

## Risk Factors Comparison 2024-02-20 to 2023-02-16 Form: 10-K

**Legend:** **New Text** ~~Removed Text~~ Unchanged Text **Moved Text** Section

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, **or impair the use of,** 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. **The increase in additional costs could also have an adverse effect on cash flow and liquidity.** 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 **.** **Weather- related events could also cause system constraints or disrupt transmission flows, resulting in decreased reliability for customers**. Severe weather may also require increased PGE personnel availability, which could result in increased operating expenses as well **as** 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 **provide reliable serve- service to** 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 **.** **The Company is exposed to, and may be adversely affected by, interruptions to its computer and information technology systems and sophisticated cyber- attacks. As with most companies, PGE has experienced attempts to breach the Company's systems and other similar incidents**. 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. **PGE continuously seeks to maintain a robust program of security and controls, but the impact of a physical or material information technology event could have a material adverse effect on the Company's competitive position, reputation, results of operations, financial condition and cash flows.** 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 **and reputational harm**. 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 **could** 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** **impacts** 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, **changes to and** 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 **and will own battery storage facilities**, which generate federal production tax credits (PTCs) **and investment tax credits (ITCs)** 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 **. The Inflation Reduction Act of 2022 allows for the sale or transfer of renewable tax credits to other taxpayers. The Company has sold and plans to continue to sell tax credits. PGE’s inability to generate, transfer, or sell these credits could have a material impact on results of operations.** 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, 2022-2023, \$ 399-401 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 \$ 650-750 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-may not be** 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. **A new mechanism, the Reliability Contingency Event (RCE), which, like the PCAM, allows for cost sharing and deferral of certain costs for specific events, was introduced through the 2024 General Rate Case., This mechanism expires at the end of 2025.** 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, **reduced capacity or degradation of solar panels**, 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 **or specific contract terms** 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, **state legislatures**, 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** **disruption to company operations**, 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.