. Pursuant to a regulated earnings test, a refund will occur only to the extent that it results in PGE's actual regulated return on equity (ROE) for the given

PORTLAND GENERAL ELECTRIC COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS, continued

year being no less than 1% above the Company's latest authorized ROE, while a collection will occur only to the extent that it results in PGE's actual regulated ROE for that year being no greater than 1% below the Company's authorized ROE. PGE's authorized ROE was 9.5% for 2022 and 2021.

Any estimated refund to customers pursuant to the PCAM is recorded as a reduction in Revenues, net in PGE's consolidated statements of income, while any estimated collection from customers is recorded as a reduction in Purchased power and fuel expense. For the year ended December 31, 2022, PGE's actual NVPC was \$23 million above baseline NVPC, which is within the established deadband range, therefore no estimated collection from customers was recorded as of December 31, 2022. A final determination regarding the 2022 PCAM results will be made by the OPUC through a public filing and review in 2023. For the year ended December 31, 2021, actual NVPC was above baseline NVPC by \$62 million, which was outside the established deadband range. Pursuant to the PCAM, as PGE's preliminary regulatory ROE was below 8.5% as determined under the related earnings test, PGE deferred \$29 million, which represents 90% of the excess variance expected to be collected from customers. On October 24, 2022, PGE and Parties submitted a stipulation with the OPUC that resolved all matters related to the 2021 PCAM and would allow PGE full recovery except for \$2 million, which was recorded as a charge to earnings. Amortization will occur over a two-year period beginning January 1, 2023. Order 22-440, issued November 11, 2022, adopted the stipulation approving amortization of amounts.

Asset Retirement Obligations

Legal obligations related to the future retirement of tangible long-lived assets are classified as AROs on PGE's consolidated balance sheets. An ARO is recognized in the period in which the legal obligation is incurred, and when the fair value of the liability can be reasonably estimated. Due to the long lead time involved until decommissioning activities occur, the Company uses present value techniques. The present value of estimated future decommissioning costs is capitalized and included in Electric utility plant, net on the consolidated balance sheets with a corresponding offset to ARO. For revisions to AROs in which the related asset is no longer in service, the corresponding offset is recorded as a Regulatory asset on the consolidated balance sheets, except for those AROs related to non-utility assets which is charged to Depreciation and amortization on the consolidated statements of income. Such estimates are revised periodically, with actual settlements charged to the ARO as incurred.

The estimated capitalized costs of AROs are depreciated over the estimated life of the related asset, with such depreciation included in Depreciation and amortization in the consolidated statements of income. Changes in the ARO resulting from the passage of time (accretion) is based on the original discount rate and recognized as an increase in the carrying amount of the liability and as a charge to accretion expense, which is included in Depreciation and amortization expense in the Company's consolidated statements of income.

For additional information concerning the Company's AROs, see Note 8, Asset Retirement Obligations.

The difference between the timing of the recognition of ARO depreciation and accretion expenses and the amount included in customers' prices is recorded as a regulatory asset or liability in the Company's consolidated balance sheets. As of December 31, 2022, PGE had a net regulatory liability related to Utility plant AROs in the amount of \$7 million and a net regulatory asset related to Trojan decommissioning ARO activities of \$131 million. As of December 31, 2021, PGE had a net regulatory liability related to Utility plant AROs in the amount of \$43 million and a net regulatory asset related to Trojan decommissioning ARO activities of \$90 million. For additional information concerning the Company's regulatory assets and liabilities related to AROs, see Note 7, Regulatory Assets and Liabilities.

Contingencies

Contingencies are evaluated using the best information available at the time the consolidated financial statements are prepared. Legal costs incurred in connection with loss contingencies are expensed as incurred. Loss contingencies, including environmental contingencies, are accrued, and disclosed if material, when it is probable

that an asset has been impaired, or a liability incurred, as of the financial statement date and the amount of the loss can be reasonably estimated. If a reasonable estimate of probable loss cannot be determined, a range of loss may be established, in which case the minimum amount in the range is accrued, unless some other amount within the range appears to be a better estimate.

A loss contingency will also be disclosed when it is reasonably possible that a liability has been incurred if the estimate or range of potential loss is material. If a probable or reasonably possible loss cannot be determined, then the Company: i) discloses an estimate of such loss or the range of such loss, if the Company is able to determine such an estimate; or ii) discloses that an estimate cannot be made and the reasons why the estimate cannot be made.

If an asset has been impaired or a liability incurred after the financial statement date, but prior to the issuance of the financial statements, the loss contingency is disclosed, if material, and the amount of any estimated loss is recorded in either the current or the subsequent reporting period, depending on the nature of the underlying event.

Gain contingencies are recognized when realized and are disclosed when material.

For additional information concerning the Company's contingencies, see Note 19, Contingencies.

Accumulated Other Comprehensive Loss

Accumulated other comprehensive loss (AOCL) presented on the consolidated balance sheets is comprised of the difference between the obligations of the non-qualified benefit plans recognized in net income and the unfunded position.

Revenue Recognition

Revenue is recognized when obligations under the terms of a contract with customers are satisfied. Generally, this satisfaction of performance obligations and transfer of control occurs and revenues are recognized as electricity is delivered to customers, including any services provided. The prices charged, and amount of consideration PGE receives in exchange for its services provided, are regulated by the OPUC or the FERC. PGE recognizes revenue through the following steps: i) identifying the contract with the customer; ii) identifying the performance obligations in the contract; iii) determining the transaction price; iv) allocating the transaction price to the performance obligations; and v) recognizing revenue when or as each performance obligation is satisfied.

Franchise taxes, which are collected from customers and remitted to taxing authorities, are recorded on a gross basis in PGE's consolidated statements of income. Amounts collected from customers are included in Revenues, net and amounts due to taxing authorities are included in Taxes other than income taxes and totaled \$53 million in 2022, \$48 million in 2021, and \$46 million in 2020.

Retail revenue is billed based on monthly meter readings taken at various cycle dates throughout the month. At the end of each month, PGE estimates the revenue earned from energy deliveries that remained unbilled to customers. The unbilled revenues estimate, which is included in Accounts receivable, net in the Company's consolidated balance sheets, is calculated based on actual net retail system load each month, the number of days from the last meter read date through the last day of the month, and current customer prices.

As a rate-regulated utility, PGE, in certain situations, recognizes revenue to be billed to customers in future periods or defers the recognition of certain revenues to the period in which the related costs are incurred or approved by the OPUC for amortization. For additional information, see "*Regulatory Assets and Liabilities*" in this Note 2.

Alternative Revenue Programs

Revenues related to PGE's decoupling mechanism are considered earned under alternative revenue programs, as this amount represents a contract with the regulator and not with customers. Such revenues are presented separately from revenues from contracts with customers and classified as Alternative revenue programs, net of amortization on the consolidated statements of income. The activity within this line item is comprised of current period deferral adjustments, which can either be a collection from or a refund to customers, and is net of any related amortization. When amounts related to alternative revenue programs are ultimately included in prices and customer bills, the amounts are included within Revenues, net, with an equal and offsetting amount of amortization recorded on the Alternative revenue programs, net of amortization line item.

In the 2022 GRC, parties reached an agreement that has eliminated PGE's decoupling mechanism upon the effective date of new customer prices pursuant to the case, which began May 9, 2022. Pursuant to the GRC Order, the OPUC adopted the agreement such that deferrals will not occur after 2022, although amortization of then previously recorded deferrals will continue as scheduled until collected or refunded in future customer prices and deferral continued through the end of 2022 on a prorated basis.

Stock-Based Compensation

The measurement and recognition of compensation expense for all share-based payment awards, including restricted stock units, is based on the estimated fair value of the awards. The fair value of the portion of the award that is ultimately expected to vest is recognized as expense over the requisite vesting period. PGE attributes the value of stock-based compensation to expense on a straight-line basis. For additional information concerning the Company's Stock-Based Compensation, see Note 14, Stock-Based Compensation Expense.

Income Taxes

Income taxes are accounted for under the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of temporary differences between financial statement carrying amounts and tax bases of assets and liabilities. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in current and future periods that includes the enactment date. Any valuation allowance would be established to reduce deferred tax assets to the "more likely than not" amount expected to be realized in future tax returns.

Because PGE is a rate-regulated enterprise, changes in certain deferred tax assets and liabilities are required to be passed on to customers through future prices and are charged or credited directly to a regulatory asset or regulatory liability. Such amounts were recognized as net regulatory liabilities of \$194 million and \$208 million as of December 31, 2022 and 2021, respectively, and will primarily be reversed using the average rate assumption method to account for the refund to customers as the temporary differences reverse.

Unrecognized tax benefits represent management's expected treatment of a tax position taken in a filed tax return or planned to be taken in a future tax return, that has not been reflected in measuring income tax expense for financial reporting purposes. Until such positions are no longer considered uncertain, PGE would not recognize the tax benefits resulting from such positions and would report the tax effect as a liability in the Company's consolidated balance sheets.

PGE records any interest and penalties related to income tax deficiencies in Interest expense and Other income, net, respectively, in the consolidated statements of income.

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NOTE 3: REVENUE RECOGNITION

Disaggregated Revenue

The following table presents PGE's revenue, disaggregated by customer type (in millions):

| | Year Ended December 31, | | |
|---|--------------------------------|-----------------|-----------------|
| | 2022 | 2021 | 2020 |
| Retail: | | | |
| Residential | \$ 1,158 | \$ 1,118 | \$ 1,030 |
| Commercial | 723 | 690 | 616 |
| Industrial | 289 | 250 | 218 |
| Direct access customers | 35 | 47 | 46 |
| Subtotal | 2,205 | 2,105 | 1,910 |
| Alternative revenue programs, net of amortization | 11 | (29) | (6) |
| Other accrued revenues, net ⁽¹⁾ | 7 | 2 | 28 |
| Total retail revenues | 2,223 | 2,078 | 1,932 |
| Wholesale revenues ⁽²⁾ | 363 | 255 | 162 |
| Other operating revenues | 61 | 63 | 51 |
| Total revenues | <u>\$ 2,647</u> | <u>\$ 2,396</u> | <u>\$ 2,145</u> |

(1) Amount for the year ended December 31, 2020 is primarily comprised of \$24 million of amortization, including interest, related to the net tax benefits due to the change in corporate tax rate under the United States Tax Cuts and Jobs Act of 2017 (TCJA).

(2) Wholesale revenues include \$133 million, \$63 million, and \$65 million related to physical electricity commodity contract derivative settlements for the years ended December 31, 2022, 2021, and 2020, respectively. Price risk management derivative activities are included within Total revenues but do not represent revenues from contracts with customers as defined by GAAP, pursuant to Topic 606. For further information, see Note 6, Risk Management.

Retail Revenues

The Company's primary revenue source is the sale of electricity to customers at regulated tariff-based prices. Retail customers are classified as residential, commercial, or industrial. Residential customers include single family housing, multiple family housing (such as apartments, duplexes, and town homes), manufactured homes, and small farms. Residential demand is sensitive to the effects of weather, with demand highest during the winter heating and summer cooling seasons. Commercial customers consist of non-residential customers who accept energy deliveries at voltages equivalent to those delivered to residential customers and are also sensitive to the effects of weather, although to a lesser extent than residential customers. Commercial customers include most businesses, small industrial companies, and public street and highway lighting accounts. Industrial customers consist of non-residential customers who accept delivery at higher voltages than commercial customers. Demand from industrial customers is primarily driven by economic conditions, with weather having little impact on energy use by this customer class.

In accordance with state regulations, PGE's retail customer prices are based on the Company's cost-of-service and determined through general rate case (GRC) proceedings and various tariff filings with the OPUC. Additionally, the Company offers pricing options that include a daily market price option, various time-of-use options, and several renewable energy options.

Retail revenue is billed based on monthly meter readings taken throughout the month.

PORTLAND GENERAL ELECTRIC COMPANY AND SUBSIDIARIES
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PGE's obligation to sell electricity to retail customers generally represents a single performance obligation representing a series of distinct services that are substantially the same and have the same pattern of transfer to the customer that is satisfied over time as customers simultaneously receive and consume the benefits provided. PGE applies the invoice method to measure its progress towards satisfactorily completing its performance obligations.

Pursuant to regulation by the OPUC, PGE is mandated to maintain several tariff schedules to collect funds from customers for programs that benefit the general public, such as conservation, low-income housing, energy efficiency, renewable energy programs, and privilege taxes. For such programs, PGE generally collects the funds and remits the amounts to third party agencies that administer the programs. In these arrangements, PGE is considered to be an agent, as PGE's performance obligation is to facilitate a transaction between customers and the administrators of these programs. Therefore, such amounts are presented on a net basis and do not appear in Revenues, net within the consolidated statements of income.

Wholesale Revenues

PGE participates in the wholesale electricity marketplace in order to balance its supply of power to meet the needs of its retail customers. Interconnected transmission systems in the western United States serve utilities with diverse load requirements and allow the Company to purchase and sell electricity within the region depending upon the relative price and availability of power, hydro, solar, and wind conditions, and daily and seasonal retail demand.

PGE's Wholesale revenues are primarily short-term electricity sales to utilities and power marketers that consist of single performance obligations that are satisfied as energy is transferred to the counterparty. The Company may choose to net certain purchase and sale transactions in which it would simultaneously receive and deliver physical power with the same counterparty; in such cases, only the net amount of those purchases or sales required to meet retail and wholesale obligations will be physically settled and recorded in Wholesale revenues.

Other Operating Revenues

Other operating revenues consist primarily of gains and losses on the sale of natural gas volumes purchased that exceeded what was needed to fuel the Company's generating facilities, as well as revenues from transmission services, excess transmission capacity resale, excess fuel sales, utility pole attachment revenues, and other electric services provided to customers.

NOTE 4: BALANCE SHEET COMPONENTS

Accounts Receivable, Net

Accounts receivable, net includes \$131 million and \$117 million of unbilled revenues as of December 31, 2022 and 2021, respectively. Accounts receivable is net of an allowance for uncollectible accounts of \$12 million as of December 31, 2022 and \$26 million as of December 31, 2021. The following is the activity in the allowance for uncollectible accounts (in millions):

| | Years Ended December 31, | | |
|--------------------------------------|---------------------------------|--------------|--------------|
| | 2022 | 2021 | 2020 |
| Balance as of beginning of year | \$ 26 | \$ 16 | \$ 5 |
| (Decrease)/Increase in provision * | (2) | 35 | 15 |
| Amounts written off, less recoveries | (12) | (25) | (4) |
| Balance as of end of year | <u>\$ 12</u> | <u>\$ 26</u> | <u>\$ 16</u> |

* Pursuant to the Company's COVID-19 deferral, certain decreases and increases in the provision for bad debt have been deferred as a net Regulatory Asset. Of the amounts recorded as decreases and increases in the provision, reductions of \$10 million and increases of \$29 million for the years ended December 31, 2022 and December 31, 2021, respectively, have been offset within the COVID-19 Regulatory Asset. See Note 7, Regulatory Assets and Liabilities for more information.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS, continued

Other Current Assets and Accrued Expenses and Other Current Liabilities

Other current assets and Accrued expenses and other current liabilities consist of the following (in millions):

| | As of December 31, | |
|---|---------------------------|---------------|
| | 2022 | 2021 |
| Other current assets: | | |
| Prepaid expenses | \$ 69 | \$ 66 |
| Margin deposits | 116 | 37 |
| Assets from price risk management activities | 313 | 102 |
| | <u>\$ 498</u> | <u>\$ 205</u> |
| Accrued expenses and other current liabilities: | | |
| Regulatory liabilities—current | \$ 234 | \$ 106 |
| Accrued employee compensation and benefits | 66 | 67 |
| Accrued dividends payable | 42 | 40 |
| Accrued interest payable | 31 | 29 |
| Accrued taxes payable | 29 | 46 |
| Margin deposits from wholesale counterparties | 140 | 58 |
| Other | 99 | 111 |
| | <u>\$ 641</u> | <u>\$ 457</u> |

Electric Utility Plant, Net

Electric utility plant, net consist of the following (in millions):

| | As of December 31, | |
|---|---------------------------|-----------------|
| | 2022 | 2021 |
| Electric utility plant: | | |
| Generation | \$ 4,709 | \$ 4,649 |
| Transmission | 1,119 | 1,012 |
| Distribution | 4,813 | 4,469 |
| General | 973 | 914 |
| Intangible | 807 | 794 |
| Total in service | 12,421 | 11,838 |
| Accumulated depreciation and amortization | (4,423) | (4,146) |
| Total in service, net | 7,998 | 7,692 |
| Construction work-in-progress | 467 | 313 |
| Electric utility plant, net | <u>\$ 8,465</u> | <u>\$ 8,005</u> |

NOTE 5: FAIR VALUE OF FINANCIAL INSTRUMENTS

PGE determines the fair value of financial instruments, both assets and liabilities recognized and not recognized in the Company's consolidated balance sheets, for which it is practicable to estimate fair value for each reporting period. The Company then classifies these financial assets and liabilities based on a fair value hierarchy applied to prioritize the inputs to the valuation techniques used to measure fair value. The three levels of the fair value hierarchy and application to the Company are discussed below.

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Level 1 Quoted prices are available in active markets for identical assets or liabilities as of the measurement date.

Level 2 Pricing inputs include those that are directly or indirectly observable in the marketplace as of the measurement date.

Level 3 Pricing inputs include significant inputs that are unobservable for the asset or liability.

Financial assets and liabilities are classified in their entirety based on the lowest level of input that is significant to the fair value measurement. The Company's assessment of the significance of a particular input to the fair value measurement requires judgment and may affect the valuation of fair value assets and liabilities and their placement within the fair value hierarchy. Assets measured at fair value using net asset value (NAV) as a practical expedient are not categorized in the fair value hierarchy. These assets are listed in the totals of the fair value hierarchy to permit the reconciliation to amounts presented in the financial statements.

PGE recognizes transfers between levels in the fair value hierarchy as of the end of the reporting period for all of its financial instruments. Changes to market liquidity conditions, the availability of observable inputs, or changes in the economic structure of a security marketplace may require transfer of the securities between levels. There were no significant transfers between levels during the years ended December 31, 2022 and 2021, except those presented in this note.

The Company's financial assets and liabilities whose values were recognized at fair value are as follows by level within the fair value hierarchy (in millions):

| | December 31, 2022 | | | | |
|---|-------------------|---------------|---------------|----------------------|---------------|
| | Level 1 | Level 2 | Level 3 | Other ⁽²⁾ | Total |
| Assets: | | | | | |
| Cash equivalents | \$ 150 | \$ — | \$ — | \$ — | \$ 150 |
| Nuclear decommissioning trust: ⁽¹⁾ | | | | | |
| Debt securities: | | | | | |
| Domestic government | 9 | 10 | — | — | 19 |
| Corporate credit | — | 9 | — | — | 9 |
| Money market funds measured at NAV ⁽²⁾ | — | — | — | 11 | 11 |
| Non-qualified benefit plan trust: ⁽³⁾ | | | | | |
| Money market funds | 1 | — | — | — | 1 |
| Equity securities—domestic | 3 | — | — | — | 3 |
| Debt securities—domestic government | 3 | — | — | — | 3 |
| Price risk management activities: ⁽¹⁾⁽⁴⁾ | | | | | |
| Electricity | — | 93 | 63 | — | 156 |
| Natural gas | — | 225 | 6 | — | 231 |
| | <u>\$ 166</u> | <u>\$ 337</u> | <u>\$ 69</u> | <u>\$ 11</u> | <u>\$ 583</u> |
| Liabilities: | | | | | |
| Price risk management activities: ⁽¹⁾⁽⁴⁾ | | | | | |
| Electricity | \$ — | \$ 53 | \$ 93 | \$ — | \$ 146 |
| Natural gas | — | 39 | 8 | — | 47 |
| | <u>\$ —</u> | <u>\$ 92</u> | <u>\$ 101</u> | <u>\$ —</u> | <u>\$ 193</u> |

PORTLAND GENERAL ELECTRIC COMPANY AND SUBSIDIARIES
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- (1) Activities are subject to regulation, with certain gains and losses deferred pursuant to regulatory accounting and included in regulatory assets or regulatory liabilities as appropriate.
- (2) Assets are measured at NAV as a practical expedient and not subject to hierarchy level classification disclosure.
- (3) Excludes insurance policies of \$31 million, which are recorded at cash surrender value.
- (4) For further information regarding price risk management derivatives, see Note 6, Risk Management.

| | December 31, 2021 | | | | |
|---|-------------------|---------------|--------------|----------------------|---------------|
| | Level 1 | Level 2 | Level 3 | Other ⁽²⁾ | Total |
| Assets: | | | | | |
| Cash equivalents | \$ 44 | \$ — | \$ — | \$ — | \$ 44 |
| Nuclear decommissioning trust: ⁽¹⁾ | | | | | |
| Debt securities: | | | | | |
| Domestic government | 9 | 10 | — | — | 19 |
| Corporate credit | — | 14 | — | — | 14 |
| Money market funds measured at NAV ⁽²⁾ | — | — | — | 14 | 14 |
| Non-qualified benefit plan trust: ⁽³⁾ | | | | | |
| Money market funds | 1 | — | — | — | 1 |
| Equity securities—domestic | 4 | — | — | — | 4 |
| Debt securities—domestic government | 4 | — | — | — | 4 |
| Price risk management activities: ⁽¹⁾⁽⁴⁾ | | | | | |
| Electricity | — | 16 | 1 | — | 17 |
| Natural gas | — | 115 | 5 | — | 120 |
| | <u>\$ 62</u> | <u>\$ 155</u> | <u>\$ 6</u> | <u>\$ 14</u> | <u>\$ 237</u> |
| Liabilities: | | | | | |
| Price risk management activities: ⁽¹⁾⁽⁴⁾ | | | | | |
| Electricity | \$ — | \$ 33 | \$ 90 | \$ — | \$ 123 |
| Natural gas | — | 13 | 1 | — | 14 |
| | <u>\$ —</u> | <u>\$ 46</u> | <u>\$ 91</u> | <u>\$ —</u> | <u>\$ 137</u> |

- (1) Activities are subject to regulation, with certain gains and losses deferred pursuant to regulatory accounting and included in regulatory assets or regulatory liabilities as appropriate.
- (2) Assets are measured at NAV as a practical expedient and not subject to hierarchy level classification disclosure.
- (3) Excludes insurance policies of \$36 million, which are recorded at cash surrender value.
- (4) For further information regarding price risk management derivatives, see Note 6, Risk Management.

Cash equivalents are highly liquid investments with maturities of three months or less at the date of acquisition and primarily consist of money market funds. Such funds seek to maintain a stable net asset value and are comprised of short-term, government funds. Policies of such funds require that the weighted-average maturity of securities held by the funds do not exceed 90 days and investors have the ability to redeem shares daily at the net asset value of the respective fund. Cash equivalents are classified as Level 1 in the fair value hierarchy due to the availability of quoted prices for identical assets in an active market as of the measurement date. Principal markets for money market fund prices include published exchanges such as the National Association of Securities Dealers Automated Quotations (NASDAQ) and the New York Stock Exchange (NYSE).

Assets held in the NDT and NQBP trusts are recorded at fair value in PGE's consolidated balance sheets and invested in securities that are exposed to interest rate, credit, and market volatility risks. These assets are classified within Level 1, 2, or 3 based on the following factors:

PORTLAND GENERAL ELECTRIC COMPANY AND SUBSIDIARIES
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Debt securities—PGE invests in highly-liquid United States Treasury securities to support the investment objectives of the trusts. These domestic government securities are classified as Level 1 in the fair value hierarchy due to the availability of quoted prices for identical assets in an active market as of the measurement date.

Assets classified as Level 2 in the fair value hierarchy include domestic government debt securities, such as municipal debt, and corporate credit securities. Prices are determined by evaluating pricing data such as broker quotes for similar securities and adjusted for observable differences. Significant inputs used in valuation models generally include benchmark yield and issuer spreads. The external credit rating, coupon rate, and maturity of each security are considered in the valuation, as applicable.

Equity securities—Equity mutual fund and common stock securities are classified as Level 1 in the fair value hierarchy due to the availability of quoted prices for identical assets in an active market as of the measurement date. Principal markets for equity prices include published exchanges such as NASDAQ and the NYSE.

Money market funds—PGE invests in money market funds that seek to maintain a stable net asset value. These funds invest in high-quality, short-term, diversified money market instruments, short-term treasury bills, federal agency securities, certificates of deposits, and commercial paper. The Company believes the redemption value of these funds is likely to be the fair value, which is represented by the net asset value. Redemption is permitted daily without written notice.

The NQBP trust is invested in exchange traded government money market funds and is classified as Level 1 in the fair value hierarchy due to the availability of quoted prices in published exchanges such as NASDAQ and the NYSE. The money market fund in the NDT is valued at NAV as a practical expedient and is not included in the fair value hierarchy.

Assets and liabilities from price risk management activities, recorded at fair value in PGE's consolidated balance sheets, consist of derivative instruments entered into by the Company to manage its risk exposure to commodity price and foreign currency exchange rates and reduce volatility in NVPC. For additional information regarding these assets and liabilities, see Note 6, Risk Management.

For those assets and liabilities from price risk management activities classified as Level 2, fair value is derived using present value formulas that utilize inputs such as forward commodity prices and interest rates. Substantially all of these inputs are observable in the marketplace throughout the full term of the instrument, can be derived from observable data, or are supported by observable levels at which transactions are executed in the marketplace. Instruments in this category include commodity forwards, futures, and swaps.

Assets and liabilities from price risk management activities classified as Level 3 consist of instruments for which fair value is derived using one or more significant inputs that are not observable for the entire term of the instrument. These instruments consist of longer-term commodity forwards, futures, and swaps.

PORTLAND GENERAL ELECTRIC COMPANY AND SUBSIDIARIES
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Quantitative information regarding the significant, unobservable inputs used in the measurement of Level 3 assets and liabilities from price risk management activities is presented below:

| Commodity Contracts | Fair Value | | Valuation Technique | Significant Unobservable Input | Price per Unit | | Weighted Average |
|---------------------------------|--------------|---------------|----------------------|-------------------------------------|----------------|-----------|------------------|
| | Assets | Liabilities | | | Low | High | |
| (in millions) | | | | | | | |
| As of December 31, 2022: | | | | | | | |
| Electricity physical forwards | \$ 52 | \$ 93 | Discounted cash flow | Electricity forward price (per MWh) | \$ 35.00 | \$ 270.00 | \$ 101.27 |
| Natural gas financial swaps | 6 | 8 | Discounted cash flow | Natural gas forward price (per Dth) | 2.71 | 24.71 | 4.42 |
| Electricity financial futures | 11 | — | Discounted cash flow | Electricity forward price (per MWh) | 54.17 | 143.70 | 104.21 |
| | <u>\$ 69</u> | <u>\$ 101</u> | | | | | |
| As of December 31, 2021: | | | | | | | |
| Electricity physical forwards | \$ — | \$ 90 | Discounted cash flow | Electricity forward price (per MWh) | \$ 16.66 | \$ 129.75 | \$ 43.73 |
| Natural gas financial swaps | 5 | 1 | Discounted cash flow | Natural gas forward price (per Dth) | 2.02 | 8.02 | 2.81 |
| Electricity financial futures | 1 | — | Discounted cash flow | Electricity forward price (per MWh) | 26.76 | 68.43 | 52.46 |
| | <u>\$ 6</u> | <u>\$ 91</u> | | | | | |

The significant unobservable inputs used in the Company's fair value measurement of price risk management assets and liabilities are long-term forward prices for commodity derivatives. For shorter-term contracts, PGE employs the mid-point of the bid-ask spread of the market and these inputs are derived using observed transactions in active markets, as well as historical experience as a participant in those markets. These price inputs are validated against independent market data from multiple sources. For certain long-term contracts, observable, liquid market transactions are not available for the duration of the delivery period. In such instances, the Company uses internally-developed price curves, which derive longer-term prices and utilize observable data when available. When not available, regression techniques are used to estimate unobservable future prices. In addition, changes in the fair value measurement of price risk management assets and liabilities are analyzed and reviewed on a quarterly basis by the Company.

The Company's Level 3 assets and liabilities from price risk management activities are sensitive to market price changes in the respective underlying commodities. The significance of the impact is dependent upon the magnitude of the price change and the Company's position as either the buyer or seller of the contract. Sensitivity of the fair value measurements to changes in the significant unobservable inputs is as follows:

| Significant Unobservable Input | Position | Change to Input | Impact on Fair Value Measurement |
|--------------------------------|----------|---------------------|----------------------------------|
| Market price | Buy | Increase (decrease) | Gain (loss) |
| Market price | Sell | Increase (decrease) | Loss (gain) |

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS, continued

Changes in the fair value of net liabilities from price risk management activities (net of assets from price risk management activities) classified as Level 3 in the fair value hierarchy were as follows (in millions):

| | Years Ended December 31, | |
|--|---------------------------------|----------------|
| | 2022 | 2021 |
| Net liabilities from price risk management activities as of beginning of year | \$ 85 | \$ 137 |
| Net realized and unrealized losses/(gains) * | (84) | (50) |
| Net transfers from Level 3 to Level 2 | 31 | (2) |
| Net liabilities from price risk management activities as of end of year | <u>\$ 32</u> | <u>\$ 85</u> |
| Level 3 net unrealized losses/(gains) that have been fully offset by the effect of regulatory accounting | <u>\$ (82)</u> | <u>\$ (55)</u> |

* Includes \$2 million in net realized gains in 2022 and \$5 million in 2021.

Transfers into Level 3 occur when significant inputs used to value the Company's derivative instruments become less observable, such as a delivery location becoming significantly less liquid. During the years ended December 31, 2022 and 2021, there were no transfers into Level 3 from Level 2. Transfers out of Level 3 occur when the significant inputs become more observable, such as when the time between the valuation date and the delivery term of a transaction becomes shorter. PGE records transfers into and from Level 3 at the end of the reporting period for all of its derivative instruments.

Transfers from Level 2 to Level 1 for the Company's price risk management assets and liabilities do not occur as quoted prices are not available for identical instruments. As such, the Company's assets and liabilities from price risk management activities mature and settle as Level 2 fair value measurements.

Long-term debt is recorded at amortized cost in PGE's consolidated balance sheets. The fair value of the Company's First Mortgage Bonds (FMBs) and Pollution Control Revenue Bonds (PCRBs) is classified as a Level 2 fair value measurement.

As of December 31, 2022, the carrying amount of PGE's long-term debt was \$3,646 million, net of \$13 million of unamortized debt expense, and its estimated aggregate fair value was \$2,984 million. As of December 31, 2021, the carrying amount of PGE's long-term debt was \$3,285 million, net of \$14 million of unamortized debt expense, with an estimated aggregate fair value of \$3,831 million.

For fair value information concerning the Company's pension plan assets, see Note 11, Employee Benefits.

NOTE 6: RISK MANAGEMENT

Price Risk Management

PGE participates in the wholesale marketplace to balance its supply of power, which consists of its own generation combined with wholesale market transactions, to meet the needs of its retail customers, manage risk, and administer the Company's long-term wholesale contracts. Wholesale market transactions include purchases and sales of both power and fuel resulting from economic dispatch decisions with respect to Company-owned generating resources. The Company also performs portfolio management and wholesale market sales services for third parties in the region. As a result of this ongoing business activity, PGE is exposed to commodity price risk and foreign currency exchange rate risk, from which changes in prices and/or rates may affect the Company's financial position, results of operations, or cash flows.

PORTLAND GENERAL ELECTRIC COMPANY AND SUBSIDIARIES
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PGE utilizes derivative instruments to manage its exposure to commodity price risk and foreign exchange rate risk in order to reduce volatility in NVPC for its retail customers. Such derivative instruments, recorded at fair value on the consolidated balance sheets, may include forward, future, swap, and option contracts for electricity, natural gas, and foreign currency, with changes in fair value recorded in the consolidated statements of income. PGE also enters into non-exchange-traded weather contract options, which are accounted for using the intrinsic value method. In accordance with ratemaking and cost recovery processes authorized by the OPUC, the Company recognizes a regulatory asset or liability to defer the gains and losses from derivative activity until settlement of the associated derivative instrument. PGE may designate certain derivative instruments as cash flow hedges or may use derivative instruments as economic hedges. The Company does not intend to engage in trading activities for non-retail purposes.

PGE's Assets and Liabilities from price risk management activities consist of the following (in millions):

| | As of December 31, | |
|---|---------------------------|---------------|
| | 2022 | 2021 |
| Current assets: | | |
| Commodity contracts: | | |
| Electricity | \$ 112 | \$ 16 |
| Natural gas | 201 | 86 |
| Total current derivative assets ⁽¹⁾ | <u>313</u> | <u>102</u> |
| Noncurrent assets: | | |
| Commodity contracts: | | |
| Electricity | 44 | 1 |
| Natural gas | 30 | 34 |
| Total noncurrent derivative assets ⁽¹⁾ | <u>74</u> | <u>35</u> |
| Total derivative assets ⁽²⁾ | <u>\$ 387</u> | <u>\$ 137</u> |
| Current liabilities: | | |
| Commodity contracts: | | |
| Electricity | \$ 93 | \$ 36 |
| Natural gas | 25 | 11 |
| Total current derivative liabilities | <u>118</u> | <u>47</u> |
| Noncurrent liabilities: | | |
| Commodity contracts: | | |
| Electricity | 53 | 87 |
| Natural gas | 22 | 3 |
| Total noncurrent derivative liabilities | <u>75</u> | <u>90</u> |
| Total derivative liabilities ⁽²⁾ | <u>\$ 193</u> | <u>\$ 137</u> |

(1) Total current derivative assets is included in Other current assets, and Total noncurrent derivative assets is included in Other noncurrent assets on the consolidated balance sheets.

(2) As of December 31, 2022 and 2021, no commodity derivative assets or liabilities were designated as hedging instruments.

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PGE's net volumes related to its Assets and Liabilities from price risk management activities resulting from its derivative transactions, which are expected to deliver or settle at various dates through 2035, were as follows (in millions):

| | As of December 31, | | | |
|----------------------------|--------------------|----------|-------|----------|
| | 2022 | | 2021 | |
| Commodity contracts: | | | | |
| Electricity | 6 | MWh | 4 | MWh |
| Natural gas | 211 | Dth | 181 | Dth |
| Foreign currency contracts | \$ 10 | Canadian | \$ 19 | Canadian |

PGE has elected to report positive and negative exposures resulting from derivative instruments pursuant to agreements that meet the definition of a master netting arrangement at gross values on the consolidated balance sheet. In the case of default on, or termination of, any contract under the master netting arrangements, such agreements provide for the net settlement of all related contractual obligations with a given counterparty through a single payment. These types of transactions may include non-derivative instruments, derivatives qualifying for scope exceptions, receivables and payables arising from settled positions, and other forms of non-cash collateral, such as letters of credit. As of December 31, 2022, gross amounts included as Price risk management liabilities subject to master netting agreements were \$5 million, entirely for natural gas, for which PGE has posted no collateral. As of December 31, 2021, gross amounts included as Price risk management liabilities subject to master netting agreements were \$3 million, for which PGE has posted no collateral. Of the gross amounts recognized as of December 31, 2021, \$1 million was for electricity and \$2 million was for natural gas.

Net realized and unrealized losses (gains) on derivative transactions not designated as hedging instruments are classified in Purchased power and fuel in the consolidated statements of income and were as follows (in millions):

| | Years Ended December 31, | | |
|----------------------------|--------------------------|---------|--------|
| | 2022 | 2021 | 2020 |
| Commodity contracts: | | | |
| Electricity | \$ (187) | \$ (38) | \$ 160 |
| Natural Gas | (388) | (177) | (34) |
| Foreign currency contracts | 1 | — | (1) |

Net unrealized and certain net realized losses (gains) presented in the table above are offset within the consolidated statements of income by the effects of regulatory accounting. Of the net amounts recognized in Net income, net gains of \$188 million, net gains of \$119 million, and net losses of \$12 million for the years ended December 31, 2022, 2021, and 2020, respectively, have been offset.

Assuming no changes in market prices and interest rates, the following table presents the years in which the net unrealized (gains)/losses recorded as of December 31, 2022 related to PGE's derivative activities would become realized as a result of the settlement of the underlying derivative instrument (in millions):

| | 2023 | 2024 | 2025 | 2026 | 2027 | Thereafter | Total |
|----------------------------|-----------------|-------------|--------------|-------------|---------------|----------------|-----------------|
| Commodity contracts: | | | | | | | |
| Electricity | \$ (19) | \$ 10 | \$ 21 | \$ (3) | \$ (3) | \$ (16) | \$ (10) |
| Natural gas | (177) | (8) | (2) | 3 | — | — | (184) |
| Net unrealized (gain)/loss | <u>\$ (196)</u> | <u>\$ 2</u> | <u>\$ 19</u> | <u>\$ —</u> | <u>\$ (3)</u> | <u>\$ (16)</u> | <u>\$ (194)</u> |

PGE's secured and unsecured debt is currently rated at investment grade by Moody's Investors Service (Moody's) and S&P Global Ratings (S&P). Should Moody's and/or S&P reduce their rating on the Company's unsecured debt to below investment grade, PGE could be subject to requests by certain wholesale counterparties to post additional

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performance assurance collateral, in the form of cash or letters of credit, based on total portfolio positions with each of those counterparties. Certain other counterparties would have the right to terminate their agreements with the Company.

The aggregate fair value of derivative instruments with credit-risk-related contingent features that were in a liability position as of December 31, 2022 was \$183 million, for which the Company has posted \$130 million in collateral, consisting of \$21 million of letters of credit and \$109 million of cash. If the credit-risk-related contingent features underlying these agreements were triggered as of December 31, 2022, the cash requirement to either post as collateral or settle the instruments immediately would have been \$27 million. As of December 31, 2022, PGE had no cash collateral posted for derivative instruments with no credit-risk-related contingent features. Cash collateral for derivative instruments is classified as Margin deposits included in Other current assets on the Company's consolidated balance sheet.

As of December 31, 2022, PGE received from counterparties \$156 million in collateral, consisting of \$16 million of letters of credit and \$140 million of cash. Increases in collateral received from counterparties is due to the increase in PGE's derivative asset position. The obligation to return cash collateral held for derivative instruments is included in Accrued expenses and other current liabilities on the Company's consolidated balance sheets.

PGE is exposed to credit risk in its commodity price risk management activities related to potential nonperformance by counterparties. Credit risk may be concentrated to the extent PGE's counterparties have similar economic, industry or other characteristics and due to direct or indirect relationships among the counterparties. The Company manages the risk of counterparty default according to its credit policies by performing financial credit reviews, setting limits and monitoring exposures, and requiring collateral (in the form of cash, letters of credit, and guarantees) when needed. PGE also uses standardized enabling agreements and, in certain cases, master netting agreements, which allow for the netting of positive and negative exposures under multiple agreements with counterparties. Despite such mitigation efforts, defaults by counterparties may periodically occur. Based upon periodic review and evaluation, allowances are recorded as needed to reflect credit risk related to wholesale accounts receivable.

For additional information concerning the determination of fair value for the Company's Assets and Liabilities from price risk management activities, see Note 5, Fair Value of Financial Instruments.

NOTE 7: REGULATORY ASSETS AND LIABILITIES

The majority of PGE's regulatory assets and liabilities are reflected in customer prices and are amortized over the period in which they are reflected in customer prices. Items not currently reflected in prices are pending before the regulatory body as discussed below.

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Regulatory assets and liabilities consist of the following (dollars in millions):

| | Remaining Amortization Period | As of December 31, | | | |
|--|-------------------------------------|------------------------------------|-------------------------|-----------------|-----------------|
| | | Earning a Return ⁽¹⁾ | Not Earning a Return | Total | Total |
| | | 2022 | 2021 | 2022 | 2021 |
| Regulatory assets: | | | | | |
| Price risk management | (2) | \$ — | \$ 1 | \$ 1 | \$ 55 |
| Pension and other postretirement plans | (3) | — | 95 | 95 | 131 |
| Debt issuance costs | 2049 | — | 21 | 21 | 23 |
| Trojan decommissioning activities | 2059 | — | 133 | 133 | 90 |
| February 2021 ice storm and damage | (4) | 74 | — | 74 | 67 |
| Power cost adjustment mechanism | (5) | 28 | — | 28 | 29 |
| 2020 Labor Day wildfire | (4) | 31 | — | 31 | 45 |
| COVID-19 | (6) | 22 | — | 22 | 36 |
| Wildfire mitigation | (6) | 28 | — | 28 | — |
| Other | Various | 70 | 24 | 94 | 81 |
| Total regulatory assets | | <u>\$ 253</u> | <u>\$ 274</u> | <u>\$ 527</u> | <u>\$ 557</u> |
| Regulatory liabilities: | | | | | |
| Asset retirement removal costs | (7) | \$ 1,136 | \$ — | \$ 1,136 | \$ 1,047 |
| Deferred income taxes | (8) | 194 | — | 194 | 208 |
| Asset retirement obligations | (7) | 7 | — | 7 | 43 |
| Price risk management | (2) | — | 195 | 195 | 55 |
| Other | Various | 67 | 24 | 91 | 113 |
| Total regulatory liabilities | | <u>\$ 1,404</u> | <u>\$ 219</u> | <u>\$ 1,623</u> | <u>\$ 1,466</u> |

- (1) Earning a return includes either interest on the regulatory asset or liability, or inclusion of the regulatory asset or liability as an increase or decrease to rate base at the allowed rate of return.
- (2) No amortization period in accordance with ratemaking and cost recovery processes authorized by the OPUC, PGE recognizes a regulatory asset or liability to defer unrealized losses or gains on derivative instruments until settlement.
- (3) Recovery expected over the average service life of employees.
- (4) Amortization will occur over a 7-year period starting January 1, 2023.
- (5) Amortization will occur over a 2-year period starting January 1, 2023.
- (6) Amortization period not yet determined.
- (7) Recovery or refund expected over the estimated lives of the underlying assets and treated as a reduction to rate base.
- (8) Refund expected as the balance is reversed using the average rate assumption method over the average life of the underlying assets and treated as a reduction to rate base.

On April 25, 2022, the OPUC issued Order 22-129, which adopted all stipulations agreed to by the parties to the proceeding in PGE's 2022 GRC, including the annual revenue requirement, cost of capital, capitalization ratio, and the elimination of the decoupling mechanism, although deferral related to the decoupling mechanism continued on a prorated basis through the end of 2022. In 2023 and forward, deferral related to the decoupling mechanism will cease. Key elements of the OPUC's Order also included:

- establishment of a balancing account for the Company's major storm damage recovery mechanism;
- denial of PGE's proposal for a secondary phase of the 2022 GRC regarding the Faraday capital improvement project. The Company had requested that recovery of the capital cost of improvements at the Faraday hydroelectric facility be included in the new rate base. PGE was permitted to pursue recovery in the Company's next GRC. As of December 31, 2022, the construction work-in-progress balance of the project

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was \$168 million, including AFUDC and was placed in-service on January 31, 2023. The Company's 2024 GRC pursues recovery of the Faraday project in its rate base request;

- approval of an intervenor request that would require PGE to defer and refund, subject to an earnings test, the revenue requirement associated with the Company's Boardman coal-fired generating plant included in customer prices following plant closure in 2020; and
- creation of an earnings test for the deferrals for the 2020 Labor Day wildfire and the February 2021 ice storm and damage that is to be applied on a year-by-year basis.

As a result of the earnings tests outlined in the OPUC's Order, the Company has released deferrals associated with the year ended 2020, resulting in a pre-tax, non-cash charge to earnings in 2022 in the amount of \$17 million. The amount recorded represents the Company's estimate based on its interpretation of the OPUC's earnings test. PGE does not expect to exceed its regulated return on equity under the earnings test methodology approved by the OPUC and as a result, no release of deferrals or earnings test reserve is expected for 2021 and 2022. The OPUC has significant discretion in making the final determination of the application of the earnings test for 2020, 2021, and 2022 that could result in additional disallowances or refunds compared to the amount reserved by the Company as of December 31, 2022, which could be material.

Price risk management represents the difference between the net unrealized losses recognized on derivative instruments related to price risk management activities and their realization and subsequent recovery in customer prices. For further information regarding assets and liabilities from price risk management activities, see Note 6, Risk Management.

Pension and other postretirement plans represents unrecognized components of the benefit plans' funded status, which are recoverable in customer prices when recognized in net periodic pension and postretirement benefit costs. For further information, see Note 11, Employee Benefits.

Debt issuance costs represents unrecognized debt issuance costs related to debt instruments retired prior to the stipulated maturity date.

Trojan decommissioning activities represents the deferral of ongoing costs and adjustments to the Trojan ARO associated with monitoring spent nuclear fuel at Trojan, net of amortization of customer collections. In addition, proceeds received from the United States Department of Energy (USDOE) for the reimbursement of costs to monitor the ISFSI is deferred and offsets customer collections.

February 2021 ice storm and damage represents the costs incurred to repair damage to PGE's transmission and distribution systems and restore power to customers as a result of the historic storms that ultimately led Oregon's Governor to declare a state of emergency in February 2021. The Company filed an application for authorization to defer emergency restoration costs for the February 2021 ice storm (OPUC Docket UM 2156), which was approved on January 26, 2022 (OPUC Order No. 22-020). On October 24, 2022, PGE and parties submitted a stipulation with the OPUC reflecting an agreement that resolved all matters related to 2021 under this deferral and would allow PGE full recovery of the deferred amounts with amortization over a seven-year period. The OPUC adopted the stipulation approving amortization of amounts with amortization that began on January 1, 2023.

Power Cost Adjustment Mechanism—For the year ended December 31, 2021, actual NVPC was \$62 million above baseline NVPC, and therefore PGE deferred \$29 million, which represents 90% of the excess variance expected to be collected from customers for the year ended December 31, 2021. In conjunction with the OPUC's annual review of the Company's PCAM filing, parties reached a settlement and on October 24, 2022, PGE and parties submitted a stipulation with the OPUC reflecting an agreement that resolved all matters related to this deferral and would allow PGE full recovery except for \$2 million, which was recorded as a charge to earnings. Amortization will occur over a two-year period beginning January 1, 2023. Order 22-440, issued November 8, 2022, adopted the stipulation approving amortization of amounts.

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2020 Labor Day wildfire in 2020, the State experienced the most destructive wildfire season on record, with over one million acres of land burned that ultimately led Oregon's Governor to declare a state of emergency. PGE has incurred costs to replace and rebuild PGE facilities damaged by the fires, as well as address fire-damaged vegetation and other resulting debris and hazards both in and outside of PGE's property and right-of-way. On October 20, 2020, the OPUC formally approved PGE's request for deferral of such costs (Docket UM 2115). As of December 31, 2022 and December 31, 2021, PGE's cumulative deferred costs related to the wildfire response was \$31 million and \$45 million, respectively. Among the provisions of Order 22-129, the OPUC established an earnings test for the 2020 Labor Day wildfire deferral. Pursuant to the earnings test outlined in the OPUC's Order, the Company has released deferrals associated with the year ended 2020, resulting in a pre-tax charge to earnings for 2022 in the amount of \$15 million. The amount recorded represents the Company's estimate based on its interpretation of the OPUC's earnings test. The charge was recorded to Generation, transmission and distribution expenses in the consolidated statements of income. On July 27, 2022, PGE made a request for amortization with the OPUC that would allow collection in customer prices over a seven-year amortization period beginning November 1, 2022. On October 24, 2022, PGE and parties submitted a stipulation with the OPUC reflecting an agreement that resolved all matters related to 2021 under this deferral and would allow PGE full recovery of the amounts deferred as of September 30, 2022, with amortization over a seven-year period. Order 22-435, issued November 3, 2022, adopted the stipulation approving amortization of amounts with amortization that began on January 1, 2023.

COVID-19 pandemic led Oregon's Governor to declare a state of emergency on March 8, 2020. Due to the adverse impacts of COVID-19 on economic activity, PGE has experienced an increase in bad debt expense, lost revenue, and other incremental costs. On March 20, 2020, PGE filed an application with the OPUC for deferral of lost revenue and certain incremental costs, such as bad debt expense, related to COVID-19. PGE, other utilities under the OPUC's jurisdiction, intervenors, and OPUC staff held discussions regarding the scope of costs incurred by utilities which may qualify for deferral under Docket UM2114, Investigation into the Effects of the COVID-19 Pandemic on Utility Customers. The result of such discussions was an Energy Term Sheet (Term Sheet), which dictates costs in scope for deferral but is silent to the timing of recovery of such costs. On September 24, 2020, the Commission adopted a proposed OPUC Staff motion for Staff to execute stipulations incorporating the terms of the Term Sheet. PGE's deferral application was approved by the Commission on October 20, 2020 with final stipulations for the Term Sheet approved on November 3, 2020. As of December 31, 2022 and December 31, 2021, PGE's deferred balance was \$22 million and \$36 million, respectively, comprised primarily of bad debt expense in excess of what is currently considered and collected in customer prices. The Company has released deferrals associated with the year ended 2020, resulting in a pre-tax charge to earnings in 2022 in the amount of \$2 million. The amount recorded represents the Company's estimate based on its understanding of the OPUC's intent to apply an earnings test to certain elements of utility COVID deferrals. PGE filed a request for amortization of deferred amounts on December 16, 2022, which reflected a \$12 million adjustment primarily related to bad debt write-offs being lower than estimated. The request for amortization has an effective date of April 1, 2023, and is still pending the approval of the Commission. Amortization of any deferred costs will remain subject to OPUC review prior to amortization in customer prices and would be subject to an earnings test. PGE believes amounts deferred are probable of recovery as the Company's prudently incurred costs were in response to the unique nature of the COVID-19 pandemic health emergency. The OPUC has significant discretion in making the final determination of recovery. The OPUC's conclusion of overall prudence and the application of an earnings review could result in a portion, or all, of PGE's deferrals being disallowed for recovery. Such disallowance would be recognized as a charge to earnings.

Wildfire mitigation represents incremental costs and investments made by PGE under SB 762, which was passed in the 2021 legislative session with an effective date of July 19, 2021. SB 762 instructs public utilities to develop, implement, and execute a wildfire protection plan, in which reasonable costs can be recovered through prices to all customers. The outcome of PGE's 2022 GRC provided an annual amount of \$24 million to be collected in base rates in regards to wildfire mitigation efforts. On July 1, 2022, PGE filed an application for reauthorization of OPUC Docket UM 2019 to defer incremental wildfire mitigation costs that exceed the amount granted in base rates. As of December 31, 2022, PGE's deferred balance related to wildfire mitigation was \$28 million. While the Company believes the full amount of the deferral is probable of recovery, the OPUC has significant discretion in making the final determination of recovery. The OPUC's conclusions of overall prudence, or application of a

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potential earnings test, could result in a portion, or all, of PGE's deferral being disallowed for recovery. Such disallowance would be recognized as a charge to earnings.

Asset retirement removal costs represents the costs that do not qualify as AROs and are a component of depreciation expense allowed in customer prices. Such costs are recorded as a regulatory liability as they are collected in prices, and are reduced by actual removal costs incurred.

Deferred income taxes represents income tax benefits primarily from property-related timing differences that will be refunded to customers when the temporary differences reverse. Substantially all of the amounts deferred are subject to tax normalization rules that require that the impact to the results of operations of reversing the excess deferred income tax balance cannot occur more rapidly than over the book life of the related assets. The Company uses the average rate assumption method to account for the refund to customers. For further information, see Note 12, Income Taxes.

Asset retirement obligations represents the difference in the timing of recognition of: i) the amounts recognized for depreciation expense of the asset retirement costs and accretion of the ARO; and ii) the amount recovered in customer prices.

NOTE 8: ASSET RETIREMENT OBLIGATIONS

ARO consist of the following (in millions):

| | As of December 31, | |
|---|---------------------------|-------------|
| | 2022 | 2021 |
| Trojan decommissioning activities | \$ 170 | \$ 139 |
| Utility plant | 86 | 95 |
| Non-utility property | 33 | 35 |
| Total asset retirement obligations | 289 | 269 |
| Less: current portion * | 32 | 31 |
| Noncurrent asset retirement obligations | \$ 257 | \$ 238 |

* Current portion of AROs are classified within Accrued expenses and other current liabilities in the consolidated balance sheets.

Trojan decommissioning activities represents the present value of future decommissioning costs for PGE's 67.5% ownership interest in Trojan, which ceased operation in 1993. The remaining decommissioning activities primarily consist of the long-term operation and decommissioning of the ISFSI, an interim dry storage facility that is licensed by the Nuclear Regulatory Commission. The ISFSI will store the spent nuclear fuel at the former plant site until an off-site storage facility is available. Decommissioning of the ISFSI and final site restoration activities will begin once shipment of all the spent fuel to a USDOE facility is complete, which is not expected prior to 2059. In 2022, the Company recorded an increase in the ARO of \$36 million due to an increase in expected annual ISFSI operation costs. The Company also recorded accretion of \$6 million and a reduction of \$11 million due to settled liabilities.

Under a settlement agreement reached with the USDOE, the Company receives annual reimbursement from the USDOE for certain costs related to monitoring the ISFSI. Pursuant to this process, the USDOE reimbursed the co-owners \$6 million in 2022 for costs incurred in 2021 and \$5 million in 2021 for costs incurred in 2020 resulting from USDOE delays in accepting spent nuclear fuel.

Utility plant represents AROs that have been recognized for the Company's thermal and wind generation sites, and distribution and transmission assets, the disposal of which is legally required. During 2022, utility AROs decreased

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by \$9 million, with the change comprised of new liabilities incurred of \$1 million, accretion of \$3 million, and a reduction of \$13 million due to settled liabilities.

Non-utility property primarily represents AROs that have been recognized for portions of unregulated properties that are currently or previously leased to third parties. Revisions to estimates for non-utility AROs relate to assets that are no longer in service and the offset is charged directly to Depreciation and amortization on the consolidated statements of income in the period in which the revisions are probable and reasonably estimable. Non-utility AROs are not subject to regulatory deferral.

The following is a summary of the changes in the Company's AROs (in millions):

| | Years Ended December 31, | | |
|-----------------------------------|---------------------------------|---------------|---------------|
| | 2022 | 2021 | 2020 |
| Balance as of beginning of year | \$ 269 | \$ 291 | \$ 279 |
| Liabilities incurred | 1 | — | 3 |
| Liabilities settled | (27) | (18) | (18) |
| Accretion expense | 10 | 10 | 10 |
| Revisions in estimated cash flows | 36 | (14) | 17 |
| Balance as of end of year | <u>\$ 289</u> | <u>\$ 269</u> | <u>\$ 291</u> |

Pursuant to regulation, the amortization of utility plant AROs is included in depreciation expense and in customer prices. Any differences in the timing of recognition of costs for financial reporting and ratemaking purposes are deferred as a regulatory asset or regulatory liability. Recovery of Trojan decommissioning costs is included in PGE's retail prices with an equal amount recorded in Depreciation and amortization expense.

PGE maintains a separate Nuclear decommissioning trust in the consolidated balance sheet for funds collected from customers through prices to cover the cost of Trojan decommissioning activities.

The Oak Grove hydro facility and transmission and distribution plant located on public right-of-ways and on certain easements meet the requirements of a legal obligation and will require removal when the plant is no longer in service. An ARO liability is not currently measurable as management believes that these assets will be used in utility operations for the foreseeable future. Removal costs are charged to accumulated asset retirement removal costs, which is included in Regulatory liabilities on PGE's consolidated balance sheets.

NOTE 9: CREDIT FACILITIES

In September 2022, PGE amended its existing revolving credit facility. As of December 31, 2022, PGE had a \$650 million revolving credit facility scheduled to expire in September 2027. The Company has the ability to expand the revolving credit facility to \$750 million, if needed. Pursuant to the terms of the agreement, the revolving credit facility may be used for general corporate purposes, including as backup for commercial paper borrowings, and to permit the issuance of standby letters of credit. PGE may borrow for one, three, or six months at a fixed interest rate established at the time of the borrowing, or at a variable interest rate for any period up to the then remaining term of the applicable credit facility. The revolving credit facility contains a provision that requires annual fees based on the Company's unsecured credit ratings, and contains customary covenants and default provisions, including a requirement that limits consolidated indebtedness, as defined in the agreement, to 65.0% of total capitalization. As of December 31, 2022, PGE was in compliance with this covenant with a 56.9% debt to total capital ratio. In addition, the credit facility offers the potential for adjustments to interest rate margins and fees based on PGE's achievement of certain annual sustainability-linked metrics related to its non-emitting generation capacity and the percentage of management comprised of women and employees who identify as black, indigenous, and people of color. The Company believes these potential adjustments will have an immaterial impact on PGE's results of operations.

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Under the revolving credit facility, as of December 31, 2022, PGE had no borrowings outstanding and there were no commercial paper or letters of credit issued. As a result, the aggregate unused available credit capacity under the revolving credit facility was \$650 million.

The Company has a commercial paper program under which it may issue commercial paper for terms of up to 270 days. The Company has elected to limit its borrowings under the revolving credit facility to cover any potential need to repay commercial paper that may be outstanding at the time. As of December 31, 2022, PGE had no commercial paper outstanding.

PGE typically classifies borrowings under the revolving credit facility and outstanding commercial paper as Short-term debt in the consolidated balance sheets.

In addition, PGE has three letter of credit facilities that provide a total capacity of \$220 million under which the Company can request letters of credit for original terms not to exceed one year. The issuance of such letters of credit is subject to the approval of the issuing institution. Under these facilities, a total of \$97 million of letters of credit were outstanding as of December 31, 2022. Outstanding letters of credit are not reflected on the Company's consolidated balance sheets.

Pursuant to an order issued by the FERC, the Company is authorized to issue short-term debt in an aggregate amount up to \$900 million through February 6, 2024.

Short-term borrowings under these credit facilities, and related interest rates, are reflected in the following table (dollars in millions).

| | Year Ended December 31, | | |
|---|--------------------------------|-------------|-------------|
| | 2022 | 2021 | 2020 |
| Average daily amount of short-term debt outstanding | \$ 2 | \$ 139 | \$ 131 |
| Weighted daily average interest rate * | 3.4 % | 0.9 % | 1.5 % |
| Maximum amount outstanding during the year | \$ 135 | \$ 230 | \$ 225 |

* Excludes the effect of commitment fees, facility fees, and other financing fees.

NOTE 10: LONG-TERM DEBT & OTHER FINANCING ARRANGEMENTS

Long-term debt

Long-term debt consists of the following (in millions):

| | As of December 31, | |
|---|---------------------------|-----------------|
| | 2022 | 2021 |
| First Mortgage Bonds , rates range from 1.82% to 6.88%, with a weighted average rate of 4.09% in 2022 and 4.11% in 2021, due at various dates through 2051 | \$ 3,280 | \$ 3,180 |
| Unsecured term bank loans , variable rate of approximately 5.30% at December 31, 2022 | 260 | — |
| Pollution Control Revenue Bonds , rates at 2.13% and 2.38%, due 2033 | 119 | 119 |
| Total long-term debt | 3,659 | 3,299 |
| Less: Unamortized debt expense | (13) | (14) |
| Less: Current portion of long-term debt | (260) | — |
| Long-term debt, net of current portion | \$ 3,386 | \$ 3,285 |

First Mortgage Bonds—On November 30, 2022, PGE entered into a Bond Purchase Agreement related to the sale of \$200 million in FMBs. The bonds consist of:

- a series, due in 2029, in the amount of \$100 million that will bear interest at an annual rate of 5.47%; and
- a series, due in 2033, in the amount of \$100 million that will bear interest at an annual rate of 5.56%.

The 2029 and 2033 series were issued in 2022 and funded in full on November 30, 2022 and January 13, 2023, respectively.

The Indenture securing PGE's outstanding FMBs constitutes a direct first mortgage lien on substantially all regulated utility property, other than expressly excepted property. Interest is payable semi-annually on FMBs.

Term Loan—On October 21, 2022, PGE obtained a 366-day term loan from lenders in the aggregate principal of \$260 million under a 366-Day Bridge Credit Agreement. The term loan bears interest for the relevant interest period at the Term Secured Overnight Financing Rate (SOFR) plus Term SOFR Adjustment Rate of 10 basis points and Applicable Margin of 87.5 basis points. The interest rate is subject to adjustment pursuant to the terms of the loan. The loan is prepayable, in whole or in part, without penalty, at any time. The credit agreement expires on October 22, 2023, with any outstanding balance due and payable on such date. The term loan is classified as Current portion of long-term debt on PGE's consolidated balance sheet.

Pollution Control Revenue Bonds—On March 11, 2020, PGE completed the remarketing of an aggregate principal amount of \$119 million of Pollution Control Revenue Refunding Bonds (PCRBs), which consist of \$98 million aggregate principal of PCRBs that bear an interest rate of 2.125%, and \$21 million aggregate principal of PCRBs that bear an interest rate of 2.375%, both due in 2033. At the time of remarketing, the Company chose a new interest rate period that was fixed term. The new interest rate was based on market conditions at the time of remarketing. The PCRBs could be backed by FMBs or a bank letter of credit depending on market conditions. Interest is payable semi-annually on the PCRBs.

PORTLAND GENERAL ELECTRIC COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS, continued

As of December 31, 2022, the future minimum principal payments on long-term debt are as follows (in millions):

Years ending December 31:

| | | |
|------------|----|--------------|
| 2023 | \$ | 260 |
| 2024 | | 80 |
| 2025 | | — |
| 2026 | | — |
| 2027 | | 160 |
| Thereafter | | 3,159 |
| | \$ | <u>3,659</u> |

Pelton/Round Butte financing arrangement

Under terms of an agreement (the “Agreement”) approved by the OPUC in 2000, PGE had a 66.67% ownership interest in the 455 Megawatt (MW) Pelton/Round Butte hydroelectric project on the Deschutes River (Pelton/Round Butte), with the remaining interest held by the Confederated Tribes of the Warm Springs Reservation of Oregon (CTWS). In the Agreement, the CTWS had an option to purchase an additional undivided 16.66% ownership interest in Pelton/Round Butte in 2021. On June 30, 2021, the CTWS notified PGE of their intent to exercise this purchase option. Under the terms of the purchase option, on January 1, 2022, PGE completed the sale of the additional undivided interest in the project at a net book value of \$37 million, with no gain or loss recognized on the sale. Under terms of the Agreement, the CTWS has a second option in 2036 to purchase an undivided 0.02% interest in Pelton/Round Butte. If the second option is exercised, the CTWS’ ownership percentage would exceed 50%. PGE remains the operator of the project.

PGE has agreed to purchase 100% of the CTWS’ share of the project’s output under a Power Purchase Agreement (PPA) through 2040. The exercise of the purchase option on January 1, 2022 was evaluated as a sale-leaseback arrangement, and PGE determined that the transaction did not qualify for sale-leaseback accounting. As a result, the transaction is accounted for as a financing arrangement. PGE will continue to record the tangible utility asset within Electric utility plant, net on the consolidated balance sheets as if it were the legal owner and will continue to recognize depreciation expense over the estimated useful life. A financing obligation of \$25 million was recorded in Other noncurrent liabilities in 2022. Proceeds related to the financing obligation of \$25 million were recorded as a financing activity while proceeds from the sale of intangible property of \$11 million and from the sale of construction work-in-progress of \$1 million were recorded as an investing activity on the consolidated statements of cash flow. The monthly PPA payments are split between interest expense and a reduction of the principal portion of the financing obligation. Any material differences between expense recognition and timing of payments is deferred as a regulatory asset or liability in order to match what is being recovered in customer prices for ratemaking purposes.

As of December 31, 2022, the future minimum payments on the financing arrangement are as follows (in millions):

Years ending December 31:

| | | |
|-----------------------------------|----|-----------|
| 2023 | \$ | 2 |
| 2024 | | 2 |
| 2025 | | 5 |
| 2026 | | 5 |
| 2027 | | 5 |
| Thereafter | | 69 |
| Total Payments | | <u>88</u> |
| Less: Imputed Interest | | (61) |
| Present value of minimum payments | \$ | <u>27</u> |

NOTE 11: EMPLOYEE BENEFITS***Pension and Other Postretirement Plans***

Defined Benefit Pension Plan—PGE sponsors a non-contributory defined benefit pension plan, which is closed to new employees.

The assets of the pension plan are held in a trust and are comprised of equity and debt instruments, all of which are recorded at fair value. Pension plan calculations include several assumptions that are reviewed annually and updated as appropriate.

As expected, PGE contributed no additional funds to the pension plan in both 2022 and 2021. PGE does not expect to contribute to the pension plan in 2023.

Other Postretirement Benefits—PGE offers non-contributory postretirement health and life insurance plans, and provides health reimbursement arrangements (HRAs) to its employees (collectively, “Other Postretirement Benefits” in the following tables). PGE’s obligation pursuant to the postretirement health plan is limited by establishing a maximum benefit per employee with any additional cost the responsibility of the employee.

The assets of these plans are held in voluntary employees’ beneficiary association trusts and are comprised of money market funds, equity securities, common and collective trust funds, partnerships/joint ventures, and registered investment companies, all of which are recorded at fair value. Postretirement health and life insurance benefit plan calculations include several assumptions that are reviewed annually by PGE and updated as appropriate, with measurement dates of December 31.

In 2022, PGE executed a buyout of the Non-represented Retiree Medical Plan, resulting in an \$11 million settlement gain, which has been recorded in Miscellaneous income (expense), net on the consolidated statement of income.

Non-Qualified Benefit Plan—The NQBP in the following tables include obligations for a Supplemental Executive Retirement Plan and a directors pension plan, both of which were closed to new participants in 1997. The NQBP also includes pension make-up benefits for employees that participate in the Management Deferred Compensation Plan (MDCP). Investments in the NQBP trust, consisting of trust-owned life insurance policies and marketable securities, provide partial funding for the future requirements of these plans. The assets of such trust are included in the accompanying tables for informational purposes only and are not considered segregated and restricted under current accounting standards. The investments in marketable securities, consisting of money market, bonds, and equity mutual funds, are classified as equity or trading debt securities and recorded at fair value. The measurement date for the NQBP is December 31. For further information regarding these trust investments, see Note 5, Fair Value of Financial Instruments.

Other NQBP—In addition to the NQBP discussed above, PGE provides certain employees and outside directors with deferred compensation plans, whereby participants may defer a portion of their earned compensation. PGE holds investments in a NQBP trust that are intended to be a funding source for these plans.

PORTLAND GENERAL ELECTRIC COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS, continued

Trust assets and plan liabilities related to the NQBP included in PGE's consolidated balance sheets are as follows as of December 31 (in millions):

| | 2022 | | | 2021 | | |
|--|-------|------------|-------|-------|------------|-------|
| | NQBP | Other NQBP | Total | NQBP | Other NQBP | Total |
| Non-qualified benefit plan trust assets | \$ 19 | \$ 19 | \$ 38 | \$ 21 | \$ 24 | \$ 45 |
| Non-qualified benefit plan liabilities * | 16 | 67 | 83 | 25 | 70 | 95 |

* For the NQBP, excludes the current portion of \$2 million in 2022 and 2021, which are classified in Accrued expenses and other current liabilities in the consolidated balance sheets.

Investment Policy and Asset Allocation—The Finance Committee of the PGE Board of Directors appoints an Investment Committee, which is comprised of certain members of management from the Company, and establishes the Company's asset allocation. The Investment Committee is then responsible for the implementation of the asset allocation and oversight of the benefit plan investments. The Company's investment strategy for its pension and other postretirement plans is to balance risk and return through a diversified portfolio of equity securities, fixed income securities, and other alternative investments. Asset classes are regularly rebalanced to ensure asset allocations remain within prescribed parameters.

The asset allocations for the plans, and the target allocation, are as follows:

| | As of December 31, | | | |
|--|--------------------|----------|--------|----------|
| | 2022 | | 2021 | |
| | Actual | Target * | Actual | Target * |
| Defined Benefit Pension Plan: | | | | |
| Equity securities | 55 % | 55 % | 61 % | 60 % |
| Debt securities | 45 | 45 | 39 | 40 |
| Total | 100 % | 100 % | 100 % | 100 % |
| Other Postretirement Benefit Plans: | | | | |
| Equity securities | 39 % | 40 % | 59 % | 57 % |
| Debt securities | 61 | 60 | 41 | 43 |
| Total | 100 % | 100 % | 100 % | 100 % |
| Non-Qualified Benefits Plans: | | | | |
| Equity securities | 7 % | 5 % | 8 % | 7 % |
| Debt securities | 9 | 11 | 13 | 14 |
| Insurance contracts | 84 | 84 | 79 | 79 |
| Total | 100 % | 100 % | 100 % | 100 % |

* The target for the Defined Benefit Pension Plan represents the mid-point of the investment target range. Due to the nature of the investment vehicles in both the Other Postretirement Benefit Plans and the NQBP, these targets are the weighted average of the mid-point of the respective investment target ranges approved by the Investment Committee. Due to the method used to calculate the weighted average targets for the Other Postretirement Benefit Plans and NQBP, reported percentages are affected by the fair market values of the investments within the pools.

The Company's overall investment strategy is to meet the goals and objectives of the individual plans through a wide diversification of asset types, fund strategies, and fund managers.

PORTLAND GENERAL ELECTRIC COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS, continued

The fair values of the Company's pension plan assets and other postretirement benefit plan assets by asset category are as follows (in millions):

| | Level 1 | Level 2 | Level 3 | Other * | Total |
|---|--------------|--------------|-------------|---------------|---------------|
| As of December 31, 2022: | | | | | |
| Defined Benefit Pension Plan assets: | | | | | |
| Equity securities—Domestic | \$ 16 | \$ — | \$ — | \$ — | \$ 16 |
| Investments measured at NAV: | | | | | |
| Money market funds | — | — | — | 4 | 4 |
| Collective trust funds | — | — | — | 525 | 525 |
| Private equity funds | — | — | — | 2 | 2 |
| | <u>\$ 16</u> | <u>\$ —</u> | <u>\$ —</u> | <u>\$ 531</u> | <u>\$ 547</u> |
| Other Postretirement Benefit Plans assets: | | | | | |
| Money market funds | \$ 4 | \$ — | \$ — | \$ — | \$ 4 |
| Equity securities: | | | | | |
| Domestic | — | 2 | — | — | 2 |
| International | 3 | — | — | — | 3 |
| Debt securities—Domestic | — | 4 | — | — | 4 |
| Investments measured at NAV: | | | | | |
| Money market funds | — | — | — | 5 | 5 |
| Collective trust funds | — | — | — | 3 | 3 |
| | <u>\$ 7</u> | <u>\$ 6</u> | <u>\$ —</u> | <u>\$ 8</u> | <u>\$ 21</u> |
| As of December 31, 2021: | | | | | |
| Defined Benefit Pension Plan assets: | | | | | |
| Equity securities—Domestic | \$ 25 | \$ — | \$ — | \$ — | \$ 25 |
| Investments measured at NAV: | | | | | |
| Money market funds | — | — | — | 6 | 6 |
| Collective trust funds | — | — | — | 764 | 764 |
| Private equity funds | — | — | — | 5 | 5 |
| | <u>\$ 25</u> | <u>\$ —</u> | <u>\$ —</u> | <u>\$ 775</u> | <u>\$ 800</u> |
| Other Postretirement Benefit Plans assets: | | | | | |
| Money market funds | \$ 3 | \$ — | \$ — | \$ — | \$ 3 |
| Equity securities: | | | | | |
| Domestic | — | 4 | — | — | 4 |
| International | 10 | — | — | — | 10 |
| Debt securities—Domestic government | — | 6 | — | — | 6 |
| Investments measured at NAV: | | | | | |
| Money market funds | — | — | — | 6 | 6 |
| Collective trust funds | — | — | — | 8 | 8 |
| | <u>\$ 13</u> | <u>\$ 10</u> | <u>\$ —</u> | <u>\$ 14</u> | <u>\$ 37</u> |

* Assets are measured at NAV as a practical expedient and not subject to hierarchy level classification disclosure. These assets are listed in the totals of the fair value hierarchy to permit the reconciliation to amounts presented in the financial statements.

An overview of the identification of Level 1, 2, and 3 financial instruments is provided in Note 5, Fair Value of Financial Instruments. The following discussion provides information regarding the methods used in valuation of the various asset class investments held in the pension and other postretirement benefit plan trusts.

PORTLAND GENERAL ELECTRIC COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS, continued

Money market funds—PGE invests in money market funds that seek to maintain a stable NAV. These funds invest in high-quality, short-term, diversified money market instruments, short-term treasury bills, federal agency securities, or certificates of deposit. Some of the money market funds held in the trusts are classified as Level 1 instruments as pricing inputs are based on unadjusted prices in an active market. The remaining money market funds are valued at NAV as a practical expedient and are not classified in the fair value hierarchy.

Equity securities—Equity mutual fund and common stock securities are classified as Level 1 securities as pricing inputs are based on unadjusted prices in an active market. Principal markets for equity prices include published exchanges such as NASDAQ and NYSE. Mutual fund assets included in separately managed accounts are classified as Level 2 securities due to pricing inputs that are directly or indirectly observable in the marketplace.

Debt Securities—Debt security investment funds are classified as Level 2 securities as pricing for underlying securities are determined by evaluating pricing data, such as broker quotes for similar securities, adjusted for observable differences. Significant inputs used in valuation models generally include benchmark yield and issuer spreads. The external credit rating, coupon rate, and maturity of each security are considered in the valuation, if applicable.

Collective trust funds—Domestic and international mutual fund assets and debt security assets, including municipal debt and corporate credit securities, mortgage-backed securities, and asset back securities assets, are included in commingled trusts or separately managed accounts. The Company believes the redemption value of the collective trust funds are likely to be the fair value, which is represented by the net asset value as a practical expedient. The funds are valued at NAV as a practical expedient and are not classified in the fair value hierarchy.

Private equity funds—PGE invests in a combination of primary and secondary fund-of-funds, which hold ownership positions in privately held companies across the major domestic and international private equity sectors, including but not limited to, partnerships, joint ventures, venture capital, buyout, and special situations. Private equity investments are valued at NAV as a practical expedient and are not classified in the fair value hierarchy.

The following tables provide certain information with respect to the Company's defined benefit pension plan, other postretirement benefits, and NQBP as of and for the years ended December 31, 2022 and 2021. Information related to the Other NQBP is not included in the following tables (dollars in millions):

PORTLAND GENERAL ELECTRIC COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS, continued

| | Defined Benefit Pension Plan | | Other Postretirement Benefits | | Non-Qualified Benefit Plans | |
|--|-------------------------------------|-----------------|--------------------------------------|----------------|------------------------------------|---------------|
| | 2022 | 2021 | 2022 | 2021 | 2022 | 2021 |
| Benefit obligation: | | | | | | |
| As of January 1 | \$ 972 | \$ 1,010 | \$ 71 | \$ 76 | \$ 27 | \$ 28 |
| Service cost | 17 | 19 | 1 | 2 | — | — |
| Interest cost | 28 | 27 | 2 | 2 | 1 | 1 |
| Actuarial gain | (255) | (26) | (15) | (5) | (7) | — |
| Benefit payments | (69) | (47) | (4) | (5) | (3) | (2) |
| Administrative expenses | (3) | (3) | — | — | — | — |
| Plan amendment | 5 | (8) | 1 | 1 | — | — |
| Plan settlements | — | — | (13) | — | — | — |
| As of December 31 | <u>\$ 695</u> | <u>\$ 972</u> | <u>\$ 43</u> | <u>\$ 71</u> | <u>\$ 18</u> | <u>\$ 27</u> |
| Fair value of plan assets: | | | | | | |
| As of January 1 | \$ 800 | \$ 753 | \$ 37 | \$ 35 | \$ 21 | \$ 19 |
| Actual return on plan assets | (181) | 97 | (6) | 4 | (2) | 1 |
| Company contributions | — | — | 7 | 3 | 3 | 3 |
| Benefit payments | (69) | (47) | (4) | (5) | (3) | (2) |
| Administrative expenses | (3) | (3) | — | — | — | — |
| Plan settlements | — | — | (13) | — | — | — |
| As of December 31 | <u>\$ 547</u> | <u>\$ 800</u> | <u>\$ 21</u> | <u>\$ 37</u> | <u>\$ 19</u> | <u>\$ 21</u> |
| Unfunded position as of December 31 | <u>\$ (148)</u> | <u>\$ (172)</u> | <u>\$ (22)</u> | <u>\$ (34)</u> | <u>\$ 1</u> | <u>\$ (6)</u> |
| Accumulated benefit plan obligation as of December 31 | <u>\$ 656</u> | <u>\$ 885</u> | <u>N/A</u> | <u>N/A</u> | <u>\$ 17</u> | <u>\$ 23</u> |
| Classification in consolidated balance sheet: | | | | | | |
| Noncurrent asset | \$ — | \$ — | \$ — | \$ — | \$ 19 | \$ 21 |
| Current liability | — | — | (1) | — | (2) | (2) |
| Noncurrent liability | (148) | (172) | (21) | (34) | (16) | (25) |
| Net asset (liability) | <u>\$ (148)</u> | <u>\$ (172)</u> | <u>\$ (22)</u> | <u>\$ (34)</u> | <u>\$ 1</u> | <u>\$ (6)</u> |
| Amounts included in comprehensive income: | | | | | | |
| Net actuarial loss (gain) | \$ (28) | \$ (78) | \$ (8) | \$ (7) | \$ (7) | \$ (1) |
| Net settlement gain | — | — | 11 | — | — | — |
| Net prior service credit | 5 | (9) | — | — | — | — |
| Amortization of net actuarial loss | (15) | (22) | — | — | (1) | (1) |
| Amortization of prior service credit | 2 | — | — | 1 | — | — |
| | <u>\$ (36)</u> | <u>\$ (109)</u> | <u>\$ 3</u> | <u>\$ (6)</u> | <u>\$ (8)</u> | <u>\$ (2)</u> |
| Amounts included in AOCL: * | | | | | | |
| Net actuarial loss (gain) | \$ 96 | \$ 139 | \$ (7) | \$ (3) | \$ 6 | \$ 14 |
| Prior service cost | (1) | (8) | — | (7) | — | — |
| | <u>\$ 95</u> | <u>\$ 131</u> | <u>\$ (7)</u> | <u>\$ (10)</u> | <u>\$ 6</u> | <u>\$ 14</u> |

* Amounts included in AOCL related to the Company's defined benefit pension plan and other postretirement benefits are classified as Regulatory assets or liabilities as future recoverability is expected from retail customers.

PORTLAND GENERAL ELECTRIC COMPANY AND SUBSIDIARIES
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Significant actuarial gains (losses) experienced that resulted in changes in projected benefit obligation included the following:

- For the defined benefit pension plan, actuarial gains and losses due to demographic experience, including assumption changes, were gains of \$255 million and \$26 million, and the changes between actual and expected return on plan assets were a loss of \$227 million and a gain of \$52 million, for the years ended December 31, 2022 and 2021, respectively.
- For the other postretirement benefits, actuarial gains and losses due to demographic experience, including assumption changes, were gains of \$15 million and \$5 million, and the changes between actual and expected return on plan assets were a loss of \$6 million and a gain of \$2 million, for each of the years ended December 31, 2022 and 2021, respectively.

Net periodic benefit cost consists of the following for the years ended December 31 (in millions):

| | Defined Benefit Pension Plan | | | Other Postretirement Benefits | | | Non-Qualified Benefit Plans | | |
|--------------------------------------|-------------------------------------|--------------|--------------|--------------------------------------|-------------|-------------|------------------------------------|-------------|-------------|
| | 2022 | 2021 | 2020 | 2022 | 2021 | 2020 | 2022 | 2021 | 2020 |
| Service cost | \$ 17 | \$ 19 | \$ 17 | \$ 1 | \$ 2 | \$ 2 | \$ — | \$ — | \$ — |
| Interest cost on benefit obligation | 28 | 27 | 31 | 2 | 2 | 2 | 1 | 1 | 1 |
| Expected return on plan assets | (46) | (45) | (44) | (2) | (2) | (2) | — | — | — |
| Amortization of prior service credit | (2) | — | — | — | (1) | (1) | — | — | — |
| Amortization of net actuarial loss | 15 | 22 | 17 | — | — | — | 1 | 1 | 1 |
| Settlement gain | — | — | — | (11) | — | — | — | — | — |
| Net periodic benefit cost | <u>\$ 12</u> | <u>\$ 23</u> | <u>\$ 21</u> | <u>\$ (10)</u> | <u>\$ 1</u> | <u>\$ 1</u> | <u>\$ 2</u> | <u>\$ 2</u> | <u>\$ 2</u> |

The portion of non-service costs attributable to expense related to the pension and other postretirement benefit plans, is classified as Miscellaneous income (expense), net within Other income, net on the Company's consolidated statements of income. A portion of current period non-service costs attributable capital projects is recorded as a regulatory asset and amortized to Miscellaneous income (expense), net over time.

The following assumptions were used in determining benefit obligations and net period benefit costs:

| | Defined Benefit Pension Plan | | Other Postretirement Benefits | | Non-Qualified Benefit Plans | |
|---|-------------------------------------|-------------|--------------------------------------|-------------------|------------------------------------|-------------|
| | 2022 | 2021 | 2022 | 2021 | 2022 | 2021 |
| Assumptions used to determine benefit obligations: | | | | | | |
| Discount rate | 5.42 % | 2.92 % | 5.47% - 5.51 % | 2.75% - 3.11 % | 5.42 % | 2.92 % |
| Rate of compensation increase | 4.21 % | 4.26 % | 4.04 % | 4.13 % | 5.10 % | 4.10 % |
| Assumptions used to determine net periodic benefit cost: | | | | | | |
| Discount rate | 2.92 % | 2.64 % | 2.75% - 3.11 % | 2.22% - 2.92 % | 2.92 % | 2.64 % |
| Rate of compensation increase | 4.26 % | 3.65 % | 4.13 % | 4.58 % | 4.10 % | 4.10 % |
| Long-term rate of return on plan assets | 6.75 % | 6.88 % | 4.83 % | 5.04 % | N/A | N/A |

As of December 31, 2022, there are no liabilities with sensitivity to health care cost trend rates.

PORTLAND GENERAL ELECTRIC COMPANY AND SUBSIDIARIES
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Changes in actuarial assumptions can also have a material effect on net periodic pension expense. A 0.50% reduction in the expected long-term rate of return on plan assets, or a 0.50% reduction in the discount rate, would have the effect of increasing the 2022 net periodic pension expense by approximately \$4 million and \$6 million, respectively.

The following table summarizes the benefits expected to be paid to participants in each of the next five years and in the aggregate for the five years thereafter (in millions):

| | Payments Due | | | | | |
|-------------------------------|---------------------|--------------|--------------|--------------|--------------|--------------------|
| | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 - 2032 |
| Defined benefit pension plan | \$ 59 | \$ 54 | \$ 54 | \$ 54 | \$ 53 | \$ 262 |
| Other postretirement benefits | 4 | 4 | 5 | 5 | 3 | 14 |
| Non-qualified benefit plans | 2 | 2 | 2 | 2 | 2 | 8 |
| Total | <u>\$ 65</u> | <u>\$ 60</u> | <u>\$ 61</u> | <u>\$ 61</u> | <u>\$ 58</u> | <u>\$ 284</u> |

All of the plans develop expected long-term rates of return for the major asset classes using long-term historical returns, with adjustments based on current levels and forecasts of inflation, interest rates, and economic growth. Also included are incremental rates of return provided by investment managers whose returns are expected to be greater than the markets in which they invest.

401(k) Retirement Savings Plan

PGE sponsors a 401(k) Plan that covers substantially all employees. For eligible employees who are covered by PGE's defined benefit pension plan, the Company matches employee contributions to the 401(k) Plan up to 6% of the employee's base pay. For eligible employees who are not covered by PGE's defined benefit pension plan, the Company contributes 5% of the employee's base salary, whether or not the employee contributes to the 401(k) Plan, and also matches employee contributions up to 5% of the employee's base pay.

For the majority of bargaining employees who are subject to the International Brotherhood of Electrical Workers Local 125 agreements the Company contributes an additional 1% of the employee's base salary, whether or not the employee contributes to the 401(k) Plan.

All contributions are invested in accordance with employees' elections, limited to investment options available under the 401(k) Plan. PGE made contributions to employee accounts of \$29 million in 2022, and \$26 million in 2021 and 2020.

PORTLAND GENERAL ELECTRIC COMPANY AND SUBSIDIARIES
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NOTE 12: INCOME TAXES

Income tax expense/(benefit) consists of the following (in millions):

| | Years Ended December 31, | | |
|--------------------|--------------------------|--------------|-------------|
| | 2022 | 2021 | 2020 |
| Current: | | | |
| Federal | \$ 9 | \$ 4 | \$ 6 |
| State and local | 24 | 14 | 17 |
| | <u>33</u> | <u>18</u> | <u>23</u> |
| Deferred: | | | |
| Federal | (1) | — | (22) |
| State and local | 7 | 5 | (1) |
| | <u>6</u> | <u>5</u> | <u>(23)</u> |
| Income tax expense | <u>\$ 39</u> | <u>\$ 23</u> | <u>\$ —</u> |

The significant differences between the U.S. Federal statutory rate and PGE's Effective tax rate for financial reporting purposes are as follows:

| | Years Ended December 31, | | |
|---|--------------------------|--------------|------------|
| | 2022 | 2021 | 2020 |
| Federal statutory tax rate | 21.0 % | 21.0 % | 21.0 % |
| Federal tax credits ⁽¹⁾ | (11.6) | (11.9) | (20.5) |
| State and local taxes, net of federal tax benefit | 8.8 | 8.9 | 10.1 |
| Flow through depreciation and cost basis differences | 0.8 | (0.2) | (4.9) |
| Local tax flow-through adjustment | — | (3.2) | — |
| Reversal of excess deferred income tax ⁽²⁾ | (4.5) | (4.8) | (4.7) |
| Other | (0.2) | (1.2) | (1.0) |
| Effective tax rate | <u>14.3 %</u> | <u>8.6 %</u> | <u>— %</u> |

(1) Federal tax credits consist primarily of production tax credits (PTCs) earned from Company-owned wind-powered generating facilities. The federal PTCs are earned based on a per-kilowatt hour rate, and as a result, the annual amount of PTCs earned will vary based on weather conditions and availability of the facilities. The PTCs are generated for 10 years from the corresponding facilities' in-service dates. PGE's PTC generation will end at various dates through 2030.

(2) The majority of excess deferred income taxes related to remeasurement under the TCJA is subject to IRS normalization rules and will be reversed over the remaining regulatory life of the assets using the average rate assumption method.

PORTLAND GENERAL ELECTRIC COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS, continued

Deferred income tax assets and liabilities consist of the following (in millions):

| | As of December 31, | |
|---------------------------------------|---------------------------|---------------|
| | 2022 | 2021 |
| Deferred income tax assets: | | |
| Employee benefits | \$ 99 | \$ 114 |
| Regulatory liabilities | 75 | 39 |
| Tax credits | 102 | 98 |
| Total deferred income tax assets | <u>276</u> | <u>251</u> |
| Deferred income tax liabilities: | | |
| Depreciation and amortization | 547 | 536 |
| Price risk management | 54 | — |
| Regulatory assets | 101 | 121 |
| Other | 13 | 7 |
| Total deferred income tax liabilities | <u>715</u> | <u>664</u> |
| Deferred income tax liability, net | <u>\$ 439</u> | <u>\$ 413</u> |

As of December 31, 2022, PGE has federal credit carryforwards of \$102 million, consisting of PTCs, which will expire at various dates through 2042. PGE believes that it is more likely than not that its deferred income tax assets as of December 31, 2022 and 2021 will be realized; accordingly, no valuation allowance has been recorded. As of December 31, 2022, and 2021, PGE had no material unrecognized tax benefits.

PGE and its subsidiaries file a consolidated federal income tax return. The Company also files income tax returns in the states of Oregon, California, and Montana, and in certain local jurisdictions. The Company files in other states to maintain compliance with remote worker rules and regulations. These additional state filings are not significant to the consolidated financial statements. The Internal Revenue Service (IRS) has completed its examination of all tax years through 2010 and all issues were resolved related to those years. The Company does not believe that any open tax years for federal or state income taxes could result in any adjustments that would be significant to the consolidated financial statements.

Local tax flow-through adjustment

The Company is subject to a local tax that is recovered through a supplemental tariff based on current tax expense, but for which the Company has also recognized deferred income tax expenses over time. Because it is probable that the local deferred taxes will be flowed through future customer prices in accordance with the supplemental tariff, PGE determined a corresponding regulatory asset should have been recorded. In 2021, PGE recognized a regulatory asset to defer previously recorded deferred income tax expenses in the amount of \$9 million with a corresponding credit to Income tax expense reflected in the consolidated statements of income for the year ended December 31, 2021.

Inflation Reduction Act

The Inflation Reduction Act of 2022 (“IRA”) was signed into law by President Biden on August 16, 2022. There is no immediate impact of the IRA to the year ended December 31, 2022. PGE will be closely monitoring guidance from the IRS regarding the enhanced energy credits available under the IRA. PGE expects to be able to generate and utilize increased energy credits in future periods, and as such, continues to hold that it is more likely than not that the deferred income tax assets will be realized.

NOTE 13: EQUITY-BASED PLANS***Equity Forward Sale Agreement***

On October 25, 2022, PGE entered into an equity forward sale agreement (EFSA) in connection with a public offering of 10,100,000 shares of its common stock.

Effective October 28, 2022, pursuant to the terms of the EFSA, the forward counterparties borrowed 11,615,000 shares of PGE's common stock, including 1,515,000 shares in connection with the underwriters' exercise of their option to purchase additional shares, from third parties in the open market and sold the shares to a group of underwriters for \$43.00 per share, less an underwriting discount equal to \$1.23625 per share. PGE will not receive any proceeds from the sale of common stock until the EFSA is settled, and at that time PGE will record the proceeds, if any, in equity.

Under the terms of the EFSA, PGE may elect to settle the equity forward transactions by means of physical, cash or net share settlement, in whole or in part, at any time on or prior to October 25, 2024, except in specified circumstances or events that would require physical settlement. To the extent that the transactions are physically settled, PGE would be required to issue and deliver shares of PGE common stock to the forward counterparty at the then applicable forward sale price. The forward sale price was initially determined to be \$43.00 per share at the time the EFSA was entered into, and the amount of cash to be received by PGE upon physical settlement of the EFSA is subject to certain adjustments in accordance with the terms of the EFSA.

PGE concluded that the EFSA was an equity instrument and that it qualified for an exception from derivative accounting because the EFSA was indexed to its own stock. PGE anticipates settling the EFSA through physical settlement on or before October 25, 2024.

At December 31, 2022, the Company could have physically settled the EFSA by delivering 11,615,000 shares to the forward counterparty in exchange for cash of \$483 million.

Prior to settlement, the potentially issuable shares pursuant to the EFSA will be reflected in PGE's diluted earnings per share calculations using the treasury stock method. Under this method, the number of shares of PGE's common stock used in calculating diluted earnings per share for a reporting period would be increased by the number of shares, if any, that would be issued upon physical settlement of the EFSA less the number of shares that could be purchased by PGE in the market with the proceeds received from issuance (based on the average market price during that reporting period). Share dilution occurs when the average market price of PGE's stock during the reporting period is higher than the average forward sale price during the reporting period. As of December 31, 2022, 201,003 incremental shares were included in the calculation of diluted EPS related to the securities under the EFSA. For additional information concerning the Company's diluted earnings per share, see Note 15, Earnings Per Share.

Employee Stock Purchase Plan

PGE has an employee stock purchase plan (ESPP) under which a total of 625,000 shares of the Company's common stock may be issued. The ESPP permits all eligible employees to purchase shares of PGE common stock through regular payroll deductions, which are limited to 10% of base pay. Each year, employees may purchase up to a maximum of \$25,000 in common stock or 1,500 shares (based on fair value on the purchase date), whichever is less. Two six-month offering periods occur annually, January 1 through June 30 and July 1 through December 31, during which eligible employees may contribute toward the purchase of shares of PGE common stock. Purchases occur the last day of the offering period, at a price equal to 95% of the fair value of the stock on the purchase date. As of December 31, 2022, there were 177,145 shares available for future issuance pursuant to the ESPP.

PORTLAND GENERAL ELECTRIC COMPANY AND SUBSIDIARIES
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Dividend Reinvestment and Direct Stock Purchase Plan

PGE has a Dividend Reinvestment and Direct Stock Purchase Plan (DRIP), under which a total of 2,500,000 shares of the Company's common stock may be issued. Under the DRIP, investors may elect to buy shares of the Company's common stock or elect to reinvest cash dividends in additional shares of the Company's common stock. As of December 31, 2022, there were 2,458,622 shares available for future issuance pursuant to the DRIP.

NOTE 14: STOCK-BASED COMPENSATION EXPENSE

Pursuant to the Portland General Electric Company Stock Incentive Plan as amended and restated effective February 13, 2018 (the Plan), the Company may grant a variety of equity-based awards, including restricted stock units (RSUs) with time-based vesting conditions (time-based RSUs) and performance-based vesting conditions (performance-based RSUs), to non-employee directors, officers, or certain key employees. RSU activity is summarized in the following table:

| | Units | Weighted Average Grant Date Fair Value |
|---|-----------|--|
| Nonvested units as of December 31, 2019 | 463,390 | \$ 43.52 |
| Granted | 202,883 | 56.45 |
| Forfeited | (17,341) | 50.27 |
| Vested | (170,536) | 45.67 |
| Nonvested units as of December 31, 2020 | 478,396 | 48.00 |
| Granted | 318,844 | 43.01 |
| Forfeited | (9,754) | 48.35 |
| Vested | (212,676) | 40.33 |
| Nonvested units as of December 31, 2021 | 574,810 | 48.07 |
| Granted | 271,696 | 51.29 |
| Forfeited | (76,913) | 49.48 |
| Vested | (190,132) | 49.11 |
| Nonvested units as of December 31, 2022 | 579,461 | 49.23 |

A total of 4,687,500 shares of common stock were registered for issuance under the Plan, of which 2,082,469 shares remain available for future issuance as of December 31, 2022.

Outstanding RSUs provide for the payment of one Dividend Equivalent Right (DER) for each stock unit. Each DER represents an amount equal to dividends paid to shareholders on a share of PGE's common stock and vests on the same schedule as the related RSU. The DERs are settled in shares of PGE common stock valued either at the closing stock price on the vesting date (for performance-based RSUs) or dividend payment date (for all other grants).

Time-based RSUs generally vest over a period of up to three years from the grant date. The fair value of time-based RSUs is measured based on the closing price of PGE common stock on the date of grant and charged to compensation expense on a straight-line basis over the requisite service period for the entire award. The total value of time-based RSUs vested was \$5 million for the year ended December 31, 2022, \$3 million for 2021, and \$1 million for 2020.

Performance-based RSUs vest based on the extent to which performance goals are met at the end of a three-year performance period, subject to adjustment by the Compensation, Culture and Talent Committee of PGE's Board of Directors. The number of RSUs that may vest under the grants is based on three equally-weighted metrics: i) actual return on equity relative to allowed return on equity; ii) average EPS growth; and iii) average megawatts of forecast energy from clean or certain low-carbon emitting resources added to PGE's energy supply portfolio—and relative

PORTLAND GENERAL ELECTRIC COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS, continued

total shareholder return (TSR) as a modifier to the total of the three equally-weighted metrics. Based on the attainment of the goals, the number of RSUs that vest can range from zero to 200% of the RSUs granted.

For return on equity, average EPS growth and carbon reduction metrics of the performance-based RSUs, fair value is measured based on the NYSE closing price of PGE common stock on the date of grant. For the TSR portion of the performance-based RSUs, fair value is determined using a Monte Carlo simulation with the following weighted average assumptions:

| | 2022 | | 2021 | | 2020 | |
|--------------------------|----------|--------|----------|--------|----------|--------|
| Risk-free interest rate | | 1.7 % | | 0.2 % | | 1.4 % |
| Expected term (in years) | | 2.9 | | 2.9 | | 2.9 |
| Volatility | 26.4 % - | 37.9 % | 26.1 % - | 37.9 % | 13.5 % - | 97.3 % |

There is no expected dividend yield used in the valuation, as it is assumed that all dividends distributed during the performance period are reinvested in the Company's underlying stock. The fair value of performance-based RSUs is charged to compensation expense on a straight-line basis over the requisite service period for the entire award based on the number of shares expected to vest. Stock-based compensation expense was calculated assuming the attainment of performance goals that would allow the weighted average vesting of 118.7%, 88.6%, and 110.6% of awarded performance-based RSUs for the respective 2022, 2021, and 2020 grants, with an estimated 5% forfeiture rate.

The total value of performance-based RSUs vested was \$6 million for the year ended December 31, 2022, \$7 million for 2021, and \$9 million for 2020.

Stock-based compensation, included in Administrative and other expense in the consolidated statements of income, was \$15 million for the year ended December 31, 2022, \$14 million for 2021, and \$11 million in 2020. Such amounts differ from those reported in the consolidated statements of shareholders' equity for stock-based compensation due primarily to the impact from the income tax payments made on behalf of employees. The Company withholds a portion of the vested shares for the payment of income taxes on behalf of the employees. Not included in Administrative and other expenses in the consolidated statements of income, is the net impact from these income tax payments, partially offset by the issuance of DERs, resulting in a charge to shareholders' equity of \$4 million in 2022, \$1 million in 2021, and \$2 million in 2020.

As of December 31, 2022, unrecognized stock-based compensation expense was \$13 million, which is expected to be recognized over a weighted average period of one to three years. No stock-based compensation costs have been capitalized.

NOTE 15: EARNINGS PER SHARE

Basic earnings per share are computed based on the weighted average number of common shares outstanding during the year. Diluted earnings per share are computed using the weighted average number of common shares outstanding and the effect of dilutive potential common shares outstanding during the year using the treasury stock method. Potential common shares consist of: i) employee stock purchase plan shares; ii) contingently issuable time-based and performance-based restricted stock units, along with associated DERs; and iii) shares issuable pursuant to the EFSA. See Note 13, Equity-based Plans, for additional information on the EFSA and its impact on earnings per share. Unvested performance-based restricted stock units and associated DERs are included in dilutive potential common shares only after the performance criteria have been met. Anti-dilutive stock awards are excluded from the calculation of diluted earnings per common share.

PORTLAND GENERAL ELECTRIC COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS, continued

Net income attributable to PGE common shareholders is the same for both the basic and diluted earnings per share computations. The reconciliations of the denominators of the basic and diluted earnings per share computations are as follows (in thousands):

| | Years Ended December 31, | | |
|--|---------------------------------|---------------|---------------|
| | 2022 | 2021 | 2020 |
| Weighted average common shares outstanding—basic | 89,290 | 89,481 | 89,485 |
| Dilutive potential common shares | 353 | 146 | 160 |
| Weighted average common shares outstanding—diluted | <u>89,643</u> | <u>89,627</u> | <u>89,645</u> |

NOTE 16: COMMITMENTS AND GUARANTEES

Purchase Commitments

As of December 31, 2022, PGE’s estimated future minimum payments pursuant to purchase obligations for the following five years and thereafter are as follows (in millions):

| | Payments Due | | | | | | | Total |
|--|---------------------|---------------|---------------|---------------|---------------|-------------------|-----------------|--------------|
| | 2023 | 2024 | 2025 | 2026 | 2027 | Thereafter | | |
| Capital and other purchase commitments | \$ 239 | \$ 70 | \$ 36 | \$ 5 | \$ 2 | \$ 43 | \$ 395 | |
| Purchased power and fuel: | | | | | | | | |
| Electricity purchases | 457 | 449 | 428 | 303 | 309 | 3,653 | 5,599 | |
| Capacity contracts | 17 | 17 | 20 | 5 | 5 | 69 | 133 | |
| Public utility districts | 12 | 12 | 11 | 10 | 9 | 23 | 77 | |
| Natural gas | 158 | 43 | 38 | 37 | 30 | 202 | 508 | |
| Coal and transportation | 27 | 27 | 27 | — | — | — | 81 | |
| Total | <u>\$ 910</u> | <u>\$ 618</u> | <u>\$ 560</u> | <u>\$ 360</u> | <u>\$ 355</u> | <u>\$ 3,990</u> | <u>\$ 6,793</u> | |

Capital and other purchase commitments—Certain commitments have been made for 2023 and beyond that include those related to hydro licenses, upgrades to generation, distribution, and transmission facilities, information systems, and system maintenance work. Termination of these agreements could result in cancellation charges.

Electricity purchases and Capacity contracts—PGE has power purchase agreements with counterparties, which expire at varying dates through 2053, and power capacity contracts through 2051. Expenses associated with these commitments are recorded in purchased power and fuel on the Company’s Consolidated Statements of Income.

Public utility districts—PGE has long-term power purchase agreements with certain public utility districts (PUDs) in the state of Washington:

- Grant County PUD for the Priest Rapids and Wanapum Hydroelectric Projects, and
- Douglas County PUD for the Wells Hydroelectric Project.

Under the Grant County agreements, the Company is required to pay its proportionate share of the operating and debt service costs of the hydroelectric projects whether they are operable or not. Under the Douglas County agreement, the Company is required to make monthly payments for capacity that will not vary with annual project generation provided to PGE. The Company has estimated the capacity payments, which are subject to annual adjustments based on Douglas County’s loads, and included the estimated amounts in the table above. The future minimum payments for the PUDs in the preceding table reflect the principal and capacity payments only and do not include interest, operation, or maintenance expenses.

PORTLAND GENERAL ELECTRIC COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS, continued

Selected information regarding these projects is summarized as follows (dollars in millions):

| | <u>Capacity Charges and Revenue Bonds as of December 31, 2022</u> | <u>PGE's Average Share as of December 31, 2022</u> | | <u>Contract Expiration</u> | <u>Total PGE Contract Costs</u> | | |
|---------------------------|---|--|----------------------------|----------------------------|---------------------------------|-------------|-------------|
| | | <u>Output</u> | <u>Capacity</u> (in MW) | | <u>2022</u> | <u>2021</u> | <u>2020</u> |
| Priest Rapids and Wanapum | \$ 2,042 | 8.6 % | 163 | 2052 | \$ 45 | \$ 26 | \$ 25 |
| Wells | 421 | 18.8 | 113 | 2028 | 12 | 13 | 23 |

The agreements for Priest Rapids, Wanapum, and Wells provide that, should any other purchaser of output default on payments as a result of bankruptcy or insolvency, PGE would be allocated a pro-rata share of the output and operating and debt service costs of the defaulting purchaser. For Wells, PGE would be responsible for a pro-rata portion of the defaulting purchaser's share with no limitation, regardless of the reason for any default. For Priest Rapids and Wanapum, PGE would be allocated up to a cumulative maximum that would not adversely affect the tax-exempt status of any of the public utility district's outstanding debt for the portion of the project that benefits tax-exempt purchasers.

Natural gas—PGE has contracts for the purchase and transportation of natural gas from domestic and Canadian sources for its natural gas-fired generating facilities.

Coal—The Company has a coal agreement with take-or-pay provisions related to Colstrip Units 3 and 4 coal-fired generating plant (Colstrip) that expires in December 2025.

Guarantees

PGE enters into financial agreements, and purchase and sale agreements involving physical delivery of, both power and natural gas that include indemnification provisions relating to certain claims or liabilities that may arise relating to the transactions contemplated by these agreements. Generally, a maximum obligation is not explicitly stated in the indemnification provisions and, therefore, the overall maximum amount of the obligation under such indemnifications cannot be reasonably estimated. PGE periodically evaluates the likelihood of incurring costs under such indemnities based on the Company's historical experience and the evaluation of the specific indemnities. As of December 31, 2022, management believes the likelihood is remote that PGE would be required to perform under such indemnification provisions or otherwise incur any significant losses with respect to such indemnities. The Company has not recorded any liability on the consolidated balance sheets with respect to these indemnities.

NOTE 17: LEASES

PGE determines if an arrangement is a lease at inception and whether the arrangement is classified as an operating or finance lease. At commencement of the lease, PGE records a right-of-use (ROU) asset and lease liability in the consolidated balance sheets based on the present value of lease payments over the term of the arrangement. ROU assets represent the right to use an underlying asset for the lease term and lease liabilities represent PGE's obligation to make lease payments arising from the lease. If the implicit rate is not readily determinable in the contract, PGE uses its incremental borrowing rate based on the information available at commencement date in determining the present value of lease payments. Contract terms may include options to extend or terminate the lease, and, when the Company deems it is reasonably certain that PGE will exercise that option, it is included in the ROU asset and lease liability.

PORTLAND GENERAL ELECTRIC COMPANY AND SUBSIDIARIES
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Operating leases reflect lease expense on a straight-line basis, while finance leases result in the separate presentation of interest expense on the lease liability and amortization expense of the ROU asset. Any material differences between expense recognition and timing of payments is deferred as a regulatory asset or liability in order to match what is being recovered in customer prices for ratemaking purposes.

PGE does not record leases with a term of 12-months or less in the consolidated balance sheets. Total short-term lease costs as of December 31, 2022 are immaterial. PGE has lease agreements with lease and non-lease components, which are accounted for separately.

The Company's leases relate primarily to the use of land, support facilities, gas storage, energy storage equipment, and power purchase agreements that rely on identified plant. Variable payments are generally related to gas storage and power purchase agreements for components dependent upon variable factors, such as energy production and property taxes, and are not included in the determination of the present value of lease payments.

The components of lease cost were as follows (in millions):

| | <u>2022</u> | <u>2021</u> |
|-------------------------------------|--------------|--------------|
| Operating lease cost | \$ 4 | \$ 8 |
| Finance lease cost: | | |
| Amortization of right-of-use assets | \$ 14 | \$ 7 |
| Interest on lease liabilities | 15 | 11 |
| Total finance lease cost | <u>\$ 29</u> | <u>\$ 18</u> |
| Variable lease cost | \$ 31 | \$ 24 |

Supplemental information related to amounts and presentation of leases in the consolidated balance sheets is presented below (in millions):

| | <u>Balance Sheet Classification</u> | <u>As of December 31,</u> | |
|--|---|---------------------------|---------------|
| | | <u>2022</u> | <u>2021</u> |
| Operating Leases: | | | |
| Operating lease right-of-use assets | Other noncurrent assets | \$ 22 | \$ 25 |
| Current liabilities | Accrued expenses and other current liabilities | \$ 4 | \$ 4 |
| Noncurrent liabilities | Other noncurrent liabilities | 18 | 22 |
| Total operating lease liabilities * | | <u>\$ 22</u> | <u>\$ 26</u> |
| Finance Leases: | | | |
| Finance lease right-of-use assets | Electric utility plant, net | \$ 305 | \$ 291 |
| Current liabilities | Current portion of finance lease obligations | \$ 20 | \$ 20 |
| Noncurrent liabilities | Finance lease obligations, net of current portion | 294 | 273 |
| Total finance lease liabilities * | | <u>\$ 314</u> | <u>\$ 293</u> |

* Included in lease liabilities are \$186 million and \$161 million related to power purchase agreements for the years ended December 31, 2022 and 2021, respectively.

PORTLAND GENERAL ELECTRIC COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS, continued

Lease term and discount rates were as follows:

| | <u>December 31, 2022</u> | <u>December 31, 2021</u> |
|---|--------------------------|--------------------------|
| Weighted Average Remaining Lease Term (in years) | | |
| Operating leases | 44 | 40 |
| Finance leases | 22 | 23 |
| Weighted Average Discount Rate | | |
| Operating leases | 3.9 % | 3.8 % |
| Finance leases | 4.9 % | 5.0 % |

PGE's gas storage finance lease contains five 10-year renewal periods which have not been included in the finance lease obligation.

As of December 31, 2022, maturities of lease liabilities were as follows (in millions):

| | <u>Operating Leases</u> | <u>Finance Leases</u> |
|-----------------------|-------------------------|-----------------------|
| 2023 | \$ 4 | \$ 20 |
| 2024 | 3 | 20 |
| 2025 | 1 | 27 |
| 2026 | 1 | 27 |
| 2027 | 1 | 27 |
| Thereafter | 42 | 382 |
| Total lease payments | 52 | 503 |
| Less imputed interest | (30) | (189) |
| Total | <u>\$ 22</u> | <u>\$ 314</u> |

Supplemental cash flow information related to leases for the years indicated was as follows (in millions):

| | <u>2022</u> | <u>2021</u> | <u>2020</u> |
|--|-------------|-------------|-------------|
| Cash paid for amounts included in the measurement of lease liabilities: | | | |
| Operating cash flows from operating leases | \$ 4 | \$ 8 | \$ 8 |
| Operating cash flows from finance leases | 15 | 11 | 10 |
| Financing cash flows from finance leases | 7 | 6 | \$ 6 |
| Right-of-use assets obtained in leasing arrangements: | | | |
| Operating leases | \$ — | \$ (12) | \$ — |
| Finance leases | 29 | 153 | — |

NOTE 18: JOINTLY-OWNED PLANT

As of December 31, 2022, PGE had the following investments in jointly-owned plant (dollars in millions):

| | <u>PGE Share</u> | <u>In-service Date</u> | <u>Plant In-service</u> | <u>Accumulated Depreciation ⁽¹⁾</u> | <u>Construction Work In Progress</u> |
|-----------------------------------|------------------|------------------------|-------------------------|--|--------------------------------------|
| Colstrip | 20.00 % | 1986 | \$ 571 | \$ 421 | \$ — |
| Pelton/Round Butte ⁽²⁾ | 50.01 % | 1958 / 1964 | 210 | 69 | 12 |
| Total | | | <u>\$ 781</u> | <u>\$ 490</u> | <u>\$ 12</u> |

(1) Excludes AROs and accumulated asset retirement removal costs.

PORTLAND GENERAL ELECTRIC COMPANY AND SUBSIDIARIES
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(2) PGE operates the Pelton/Round Butte Project and had a 66.67% ownership interest as of December 31, 2021. Effective January 1, 2022, PGE sold an additional 16.66% ownership interest to the party who holds the remaining ownership interest, resulting in PGE's 50.01% ownership interest.

Under the respective joint operating agreements for the generating facilities, each participating owner is responsible for financing its share of capital and operating expenses. PGE's proportionate share of direct operating and maintenance expenses of the facilities is included in the corresponding operating and maintenance expense categories in the consolidated statements of income.

The Company operated, and continues to have a 90% ownership interest in Boardman, which ceased coal-fired operations during 2020. The Company has begun decommissioning the facility. As of December 31, 2022, PGE's ARO liability for its 90% share of the decommissioning costs was \$13 million.

NOTE 19: CONTINGENCIES

PGE is subject to legal, regulatory, and environmental proceedings, investigations, and claims that arise from time to time in the ordinary course of its business. The Company may seek regulatory recovery of certain costs that are incurred in connection with such matters, although there can be no assurance that such recovery would be granted.

PGE evaluates, on a quarterly basis, developments in such matters that could affect the amount of any accrual, as well as the likelihood of developments that would make a loss contingency both probable and reasonably estimable. The assessment as to whether a loss is probable or reasonably possible, and as to whether such loss or a range of such loss is estimable, often involves a series of complex judgments about future events. Management is often unable to estimate a reasonably possible loss, or a range of loss, particularly in cases in which: i) the damages sought are indeterminate or the basis for the damages claimed is not clear; ii) the proceedings are in the early stages; iii) discovery is not complete; iv) the matters involve novel or unsettled legal theories; v) significant facts are in dispute; vi) a large number of parties are represented (including circumstances in which it is uncertain how liability, if any, would be shared among multiple defendants); or vii) a wide range of potential outcomes exist. In such cases, there is considerable uncertainty regarding the timing or ultimate resolution, including any possible loss, fine, penalty, or business impact.

EPA Investigation of Portland Harbor

An investigation by the United States Environmental Protection Agency (EPA) of a segment of the Willamette River known as Portland Harbor that began in 1997 revealed significant contamination of river sediments. The EPA subsequently included Portland Harbor on the National Priority List pursuant to the federal Comprehensive Environmental Response, Compensation, and Liability Act as a federal Superfund site. PGE has been included among more than one hundred Potentially Responsible Parties (PRPs) as it historically owned or operated property near the river.

A Portland Harbor site remedial investigation was completed pursuant to an agreement between the EPA and several PRPs known as the Lower Willamette Group (LWG), which did not include PGE. The LWG funded the remedial investigation and feasibility study and stated that it had incurred \$115 million in investigation-related costs. The Company anticipates that such costs will ultimately be allocated to PRPs as a part of the allocation process for remediation costs of the EPA's preferred remedy.

The EPA finalized the feasibility study, along with the remedial investigation, and the results provided the framework for the EPA to determine a clean-up remedy for Portland Harbor that was documented in a Record of Decision (ROD) issued in 2017. The ROD outlined the EPA's selected remediation plan for clean-up of Portland Harbor that had an undiscounted estimated total cost of \$1.7 billion, comprised of \$1.2 billion related to remediation construction costs and \$0.5 billion related to long-term operation and maintenance costs. Remediation construction

costs were estimated to be incurred over a 13-year period, with long-term operation and maintenance costs estimated to be incurred over a 30-year period from the start of construction. Stakeholders have raised concerns that EPA's cost estimates are understated, and PGE estimates undiscounted total remediation costs for Portland Harbor per the ROD could range from \$1.9 billion to \$3.5 billion. The EPA acknowledged the estimated costs are based on data that was outdated and that pre-remedial design sampling was necessary to gather updated baseline data to better refine the remedial design and estimated cost.

A small group of PRPs performed pre-remedial design sampling to update baseline data and submitted the data in an updated evaluation report to the EPA for review. The evaluation report concluded that the conditions of the Portland Harbor have improved substantially over the past ten years. In response, the EPA indicated that while it would use the data to inform implementation of the ROD, the EPA's conclusions remained materially unchanged. With the completion of pre-remedial design sampling, Portland Harbor is now in the remedial design phase, which consists of additional technical information and data collection to be used to design the expected remedial actions. Certain PRPs, not including PGE, have entered into consent agreements to perform remedial design and the EPA has indicated it will take the initial lead to perform remedial design on the remaining areas. The Company anticipates that remedial design costs will ultimately be allocated to PRPs as a part of the allocation process for remediation costs of the EPA's preferred remedy. The EPA announced in February 2021 that the entirety of Portland Harbor was under an active engineering design phase.

PGE continues to participate in a voluntary process to determine an appropriate allocation of costs amongst the PRPs. Significant uncertainties remain surrounding facts and circumstances that are integral to the determination of such an allocation percentage, including conclusion of remedial design, a final allocation methodology, and data with regard to property specific activities and history of ownership of sites within Portland Harbor that will inform the precise boundaries for clean-up. It is probable that PGE will share in a portion of the costs related to Portland Harbor. Based on the above facts and remaining uncertainties in the voluntary allocation process, PGE does not currently have sufficient information to reasonably estimate the amount, or range, of its potential liability or determine an allocation percentage that represents PGE's portion of the liability to clean-up Portland Harbor. However, the Company may obtain sufficient information, prior to the final determination of allocation percentages among PRPs, to develop a reasonable estimate, or range, of its potential liability that would require recording of the estimate, or low end of the range. The Company's liability related to the cost of remediating Portland Harbor could be material to PGE's financial position.

In cases in which injuries to natural resources have occurred as a result of releases of hazardous substances, federal and state natural resource trustees may seek to recover for damages at such sites, which are referred to as Natural Resource Damages (NRD). The EPA does not manage NRD assessment activities but does provide claims information and coordination support to the NRD trustees. NRD assessment activities are typically conducted by a Council made up of the trustee entities for the site. The Portland Harbor NRD trustees consist of the National Oceanic and Atmospheric Administration, the U.S. Fish and Wildlife Service, the State, the Confederated Tribes of the Grand Ronde Community of Oregon, the Confederated Tribes of Siletz Indians, the Confederated Tribes of the Umatilla Indian Reservation, the Confederated Tribes of the Warm Springs Reservation of Oregon, and the Nez Perce Tribe.

The NRD trustees may seek to negotiate legal settlements or take other legal actions against the parties responsible for the damages. Funds from such settlements must be used to restore injured resources and may also compensate the trustees for costs incurred in assessing the damages. The Company believes that PGE's portion of NRD liabilities related to Portland Harbor will not have a material impact on its results of operations, financial position, or cash flows.

The impact of costs related to EPA and NRD liabilities on the Company's results of operations is mitigated by the Portland Harbor Environmental Remediation Account (PHERA) mechanism. As approved by the OPUC in 2017, the PHERA allows the Company to defer and recover incurred estimated liabilities and environmental expenditures related to Portland Harbor through a combination of third-party proceeds, including but not limited to insurance

recoveries, and, if necessary, through customer prices. The mechanism established annual prudency reviews of environmental expenditures and third-party proceeds. Annual expenditures in excess of \$6 million, excluding expenses related to contingent liabilities, are subject to an annual earnings test and would be ineligible for recovery to the extent PGE's actual regulated return on equity exceeds its return on equity as authorized by the OPUC in PGE's most recent GRC. PGE's results of operations may be impacted to the extent such expenditures are deemed imprudent by the OPUC or ineligible per the prescribed earnings test. The Company plans to seek recovery of any costs resulting from EPA's determination of liability for Portland Harbor through application of the PHERA. At this time, PGE is not recovering any Portland Harbor cost from the PHERA through customer prices.

Governmental Investigations

In March, April, and May 2021, the Division of Enforcement of the Commodity Futures Trading Commission (the "CFTC"), the Division of Enforcement of the SEC, and the Division of Enforcement of the FERC, respectively, informed the Company they are conducting investigations arising out of the energy trading losses the Company previously announced in August 2020. The Company is cooperating with the CFTC, SEC, and FERC. Management cannot at this time predict the eventual scope or outcome of these matters.

Colstrip-Related Litigation

The Company has a 20% ownership interest in Colstrip, which is operated by one of the co-owners, Talen Montana, LLC (Talen). On May 10, 2022, Talen's parent company, Talen Energy Supply, LLC, filed for chapter 11 bankruptcy protection, although Colstrip continues to operate and generate electricity for PGE customers and others. Various business disagreements have arisen amongst the co-owners regarding interpretation of the Ownership and Operation (O&O) Agreement and other matters. An arbitration process has been initiated to address such business disagreements and has resulted in several legal proceedings. These legal proceedings, as well as other matters related to Colstrip, are summarized below.

Arbitration—On March 12, 2021, co-owner NorthWestern Corporation (NorthWestern) initiated arbitration against all other co-owners of Colstrip to determine whether co-owners representing 55% or more of the ownership shares can vote to close one or both units of Colstrip, or, alternatively, whether unanimous consent is required. The O&O Agreement among the parties states that any dispute shall be submitted for resolution to a single arbitrator with appropriate expertise. This arbitration process was initially stayed as a result of the bankruptcy filing of Talen's parent company, but that stay was lifted in August 2022, by a voluntary stipulation, described below. The arbitration has once again been stayed through March 31, 2023, by agreement of the parties. PGE cannot predict the ultimate outcome of the arbitration process.

Petition to compel arbitration—In April 2021, Avista Corporation, Puget Sound Energy Inc., PacifiCorp, and PGE (the Petitioners) petitioned in Spokane County Superior Court, Washington, Case No. 21201000-32, against NorthWestern and Talen to compel the arbitration initiated by NorthWestern that is described above. In May 2021, Talen removed the case to Federal Court (Eastern District of Washington Case No. 2:21-cv-00163-RMP). Following a hearing in July 2021, Talen's motion to transfer the case to the U.S. District Court for the District of Montana was granted. This matter is stayed, because of the bankruptcy filing of Talen's parent company. The voluntary stipulation described below (see "*Challenge to constitutionality of Montana Senate Bills 265 and 266 (MSB 265 and MSB 266)*") did not lift the stay on this court action.

Challenge to constitutionality of Montana Senate Bills 265 and 266 (MSB 265 and MSB 266)—On May 4, 2021, the Petitioners filed a claim against NorthWestern and Talen in U.S. District Court - Montana, Billings Division, Case No. 1:21-cv-00047-SPW-KLD, based on the passage of MSB 265, which attempted to void contractual arbitration provisions within the O&O Agreement if they do not provide for three arbitrators or provide for venue outside of the county where the plant is located. The passage of MSB 265 was supported by Defendants and purported to void the O&O Agreement among all parties, which provides for one arbitrator and venue in Spokane, Washington. The

PORTLAND GENERAL ELECTRIC COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS, continued

Petitioners allege that MSB 265 violated the contracts clause of the U.S. Constitution and the Montana Constitution, and is preempted by the Federal Arbitration Act (FAA). The Petitioners sought declaratory relief that MSB 265 was unconstitutional as applied to the O&O Agreement and the FAA preempted the enforcement of MSB 265.

Petitioners filed a First Amended Complaint on May 19, 2021, adding the Attorney General of Montana (Montana AG) as defendant and challenging the constitutionality of MSB 266, which purportedly gives the Montana AG authority to penalize and restrain any co-owner of Colstrip who takes steps to shut-down the plant without unanimous consent, and authority to penalize any co-owner who fails or refuses to pay the costs to maintain the plant. The Court held a hearing on August 6, 2021 and on October 13, 2021, the Court issued an order that granted the Petitioners' Motion for Preliminary Injunction, enjoining the Montana AG from enforcing MSB 266 against them.

On August 17, 2021, the Petitioners filed for partial summary judgment on their claim to declare MSB 265 preempted by the FAA and unconstitutional. On October 29, 2021, the Petitioners filed a motion for partial summary judgment on their claim to declare MSB 266 unconstitutional and unenforceable. A decision on this matter had been stayed as a result of the bankruptcy filing of Talen's parent company, but the stay was lifted by a voluntary stipulation filed by Petitioners, Talen, and NorthWestern, and ordered by the bankruptcy court on August 25, 2022. On September 29, 2022, the Magistrate Judge issued Findings and Recommendations, which were adopted in full by the Court on October 19, 2022, granting both of the Petitioners' motions for summary judgment regarding the constitutionality of MSB 265 and MSB 266 by finding that MSB 266 was unconstitutional, and MSB 265 was unconstitutional and in the alternative preempted by the FAA.

Complaint to implement MSB 265—On May 4, 2021, Talen filed a complaint against the Petitioners and NorthWestern, in the Thirteenth Judicial District Court in the State of Montana, as an attempt to implement Montana laws when determining the language of the O&O agreement based on the recent enactment of MSB 265. The case was subsequently removed to the U.S. District Court - Montana, Billings Division, Case No. 1:21-cv-00058-SPW-TJC. This matter is stayed, because of the bankruptcy filing of Talen's parent company.

Richard Burnett; Colstrip Properties Inc., et al v. Talen Montana, LLC; PGE, et al—In December 2020, the original claim was filed in the Montana Sixteenth Judicial District Court, Rosebud County, Cause No. CV-20-58. The plaintiffs allege they have suffered adverse effects from the defendants' coal dust. In August 2021, the claim was amended to add PGE as a defendant. Plaintiffs are seeking economic damages, costs and disbursements, punitive damages, attorneys' fees, and an injunction prohibiting defendants from allowing coal dust to blow onto plaintiffs' properties, as determined by the Court. The Court set trial to begin September 26, 2023. This matter was stayed as a result of the bankruptcy filing of Talen's parent company. On September 23, 2022, by stipulation by the parties and order of the Court, the stay was modified to allow for some limited discovery by the parties in this matter. Pursuant to a stipulation by the parties, litigation can fully resume after February 13, 2023.

Since these lawsuits (except for the challenge to constitutionality of MSB 265 and MSB 266) are in early stages, the Company is unable to predict outcomes or estimate a range of reasonably possible losses.

Other Matters

PGE is subject to other regulatory, environmental, and legal proceedings, investigations, and claims that arise from time to time in the ordinary course of business, which may result in judgments against the Company. Although management currently believes that resolution of such known matters, individually and in the aggregate, will not have a material impact on its financial position, results of operations, or cash flows, these matters are subject to inherent uncertainties, and management's view of these matters may change in the future.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE.

None.

ITEM 9A. CONTROLS AND PROCEDURES.

(a) Disclosure Controls and Procedures

Management of the Company, under the supervision and with the participation of the Chief Executive Officer and the Chief Financial Officer, has evaluated the effectiveness of the Company's disclosure controls and procedures (as defined in Rule 13a-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act")) as of the end of the period covered by this report pursuant to Rule 13a-15(b) under the Exchange Act. Based on that evaluation, the Chief Executive Officer and Chief Financial Officer have concluded that, as of the end of such period, the Company's disclosure controls and procedures are effective.

(b) Management's Annual Report on Internal Control over Financial Reporting

The Company's management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act). The Company's internal control over financial reporting is a process designed by, or under the supervision of, the Chief Executive Officer and Chief Financial Officer to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the Company's financial statements for external purposes in accordance with accounting principles generally accepted in the United States of America.

Management of the Company, under the supervision and with the participation of the Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of the Company's internal control over financial reporting as of the end of the period covered by this report pursuant to Rule 13a-15(c) under the Exchange Act. Management's assessment was based on the framework established in *Internal Control-Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this assessment, management has concluded that, as of December 31, 2022, the Company's internal control over financial reporting is effective.

The Company's internal control over financial reporting, as of December 31, 2022, has been audited by Deloitte & Touche LLP, the independent registered public accounting firm who audits the Company's consolidated financial statements, as stated in their report included in Item 8.—"Financial Statements and Supplementary Data," which expresses an unqualified opinion on the effectiveness of the Company's internal control over financial reporting, as of December 31, 2022.

(c) Changes in Internal Control over Financial Reporting

There have not been any changes in the Company's internal control over financial reporting during the fourth quarter of 2022 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

ITEM 9B. OTHER INFORMATION.

None.

ITEM 9C. DISCLOSURES REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS.

Not applicable.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE.

Certain information required by Item 10 is incorporated herein by reference to the relevant information under the captions “Corporate Governance” and “Item 1: Election of Directors” in the Company’s definitive proxy statement to be filed pursuant to Regulation 14A with the United States Securities and Exchange Commission (SEC) in connection with the Annual Meeting of Shareholders scheduled to be held on April 21, 2023. Information regarding executive officers of Portland General Electric Company may be found in Part I, Item 1. Business of this Annual Report on Form 10-K.

ITEM 11. EXECUTIVE COMPENSATION.

The information required by Item 11 is incorporated herein by reference to the relevant information under the captions “Item 1: Election of Directors—Director Compensation,” “Item 1: Election of Directors—Board Committees—Compensation, Culture and Talent Committee—Compensation, Culture and Talent Committee Interlocks,” “Compensation, Culture and Talent Committee Report,” “Compensation Discussion and Analysis,” and “Executive Compensation Tables” in the Company’s definitive proxy statement to be filed pursuant to Regulation 14A with the SEC in connection with the Annual Meeting of Shareholders scheduled to be held on April 21, 2023.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS.

The information required by Item 12 is incorporated herein by reference to the relevant information under the captions “Security Ownership of Certain Beneficial Owners, Directors and Executive Officers,” in the Company’s definitive proxy statement to be filed pursuant to Regulation 14A with the SEC in connection with the Annual Meeting of Shareholders scheduled to be held on April 21, 2023.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE.

The information required by Item 13 is incorporated herein by reference to the relevant information under the caption “Corporate Governance” in the Company’s definitive proxy statement to be filed pursuant to Regulation 14A with the SEC in connection with the Annual Meeting of Shareholders scheduled to be held on April 21, 2023.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES.

The information required by Item 14 is incorporated herein by reference to the relevant information under the captions “Principal Accountant Fees and Services” and “Pre-Approval Policy for Independent Auditor Services” in the Company’s definitive proxy statement to be filed pursuant to Regulation 14A with the SEC in connection with the Annual Meeting of Shareholders scheduled to be held on April 21, 2023.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES.

(a) Financial Statements and Schedules

The financial statements are set forth under Item 8 of this Annual Report on Form 10-K. Financial statement schedules have been omitted since they are either not required, not applicable, or the information is otherwise included.

(b) Exhibit Listing

| Exhibit Number | Description |
|----------------|---|
| (3) | Articles of Incorporation and Bylaws |
| 3.1* | Third Amended and Restated Articles of Incorporation of Portland General Electric Company (Form 8-K filed May 9, 2014, Exhibit 3.1). |
| 3.2* | Eleventh Amended and Restated Bylaws of Portland General Electric Company (Form 10-K filed February 15, 2019, Exhibit 3.2). |
| (4) | Instruments defining the rights of security holders, including indentures |
| 4.1* | Portland General Electric Company Indenture of Mortgage and Deed of Trust dated July 1, 1945 (Form 8, Amendment No. 1 dated June 14, 1965) (File No. 001-05532-99). |
| 4.2* | Fortieth Supplemental Indenture dated October 1, 1990 (Form 10-K for the year ended December 31, 1990, Exhibit 4) (File No. 001-05532-99). |
| 4.3* | Seventy-third Supplemental Indenture dated August 1, 2017, between the Company and Wells Fargo Bank, National Association, as Trustee (Form 8-K filed August 3, 2017, Exhibit 4.1). |
| 4.4* | Seventy-fifth Supplemental Indenture, dated April 1, 2019, between the Company and Wells Fargo Bank, National Association, as trustee (Form 8-K filed April 15, 2019, Exhibit 4.1). |
| 4.5* | Description of Securities (Form 10-K filed February 15, 2019, Exhibit 4.6). |
| (10) | Material Contracts |
| 10.1* | First Amendment to Credit Agreement, dated as of September 9, 2022, among Portland General Electric Company, the Lenders, and Wells Fargo Bank, National Association, as administrative agent for the Lenders. (8-K filed September 9, 2022, Exhibit 10.1). |
| 10.2* | Portland General Electric Company Outplacement Assistance Plan dated June 15, 2005 (Form 8-K filed June 20, 2005, Exhibit 10.2) (File No. 001-05532-99). + |
| 10.3* | Portland General Electric Company 2005 Management Deferred Compensation Plan dated January 1, 2005 (Form 10-K filed March 11, 2005, Exhibit 10.18) (File No. 001-05532-99). + |
| 10.4* | Portland General Electric Company Management Deferred Compensation Plan dated March 12, 2003 (Form 10-Q filed May 15, 2003, Exhibit 10.1) (File No. 001-05532-99). + |
| 10.5* | Portland General Electric Company Supplemental Executive Retirement Plan dated March 12, 2003 (Form 10-Q filed May 15, 2003, Exhibit 10.2) (File No. 001-05532-99). + |
| 10.6* | Portland General Electric Company Umbrella Trust for Management dated March 12, 2003 (Form 10-Q filed May 15, 2003, Exhibit 10.4) (File No. 001-05532-99). + |
| 10.7* | Portland General Electric Company 2006 Outside Directors' Deferred Compensation Plan (Form 8-K filed May 17, 2006, Exhibit 10.1) (File No. 001-05532-99). + |
| 10.8* | Form of Portland General Electric Company Agreement Concerning Indemnification and Related Matters (Form 8-K filed December 24, 2009, Exhibit 10.1) (File No. 001-05532-99). + |
| 10.9* | Form of Portland General Electric Company Agreement Concerning Indemnification and Related Matters for Officers and Key Employees (Form 8-K filed February 19, 2010, Exhibit 10.1) (File No. 001-05532-99). + |
| 10.10* | Form of Directors' Restricted Stock Unit Agreement (Form 10-K filed February 15, 2019, Exhibit 10.18).+ |

| Exhibit Number | Description |
|-----------------------|--|
| 10.11* | Portland General Electric Company Amended and Restated Incentive Compensation Clawback and Cancellation Policy. (Form 10-K filed February 19, 2021, Exhibit 10.19). + |
| 10.12* | Portland General Electric Company Amended and Restated Severance Pay Plan for Executive Employees (the "Amended Plan"), effective July 27, 2021 (Form 10-Q filed July 30, 2021, Exhibit 10.1). + |
| 10.13* | Portland General Electric Company Annual Cash Incentive Plan as amended and restated effective July 27, 2021 (Form 10-Q filed July 30, 2021, Exhibit 10.2). + |
| 10.14* | Portland General Electric Company Stock Incentive Plan as amended and restated effective July 27, 2021 (Form 10-Q filed July 30, 2021, Exhibit 10.3). + |
| 10.15* | Form of Officers' and Key Employees' Performance Stock Unit Agreement. (Form 10-K filed February 17, 2022, Exhibit 10.15). + |
| 10.16* | Form of Officers' and Key Employees' Restricted Stock Unit Agreement. (Form 10-K filed February 17, 2022, Exhibit 10.16). + |
| (23) | Consents of Experts and Counsel |
| 23.1 | Consent of Independent Registered Public Accounting Firm Deloitte & Touche LLP. |
| (31) | Rule 13a-14(a)/15d-14(a) Certifications |
| 31.1 | Certification of Chief Executive Officer. |
| 31.2 | Certification of Chief Financial Officer. |
| (32) | Section 1350 Certifications |
| 32.1 | Certifications of Chief Executive Officer and Chief Financial Officer. |
| (101) | Interactive Data File |
| 101.INS | XBRL Instance Document. The instance document does not appear in the interactive data file because its XBRL tags are embedded within the inline XBRL document. |
| 101.SCH | XBRL Taxonomy Extension Schema Document. |
| 101.CAL | XBRL Taxonomy Extension Calculation Linkbase Document. |
| 101.DEF | XBRL Taxonomy Extension Definition Linkbase Document. |
| 101.LAB | XBRL Taxonomy Extension Label Linkbase Document. |
| 101.PRE | XBRL Taxonomy Extension Presentation Linkbase Document. |
| 104 | Cover page information from Portland General Electric Company's Annual Report on Form 10-K filed February 16, 2023, formatted in iXBRL (Inline Extensible Business Reporting Language). |

* Incorporated by reference as indicated.

+ Indicates a management contract or compensatory plan or arrangement.

Certain instruments defining the rights of holders of other long-term debt of PGE are omitted pursuant to Item 601(b)(4)(iii)(A) of Regulation S-K because the total amount of securities authorized under each such omitted instrument does not exceed 10% of the total consolidated assets of the Company and its subsidiaries. PGE hereby agrees to furnish a copy of any such instrument to the SEC upon request.

Upon written request to Investor Relations, Portland General Electric Company, 121 S.W. Salmon Street, Portland, Oregon 97204, the Company will furnish shareholders with a copy of any Exhibit upon payment of reasonable fees for reproduction costs incurred in furnishing requested Exhibits.

ITEM 16. FORM 10-K SUMMARY.

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized on February 15, 2023.

PORTLAND GENERAL ELECTRIC COMPANY

By: _____ /s/ MARIA M. POPE

Maria M. Pope
President and Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities indicated on February 15, 2023.

Signature

Title

/s/ MARIA M. POPE

Maria M. Pope

*President, Chief Executive Officer, and Director
(principal executive officer)*

/s/ JAMES A. AJELLO

James A. Ajello

*Senior Vice President of Finance, Chief Financial Officer, Treasurer
& Corporate Compliance Officer
(principal financial and accounting officer)*

/s/ RODNEY L. BROWN, JR.

Rodney L. Brown, Jr.

Director

/s/ JACK E. DAVIS

Jack E. Davis

Director

/s/ DAWN L. FARRELL

Dawn L. Farrell

Director

/s/ MARK B. GANZ

Mark B. Ganz

Director

/s/ MARIE OH HUBER

Marie Oh Huber

Director

/s/ KATHRYN J. JACKSON

Kathryn J. Jackson

Director

/s/ MICHAEL A. LEWIS

Michael A. Lewis

Director

/s/ MICHAEL H. MILLEGAN

Michael H. Millegan

Director

/s/ M. LEE PELTON

M. Lee Pelton

Director

/s/ PATRICIA S. PINEDA

Patricia S. Pineda

Director

/s/ JAMES P. TORGERSON

James P. Torgerson

Director

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement No. 333-266454 on Form S-3 and Registration Statements Nos. 333-135726, 333-142694, and 333-158059 on Forms S-8 of our report dated February 15, 2023, relating to the consolidated financial statements of Portland General Electric Company and subsidiaries, and the effectiveness of Portland General Electric Company's internal control over financial reporting, appearing in this Annual Report on Form 10-K for the year ended December 31, 2022.

/s/ Deloitte & Touche LLP

Portland, Oregon
February 15, 2023

CERTIFICATION

I, Maria M. Pope, certify that:

1. I have reviewed this Annual Report on Form 10-K of Portland General Electric Company;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 15, 2023

/s/ MARIA M. POPE

Maria M. Pope
President and
Chief Executive Officer

CERTIFICATION

I, James A. Ajello, certify that:

1. I have reviewed this Annual Report on Form 10-K of Portland General Electric Company;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 15, 2023

/s/ JAMES A. AJELLO

James A. Ajello

*Senior Vice President of Finance, Chief
Financial Officer, Treasurer & Corporate
Compliance Officer*

**CERTIFICATIONS PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED
PURSUANT TO SECTION 906 OF THE
SARBANES-OXLEY ACT OF 2002**

We, Maria M. Pope, President and Chief Executive Officer, and James A. Ajello, Senior Vice President of Finance, Chief Financial Officer and Treasurer, of Portland General Electric Company (the "Company"), hereby certify that the Company's Annual Report on Form 10-K for the year ended December 31, 2022, as filed with the Securities and Exchange Commission on February 16, 2023 pursuant to Section 13(a) of the Securities Exchange Act of 1934 (the "Report"), fully complies with the requirements of that section.

We further certify that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ MARIA M. POPE

Maria M. Pope
*President and
Chief Executive Officer*

Date: February 15, 2023

/s/ JAMES A. AJELLO

James A. Ajello
*Senior Vice President of Finance, Chief
Financial Officer, Treasurer & Corporate
Compliance Officer*

Date: February 15, 2023