EXH. AJR-1T DOCKETS UE-22__/UG-22_ 2022 PSE GENERAL RATE CASE WITNESS: ADRIAN J. RODRIGUEZ

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION,	
Complainant,	
v.	Docket UE-22 Docket UG-22
PUGET SOUND ENERGY,	
Respondent.	

PREFILED DIRECT TESTIMONY (NONCONFIDENTIAL) OF

ADRIAN J. RODRIGUEZ

ON BEHALF OF PUGET SOUND ENERGY

PUGET SOUND ENERGY

PREFILED DIRECT TESTIMONY (NONCONFIDENTIAL) OF ADRIAN J. RODRIGUEZ

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I. INTRODUCTION AND OVERVIEW OF PSE'S RATE PROPOSAL

Professional Background

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- Q. Please state your name, business address, and position with Puget Sound Energy.
- My name is Adrian J. Rodriguez, and my business address is Puget Sound A. Energy, P.O. Box 97034, Bellevue, Washington 98009-9734. I am employed by Puget Sound Energy ("PSE" or "the Company") as Senior Vice President-Regulatory and Strategy.
- Q. Have you prepared an exhibit describing your education, relevant employment experience, and other professional qualifications?
- Yes, I have. It is Exhibit AJR-2. A.
 - Q. What are your duties as Senior Vice President-Regulatory and Strategy for PSE?
 - I lead PSE's efforts to be our customers' clean energy partner of choice. I am A. responsible for PSE's clean energy strategy, regulatory and government affairs, resource planning, new product development, and energy efficiency.

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Purpose of Testimony В.

Q. What topics are you covering in your testimony?

My testimony introduces PSE and provides an overview of the relief PSE is A. seeking in this case, why that relief is necessary, and the testimony that we are presenting to support that request.

First, I provide a high-level overview of the relief PSE is requesting and the financial challenges PSE faces that require the filing of this case. I demonstrate how PSE's multiyear rate plan complies with Washington law and will benefit both customers and PSE. PSE has worked closely with stakeholders on many of the proposals set forth in this case including low-income assistance and performance metrics, among others.

Second, I describe PSE and its vision for the future. PSE remains committed to providing safe, clean, reliable, and affordable energy services to its customers, while (i) complying with Washington's Clean Energy Transformation Act ("CETA") and (ii) striving and enabling the Company to decarbonize its footprint and help customers achieve their individual, organizational, and corporate carbon reduction goals through PSE's aspirational Beyond Net Zero Carbon commitment as well as the developing compliance requirements of the Climate Commitment Act ("CCA"). We work to maintain and enhance our focus on the customers and communities we serve and to deliver energy services in a manner equitable to all our customers.

Third, I describe the financial challenges PSE faces, and I discuss the importance of this multiyear rate plan in helping PSE meet these financial challenges so that it can continue serving its customers and meeting its clean energy, safety and reliability responsibilities. PSE needs to acquire significant clean resources and transmission assets to transition to 100 percent clean electricity, a CETA mandate that PSE is pleased to pursue. PSE also needs to continue to invest in the reliability of our electric and gas distribution systems. I highlight the continuing financial impact the 2019 general rate case is placing on PSE and discuss how the elements of this case will provide the financial resources PSE needs to invest in its electric and natural gas systems. I demonstrate that PSE's proposed pro forma adjustments and multiyear rate plan reasonably address these challenges—and mitigate the risk of further deterioration in the quality of energy service that PSE provides—while providing benefits to customers during the transition to a cleaner energy future.

Finally, I introduce the witnesses who will be testifying in this case on behalf of PSE. These witnesses will establish that PSE has incurred, and expects to incur, necessary costs in a reasonable and prudent manner, resulting in rates that are just, fair, reasonable, and sufficient.

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C. High-Level Overview of PSE's Rate Request and Reasons For Filing the Case

- Q. Please summarize the rate relief PSE is requesting in this case.
- PSE is seeking recovery of prudent expenses to maintain its core utility service A. while meeting new and transformative policy objectives. PSE is proposing a three-year multiyear rate plan consistent with the Revised Code of Washington ("RCW") 80.28.425. This new law requires utilities such as PSE that file general rate cases after January 1, 2022, to propose a multiyear rate plan for up to four years. In PSE's multiyear rate plan, rates for the first rate year include plant that is used and useful as of the first rate effective date as well as plant that is projected to be placed into service during the first rate year, consistent with RCW 80.28.425(3)(b) and the Policy Statement issued by the Commission in Docket U-190531. Rates for each of the second and third rate years will include plant projected to be placed in service during each respective rate year. In addition, PSE proposes a set of performance measures consistent with RCW 80.28.425(7). PSE's proposed multiyear rate plan is consistent with the goal of the Legislature for companies to provide safe and reliable energy while transitioning to cleaner sources of energy.

For the first year of the multiyear rate plan, PSE's cost of service for electric establishes the need for a \$310.6 million increase in overall revenues. Power costs

¹ In the Matter of the Commission Inquiry into the Valuation of Public Service Company Property that Becomes Used and Useful after Rate Effective Date, Docket U-190531, ¶ 36 (January 31, 2020).

account for \$125.5 million of the proposed rate increase in the first year of the rate plan. For natural gas, the required increase is \$143.0 million. This is based on a test year ended June 30, 2021, with pro forma adjustments extending to December 31, 2021, and including all plant that is used and useful as of the rate effective date of January 1, 2023 and projected to be put in service during 2023. Table 1 below shows the rate request for each year of the multiyear rate plan:

Table 1. Revenue Request for Multiyear Rate Plan

	2023				2024				2025			
Description	E	lectric		Gas	E	ectric		Gas	E	ectric		Gas
1 Revenue Deficiency - Grossed Up	s	330.0	S	165.5	S	62.7	S	29.9	S	10.2	S	23.3
2 Changes To Other Price Schedules		(19.5)		(22.5)		0.4		(1.4)	300	21.6		(0.0)
3 Total Revenue Change	\$	310.6	S	143.0	\$	63.1	S	28.5	S	31.8	S	23.3

Q. What are some of the other key components of PSE's request in this case?

A. PSE's proposed multiyear rate plan reflects the recovery in rates of several major projects and acquisitions that will benefit customers for which PSE seeks prudence determinations or that will be prudently executed during the course of the multiyear rate plan. These include, among others, the regrouting of PSE's Baker River hydroelectric project to maintain the safety of this sustainable source of energy; the Energize Eastside transmission project to serve the increasing energy demands of PSE's customers during summer and winter peak periods; PSE's ownership share of the Tacoma Liquified Natural Gas ("LNG") Facility to provide a reliable source of energy to meet the peak day needs of PSE's core gas

customers during the coldest of winter days; and the execution of the Clearwater Wind Power Purchase Agreement that will enable PSE to meet renewable and peak capacity needs and take a meaningful step forward in its ramping strategy toward meeting the clean energy requirements of CETA. Additionally, PSE will complete the installation of its Advanced Metering Infrastructure ("AMI") and requests recovery of its investment and a return on its investment. PSE has provided a benefits analysis that demonstrates how the AMI system benefits customers and PSE. PSE witnesses Ronald J. Roberts, Exh. RJR-1CT, Dan'l R. Koch, Exh. DRK-1T, Catherine A. Koch, Exh. CAK-1T, Roque B. Bamba, Exh. RBB-1T, Colin P. Crowley, Exh. CPC-1HCT, and Ryan P. Blood, Exh. RPB-1T, are among the witnesses who provide more information about these and other projects for which PSE seeks a prudency determination from the Commission.

PSE is requesting that the Commission authorize PSE to update its power costs on an annual basis for Year Two and Year Three of the multiyear rate plan to address the increasing volatility and price of power costs in the Western Interconnection and to allow for the Commission's timely consideration of power purchase agreements required to achieve PSE's CETA compliance targets. In combination with this request, PSE also asks the Commission to authorize the continuation of the power cost only rate case ("PCORC"), limited to periodically updating fixed power costs associated with new resource acquisitions or existing resources. PSE witnesses Janet K. Phelps, Exh. JKP-1T and Kyle Stewart, Exh. KCS-1CT,

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Q. Why is PSE filing this case at this time?

D. Jhaveri, Exh. BDJ-1CT.

company because of power costs.

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19 20 A. PSE is filing this case to recover the prudently incurred capital investments that are not currently included in PSE's rates and to recover reasonable operating costs. This rate relief is necessary so that PSE may continue to provide safe and reliable energy services to its customers while complying with state mandates and meet the expectations of customers and stakeholders to decarbonize its energy

provide more information about the proposal and the demands facing the

PSE is requesting an authorized return on equity of 9.9 percent throughout the

multiyear rate plan and a stepped capital structure of 49.0 percent in the first year

of the multiyear rate plan (2023), 49.5 percent in the second year (2024), and 50

authorization of new low-income rates, an increase in the low-income assistance

funding, and other programs to assist customers who are struggling financially as

described in the testimonies of Carol L. Wallace, Exh. CLW-1T and Birud D.

Jhaveri, Exh. BDJ-1CT. PSE is requesting the continuation of its electric and

natural gas decoupling mechanisms, with a modification to the earnings sharing

mechanism to comply with RCW 80.28.425(6) as discussed by PSE witness Birud

percent in the third year (2025) as further discussed in the testimony of PSE

witness Kazi K. Hasan, Exh. KKH-1CT. Additionally, PSE is requesting

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systems. PSE also seeks to set rates for a multiyear rate plan that reflect upcoming capital investments and operating costs over the three-year period.

Our employees take seriously the obligation to provide electricity and natural gas services to our customers and to be good stewards of the communities in which we operate. Despite the challenges posed during the COVID-19 pandemic, PSE continued to provide safe and reliable energy services to our customers when the need for both has not been greater in recent memory. The Company worked to upgrade its natural gas and electric systems to meet customer demand, address reliability, and enhance the safety of the system. At the same time, PSE also minimized expenses, deferred construction projects, and carried significant customer arrearages during one of the longest disconnection moratoria in the country. During the pandemic, many challenges grew. For example, threats such as cybersecurity and climate change are more serious today than ever before. The Company needs to protect and harden systems to address those risks. A more detailed discussion of increasing cyber security risks and costs can be found in the testimony of Margaret F. Hopkins, Exh. MFH-1T. A more detailed discussion of climate change risks, including wildfires and extreme weather events, can be found in the testimony of Catherine A. Koch, CAK-1T, and the testimony of Dan'l R. Koch, Exh. DRK-1T.

Furthermore, as economic conditions improve, PSE needs to be positioned to serve that improving economy and the growing population in PSE's service territory. While we cannot predict the future, we have more clarity about the path

forward, and need to be financially capable to meet current service demands and enable our organization to meet future needs as well.

Growing electric peak load demand, extreme weather events, and rapid changes in the Western Interconnection market—all of which occurred during the pandemic—are incremental to financial issues such as tax reform and growing inflationary pressure that changed the risk profile of energy service. These factors make it necessary for PSE to file this case so that it has sufficient financial resources to address these challenges. These financial challenges are discussed in detail in the direct testimony of PSE witnesses Kazi K. Hasan, Exh. KKH-1CT, Ann E. Bulkley, Exh. AEB-1T, and Todd A. Shipman, Exh. TAS-1T. This case is a necessary step for PSE to continue to provide safe and reliable energy services to its customers.

- Q. Does the ongoing transition to 100 percent clean electricity further necessitate this filing?
- A. Yes, with the passage of CETA, PSE must invest in new technologies and resources to provide more clean and sustainable energy while continuing to fulfill our obligation to provide safe and reliable energy to our customers. Our team is committed to showing that Washington can be a model for the nation as we transition. However, the costs for transitioning to equitable and clean resources, while also providing safe and reliable service, are higher in the near term than the costs required to construct, operate, and maintain energy infrastructure to provide

safe and reliable service without this clean energy transformation. A multiyear rate plan provides the opportunity to provide more certainty as we plan for a clean energy future, to allow for the recovery of costs in a more timely fashion, and to ease the administrative burden on the Commission. It is not sustainable for PSE to continue toward these ambitious clean energy goals and to provide safe, reliable electric and natural gas systems without timely recovery of the investments and operating costs required to achieve these critical objectives. The modified historical regulatory model for cost recovery will not allow companies to transition, and fortunately, Washington has enacted a new law to enable the transition. PSE must be financially healthy and must have the financial resources to deliver the state's clean energy goals.

- Q. Can you quantify the capital investments PSE has made that are not included in current rates?
- A. PSE has made and will make capital investments totaling approximately \$3.1 billion between the test year in its last general rate case² and the start of the rate year in this case, January 1, 2023. These capital investments will help contribute to a net increase of just over \$1 billion in PSE's rate base since its last rate case.

² Specifically, the test year ending December 31, 2018 with limited pro forma plant adjustments through December 31, 2019.

Q. Has PSE taken steps to mitigate the effects of rate increases on its customers?

A. Yes. In the final days of PSE's last rate case, the uncertainty of the COVID-19 pandemic emerged, and PSE and the Commission undertook major efforts to mitigate the effects of the rate increase on customers. These were extraordinary mitigation efforts, such as delaying the rate effective date and taking steps to offset rate increases that the Commission otherwise had found to be reasonable. After the conclusion of that case, PSE continued to take steps to limit expenditures and delay the need to file a general rate case. This is discussed in more detail in the Prefiled Direct Testimony of Kazi K. Hasan, Exh. KKH-1CT.

- Q. What was the impact of the Commission's final order in the previous general rate case?
- As noted by the Commission in its final order in the Company's most recent general rate case, the beginning of the COVID-19 pandemic presented significant uncertainty for PSE, our customers, and the communities we serve. The result of that order required PSE to limit expenditures that would have further allowed the Company to enable its transition as required under CETA. The Company has focused on the safety and reliability of its system, but demand on the system continues to grow during the pandemic, and weather events during the pandemic such as snowfall in February 2021 and heat waves in August 2020 and June and July 2021 tested the Company's ability to continue to provide adequate reliable electric and gas service. While revenue requested in PSE's most recent general

A.

Prefiled Direct Testimony

(Nonconfidential) of Adrian J. Rodriguez

rate case would have allowed the Company to be in a better position to address those system demands and prepare for changes to its system, we understand the uncertain time facing our customers and how the Commission accounted for the uncertainty. By the time the rates from this current general rate case go into effect, PSE will be carrying more than four years of net capital expense and operations expense growth that has not been included in rates.

Q. Is PSE able to continue with these mitigation efforts?

A. No, as discussed by PSE witness Kazi K. Hasan, these temporary mitigating actions are becoming unsustainable for the Company. PSE is facing increased costs for, among other things, increasingly complex cybersecurity activities, higher and volatile power costs because of constrained capacity in the western United States, and requirements to provide clean energy that necessitates new technology and innovation. In order to continue to serve our growing communities reliably and safely and meet the requirements of CETA, our rates must be set at an appropriate level to meet PSE's operational requirements while providing for the Company's financial integrity.

Q. What would the impact be if PSE is unable to recover its costs?

As I mentioned, PSE's employees want to continue to provide safe and reliable energy service to our customers and transform our business as required by CETA and the CCA. PSE's request in this case will promote financial stability and allow PSE to achieve these public policy objectives. In contrast, limited financial

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resources can impact service quality and compromise PSE's ability to meet the requirements of state law. Without full consideration of the financial resources and tools, such as the multiyear rate plan with rates that include plant in service by and during the rate effective period to provide the cash flow needed for investments, the Company will not possess the financial strength to concurrently implement CETA and decarbonize while providing safe and reliable core utility services to customers. We are honored to serve our customers in western and central Washington and excited about transforming our business to meet the requirements of CETA and the CCA. To be successful in these endeavors, the financial support requested in this case is critical.

The Multiyear Rate Plan Balances the Interests of Customers and the D. Company

- 0. How does PSE's proposed multiyear rate plan balance the interests of PSE and its customers?
- A. The multiyear rate plan that PSE proposes in this case follows the statutory requirements and carefully balances the interests of customers and PSE, consistent with the legislative intent. For example, PSE's proposed multiyear rate plan allows PSE to timely recover its investment to improve the safety and reliability of its electric and natural gas systems and to progress on the transition to a clean energy future over the course of the three-year rate plan. However, it also allows an opportunity for parties to review PSE's investments, and to confirm that the investments were prudently incurred. Because projected rates are

subject to refund, customers are protected against the risk of being charged for plant that was not placed in service or costs that are not prudently incurred. Additionally, the proposed multiyear rate plan has guardrails in place that prevent PSE's shareholders from benefitting at the expense of customers. Specifically, as required by the law, if PSE earns in excess of its authorized rate of return during the course of the multiyear rate plan, PSE will defer all revenues in excess of 0.5 percent above its authorized rate of return for refunds to customers or another determination by the Commission in a later proceeding.

- Q. Are there aspects of PSE's proposed multiyear rate plan that you would like to highlight as important to PSE?
- A. Yes, there are two aspects I would like to highlight that are important to PSE if the multiyear rate plan is to be successful from a business planning perspective. The first is the need for flexibility in the projection of capital expenditures, and the second is the importance of including in rates the plant in service to the first rate effective date, December 31, 2022, as well as the inclusion of plant in service during each rate effective period to avoid building regulatory lag into the multiyear rate plan. This second aspect is expressly set forth in RCW 80.28.425(3)(b).
- Q. Why is flexibility in the projection of capital expenditures important?
- A. Flexibility in business planning is necessary if PSE is to operate in a prudent manner. While PSE can project the in-service dates of plant for each year of the

In addition, projects are subject to reprioritization based on developing or even unforeseen needs of the organization and customers, including major weather events, permitting delays, public demands, legal challenges, supply chain disruptions, or broader economic circumstances, such as inflation. This can result in deferring a planned project to accommodate the impacts or immediate needs of the organization or customers. Even currently developing state policy can impact PSE's planning. For example, we do not yet know the details of rules to be issued by the Washington Department of Ecology under the CCA and the resulting impacts on PSE's energy delivery and budget plans. The multiyear rate plan should recognize the fact that providing energy to customers at a reasonable cost and in a prudent manner will require flexibility in allocation of funds among projects and programs.

- Q. Why is it important to PSE to include in rates all the plant in service by the first rate effective date and plant in service during each of the rate years?
- A. It is critically important to minimize regulatory lag as PSE embarks on the multiyear rate plan, to fund the safe, clean, reliable operation of the utility, and to

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- Q. What steps is PSE taking to mitigate the financial challenges associated with rate increases in the multiyear rate plan?
- A. PSE is committed to its efforts to control costs and provide affordable services for all customers, and the history of the Company's success in limiting customer bill increases is discussed by PSE witness Kazi K. Hasan. PSE is working to minimize costs and balance the interests of customers who want more (e.g., 100 percent clean energy now; more optionality) with those that cannot afford more, and PSE is taking steps to provide assistance to the most vulnerable customers as further discussed by PSE witnesses Birud D. Jhaveri and Carol Wallace.

A.	While the economy in western Washington has grown to one of the top ten largest
	regional economies in the United States with a low unemployment rate and high
	per capita income relative to other areas of the country, some customers face
	financial difficulties and can be impacted by even modest changes to utility bills.
	PSE is using a holistic approach to reduce the energy burden for low-income
	customers and those who continue to experience financial stress as a result of the
	pandemic. Starting in April of 2020, PSE established a supplemental bill
	assistance program, the Crisis Affected Customer Assistance Program
	("CACAP") to provide additional assistance to income qualified customers in
	addition to the existing Home Energy Lifeline Program and Low-Income
	Weatherization program. PSE established a second COVID assistance program
	with additional funds in April 2021 pursuant to Order 01 in Docket U-200281,
	and in November 2021, PSE implemented another iteration of the CACAP
	program in Dockets UE-210792/ UG-210793 to automatically provide arrearage
	relief to income qualified customers. Going forward, in 2022, once the COVID
	assistance funds are exhausted, PSE will implement an arrearage management
	pilot program—a payment plan option that includes debt forgiveness to help
	income eligible customers who have incurred significant past due balances during
	the pandemic. Consistent with changes to Washington law, PSE is proposing a
	low-income rate design in this case. And PSE is working closely with low-income

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Q. What role do performance measures play?

A. The performance measure proposals in this case will improve accountability for customer benefits and equitable distribution of those benefits—potentially aligning new CETA requirements into the ratemaking aspects of the regulatory system—and provide the opportunity to modernize PSE's existing service quality metrics that have largely been in place for the past 20 years. PSE's proposed performance measures are discussed in more detail in the Prefiled Direct Testimony of Dr. Mark Lowry, Exh. MNL-1T.

II. DESCRIPTION OF PSE AND OVERVIEW OF ITS VISION FOR THE FUTURE

A. Description of PSE and Its Customers

- Q. Please provide a high-level overview of PSE.
- A. PSE is a public service company incorporated in the state of Washington that furnishes electric and natural gas services in a territory covering approximately 6,000 square miles, primarily in the Puget Sound region. PSE is the largest electric and natural gas utility in the state, with approximately 1.2 million electric

customers and approximately 900,000 natural gas customers. PSE owns and maintains approximately 23,000 miles of electric transmission and distribution lines and underground cables which deliver electricity to our customers.

Additionally, PSE owns and maintains approximately 26,000 miles of natural gas lines that serve our natural gas customers. This infrastructure is located in diverse geography, including heavily wooded areas. PSE's customers are diverse—from the high-tech urban areas of Bellevue and Redmond to the agricultural and forest lands in Skagit County. PSE employs more than 3,000 union and non-union Washington residents.

PSE and its predecessor companies have served western Washington for more than a century. Our employees are proud of PSE's legacy with a commitment to great customer service and helping to make our communities better places to live and work. PSE is committed to creating a better energy future for our customers and neighbors across the region. Beyond partnering to support our customers through the COVID-19 pandemic, our mission today is deep decarbonization and greenhouse gas emissions reduction, while maintaining the safety and reliability of PSE's electric and gas systems. PSE was an early leader in addressing climate change, investing billions in renewable resources and energy efficiency for homes and businesses. Now, PSE is on the path to meet the current and future needs of our customers and to deliver on the objectives of CETA and the CCA to decarbonize the Company's operations.

Q. What is PSE's commitment to clean energy?

A. PSE has been a leader in both electric and gas conservation for decades. For example, since the inception of our programs that help customers save energy, PSE has saved 67 billion electric kWh and 600 million natural gas therms through energy efficiency programs. This is the equivalent of eliminating the typical residential customer annual electric usage for roughly 6.2 million homes and eliminating the typical residential customer annual natural gas usage for roughly 800,000 homes.

Additionally, PSE has been a leader in the development of renewable and low-carbon resources. PSE's power portfolio includes more than 800 megawatts ("MW") of wind generation, and PSE remains one of the country's largest utility-owners of wind assets. Throughout its history, PSE has built, owned, and operated FERC-licensed hydroelectric plants that have provided low-cost, reliable, carbon-free energy to Washington residents for more than a hundred years. As discussed later in my testimony, PSE plans to achieve an electric portfolio with 63 percent clean energy by 2025.

PSE has assisted the State of Washington in its transition away from the use of coal-fired generation through the retirement of Colstrip Steam Electric Generating Station ("Colstrip") Units 1 and 2 and the planned retirement of the Centralia Coal Plant by 2025. In 2011, PSE participated in the landmark negotiations that resulted in state legislation and an agreement that provided for the closure of

Centralia Generating Station Unit 1 in 2020 and the shutdown of Unit 2 by 2025, which included funding for displaced employees and environmental and community transition. With respect to Colstrip, the broad settlement PSE brokered with nine other parties in PSE's 2017 general rate case provided a solution to a number of issues that the Commission, PSE, and interested stakeholders had been grappling with for several years. Moreover, costs for Colstrip Units 3 and 4 will no longer be in rates by the end of 2025. Additionally, PSE worked closely with legislators, the Commission, and other stakeholders in the passage of the CETA that will allow PSE, its customers, and the State of Washington to transition to a 100 percent clean electricity future.

B. PSE Continues To Focus on the Safety and Reliability of Its Electric and Natural Gas Systems

- Q. What steps is PSE taking to provide safe and reliable electric and natural gas service?
- A. As discussed in the testimony of Dan'l R. Koch, Exh. DRK-1T, and Catherine A. Koch, Exh. CAK-1T, PSE will continue to use a variety of strategies to modernize and reinforce electric system reliability. These strategies include: infrastructure improvement programs focused on reducing and eliminating power outages for customers; a continued focus on vegetation management; completing the deployment of foundational technologies such as AMI and PSE's advanced distribution energy management systems ("ADMS") infrastructure to support the growing prevalence of electric vehicles and distribution energy resources

throughout our service territory; and meeting North American Electric Reliability Council ("NERC") reliability standards. PSE plans to continue its gas system integrity management programs such as eliminating sewer cross bores and replacing DuPont pipe, and will complete the installation of AMI.

As discussed in the testimony of Ronald J. Roberts, Exh. RJR-1CT, PSE plans for and procures an energy supply for our electric and gas systems in a cost-effective manner. PSE constructs and maintains its generation resources consistent with the Commission's prudency standards, including among others, its liquefied natural gas facility and Colstrip in its final years of service for PSE customers.

Q. Please elaborate on PSE's efforts to maintain and improve public safety.

A. PSE values the safety of our customers and the safe operation of our gas and electric systems. PSE monitors response times to gas and electric emergencies.

PSE has also increased its public awareness activities regarding safety during emergencies such as earthquakes, floods, and storms. PSE maintains a robust modified Incident Command Structure that scales to specific emergencies. PSE is continuously improving and adopting best practices in emergency preparation and response, such as the Wildfire Mitigation and Response Plan recently filed with the Commission.³

³See Docket U-210254.

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Q. How does PSE's use of market resources provide reliable service to PSE customers?

PSE is part of the Western Interconnection. The western energy market has had A. surplus capacity for more than a decade, and PSE's 1,500 MW of firm transmission to the Mid-Columbia market hub has served as a cost-effective means of meeting demand by accessing energy supply from the regional power market. However, the supply/demand fundamentals of the wholesale electric market have changed significantly in recent years in two important ways: regionwide, the wholesale electric market is experiencing tightening supply and increasing volatility. This market tightening presents both cost and reliability risk for PSE. As a consequence, PSE is taking steps to pursue enhanced market coordination across the west. First, PSE is working with regional power suppliers in the Pacific Northwest and western United States to change how we plan for resource adequacy. Addressing resource adequacy issues on a regional basis, rather than utility-by-utility, has the potential to increase reliability for all providers in the region; as a result, numerous regional entities, including PSE, are collectively developing a regional resource adequacy program through the efforts of the Northwest Power Pool. Second, PSE is engaging in west-wide discussions pursuing organized market opportunities such as the Enhanced Day Ahead Market at the California Independent System Operator (CAISO) and by joining the Western Markets Exploratory Group to evaluate market solutions. Our plan to mitigate the risk of changes in the market to maintain a reliable source of energy

for our customers is further addressed by PSE witnesses Paul K. Wetherbee and Kyle C. Stewart.

C. PSE's Vision for the Future

Q. What is PSE's vision for the future?

- A. PSE's vision for the future continues to be grounded in providing safe, clean, and reliable energy service to our customers. Our customers want clean energy, and we are committed to working together with them to make this a reality. The electricity PSE supplies to its customers is increasingly less carbon-intensive, and we will need to enable the Company to provide less carbon-intensive gas. We continue to seek ways to more equitably deliver gas and electricity service to our customers.
- Q. What are some of the steps PSE is taking to advance clean energy and decarbonization?
- A. PSE recently made a commitment to decarbonize its footprint across our business and help customers achieve their individual or corporate carbon reduction goals. This aspirational commitment is referred to as Beyond Net Zero Carbon in recognition that while we do not have all the technological answers today, we will need to further reduce carbon as expected by our customers and required by laws such as CETA and CCA. PSE is pursuing three parallel pathways for reducing carbon emissions:

- 1. Transform our electric system to be coal free by 2025, carbon neutral by 2030, and carbon free by 2045;
- 2. Reach net zero carbon emissions for natural gas sales by 2045—for customer use in homes and businesses—with an interim target of a 30 percent reduction in emissions by 2030, recognizing that the rules issued pursuant to the CCA may require a faster rate; and
- 3. Go beyond PSE's emissions to reduce carbon emissions in other sectors. The Commission's support in this proceeding and future proceedings will be critical to achieving these goals.
- Q. How does the Tacoma LNG Project that PSE jointly owns with Puget LNG advance clean energy and reliability?
- A. The Tacoma LNG Project advances clean energy objectives by providing cleaner fuel for maritime ships and commercial transportation while reducing the risk to the environment of harmful oil spills. Through the development of this project, PSE is helping create a greener shipping fleet for our partner, TOTE maritime.

 Additionally, the Tacoma LNG Project will serve the peak day needs of PSE's gas customers and provide further safeguards against potential pipeline interruptions for PSE gas customers. PSE witness Ronald J. Roberts provides justification for PSE's share of the Tacoma LNG Project in rates.

D. PSE's Steps To Comply with the Clean Energy Transformation Act and Its Beyond Net Zero Carbon Aspirational Commitment

Q. Please provide a high-level overview of CETA.

- A. Washington's CETA puts PSE on an aggressive path to equitably transition electric service to clean, non-emitting resources. As noted above, it requires PSE's electric system to be coal free by 2025, carbon neutral by 2030, and 100 percent served by renewable and non-emitting resources by 2045. On December 17, 2021, PSE filed its first Clean Energy Implementation Plan ("CEIP") that sets forth our plan for setting and meeting our proposed interim clean electricity targets.
- Q. Has PSE begun taking steps to transform to clean energy, consistent with CETA?
- A. Yes. As previously discussed, as early as 2011, PSE began its commitment to transition from coal generated resources with the agreement to a phased shutdown of Centralia Generating Station and recently, reduced coal generation through the closure of Colstrip Units 1 and 2 in 2019. PSE is exploring options for Colstrip Units 3 and 4, as discussed in more detail in the Prefiled Direct Testimony of Ronald J. Roberts, Exh. RJR-1CT.

In addition, PSE is actively acquiring clean energy resources as well as the appropriate grid and technology investments that will be needed to comply with CETA. In order for PSE's electric system to be carbon neutral by 2030 and 100

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percent renewable and non-emitting by 2045, PSE will need to drive aggressive demand-side resource acquisition, transformational distributed energy resource development, and aggressive acquisition of new renewable resources between now and 2045. Additionally, PSE will need to help promote and support new technologies and innovation that will be key to the success of the clean energy transition. To implement CETA, PSE will need to increase resource diversity comprised of smaller assets and technological investments, along with utility scale investments in clean resources and transmission.

Q. What steps is PSE taking to meet its Beyond Net Zero Carbon goal?

Across both electric and natural gas systems, PSE is actively testing a range of solutions that may provide value and reliability for our customers, including low-and no-carbon fuels and battery storage options. For example, PSE signed a joint development agreement with Mitsubishi Power Americas, Inc. to collaborate on project development and technology solutions. PSE is also focused on finding pathways to decarbonize our end-use natural gas sales and working outside of our core lines of business to help customers decarbonize, too. Currently, PSE works to reduce leaks in our natural gas system to reduce methane in the atmosphere as discussed by PSE witnesses Catherine A. Koch and Joshua J. Jacobs. In addition, we are assessing the ability of existing systems to handle the integration of different types of fuel. As we explore pathways to decarbonize our natural gas line of business, access to cost-effective low carbon gas alternatives such as renewable natural gas production facilities and clean hydrogen are critically

important. The pipeline infrastructure we operate and maintain on behalf of our customers today delivers a substantial amount of peak energy during the coldest of winter days, and it is paramount that we are able to maintain a safe and reliable system for our customers while finding real solutions to decarbonize the energy that flows through our pipeline infrastructure.

We recognize we do not have all the answers and much of the technology that could revolutionize the industry is nascent. Regardless, we are embracing the challenges to provide energy in a way that our customers and policymakers demand as reflected in CETA and the CCA. The Prefiled Direct Testimony of Joshua J. Jacobs, Exh. JJJ-1T, provides more information regarding our work to go Beyond Net Zero Carbon.

- Q. What steps is PSE taking to help customers and other industries reduce their energy-based emissions?
- A. PSE's goal is to partner with customers and industry to identify programs and products that cost-effectively reduce carbon across sectors and across our region and state. Examples include advancing transportation electrification, developing new distributed renewable energy resources, supporting low carbon fuels, reducing upstream methane emissions, and providing renewable natural gas to customers. These initiatives both reduce emissions and minimize waste, while providing new investment opportunities to the region.

Q. What steps is PSE taking to acquire resources that are compliant with CETA?

A .	PSE recently filed its 2021 integrated resource plan ("IRP"), which meets the
	requirements of CETA, and calls for approximately 1,500 MW of new clean
	resources by 2031 and another 2,500 MW to meet CETA clean energy standards
	by 2045. PSE continues to identify opportunities to add clean energy resources to
	our system. For example, we will soon add 350 MW of wind energy, increasing
	PSE's portfolio of owned and contracted wind to 1,500 MW, by signing a 20-year
	power purchase agreement with a subsidiary of NextEra Energy Resources, LLC
	to buy clean energy from the planned Clearwater Wind Project as discussed in the
	Prefiled Direct Testimony of PSE witness Colin P. Crowley, Exh. CPC-1HCT.
	The Clearwater Wind Project, located about 60 miles north of Colstrip, Montana,
	is expected to come online at the end of 2022, and it will provide sufficient energy
	to power about 140,000 households a year. Also, PSE reached an agreement with
	Chelan County Public Utility District ("PUD") for supply of renewable
	hydropower from two PUD hydro projects on the Columbia River. The five-year
	"slice" contract supplies PSE with five percent of the output from the PUD's 624-
	MW Rock Island and 1,236.6-MW Rocky Reach hydropower projects from 2022
	through 2026. In addition, PSE negotiated a three-year extension with Douglas
	County PUD of the agreement with the Colville Tribe for a 5.5 percent share of
	the output of the Wells Hydroelectric Project, providing PSE 25 MW of power,

enough energy to power approximately 20,000 homes. PSE witness Zac Yanez provides additional justification for these contracts.

Q. How will PSE use grid modernization, AMI, and gas system improvements to advance clean energy?

A. The clean energy transition is multifaceted, and PSE is focused on all aspects of the business to promote clean energy solutions. Grid modernization investments both improve the resiliency of our distribution grid and support enablement of our CEIP by providing the foundation for PSE to be able to actively control and operate distributed energy resources. As we layer more distributed battery and distributed energy resources into our local system, incremental grid modernization investments help enable that transition. Likewise, AMI investments provide a range of benefits to customers, and in support of the clean energy transition, AMI technology will be instrumental in providing granular customer usage for energy efficiency programs and time of use rates. The benefits and uses of AMI are discussed in detail by Dr. Sanem I. Sergici of The Brattle Group in her testimony and exhibits.

Gas system improvements also advance clean energy. As discussed by PSE witness Catherine A. Koch in Exh. CAK-6, PSE's Pipeline Modernization Program strengthens safety, efficiency, reliability, and flexibility of the pipeline system, minimizes methane release, and supports low carbon fuels. For example, digitizing monitoring equipment means fugitive emissions can be detected more

quickly and possible leaks addressed sooner. In addition, this program furthers low carbon fuels in PSE's pipelines through improvements in the RNG interconnection process and sizing and designing the system to operate reliably with more RNG and hydrogen-blended fuels so customers receive cleaner energy to burn in appliances.

Q. What are some of the highlights of the CEIP that PSE filed in 2021?

A. PSE's first CEIP, filed and pending in Docket UE-210795 and provided as Exh. JJJ-3 in this case, describes our plans for clean electricity programs, investments, and actions for 2022-2025. In addition to removing coal as a source of energy by 2025, the CEIP moves PSE to 63 percent clean electricity by the end of 2025. This clean electricity target is expected to be reached through a combination of: (i) over a million megawatt hours of energy efficiency, (ii) rapid scaling up of demand response resources, and (iii) approximately 500 MW of clean, utility-scale renewable resources. The CEIP also calls for a doubling of the amount of distributed energy resources, such as solar and batteries, currently on our system—which help PSE meet its CETA targets. The CEIP showcases PSE's recent and ongoing work to equitably distribute the benefits of the clean energy transition to all customers and provides details about the work PSE will do to facilitate an inclusive, equitable carbon-free future. PSE witness Joshua J. Jacobs discusses the CEIP in further detail.

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- Q. What steps has PSE taken to implement customer and stakeholder feedback into the CEIP?
- A. PSE is establishing itself as a leader in developing the equity and broader customer benefit requirements of CETA. PSE formed its first Equity Advisory Group ("EAG") in March of 2021 and filed a robust public participation plan for incorporating customer and stakeholder feedback into the first CEIP process. The group is comprised of 13 members representing community-based organizations from across PSE's service area. In the development of the CEIP, we have presented our materials in various languages and conducted surveys—again available in different languages—with respondents who may not actively engage in formal advisory groups. PSE consulted with its EAG and other advisory groups, held meetings with community-based organizations, conducted a customer survey to obtain input, and held an online open house to gather input on the draft CEIP. This input led to the development of factors to identify vulnerable populations and customer-driven benefit indicators that measure the impacts of PSE actions. It incorporates programs and actions that reflect customer vision for an equitable energy future. The overall objectives of the public participation initiatives were to educate and increase customer awareness, solicit feedback and collect input to inform the CEIP, be clear and transparent, and build relationships with customers and community-based organizations. Additionally, the CEIP team regularly consults with other PSE advisory groups, including the Conservation

Resource Advisory Group, the Low-Income Advisory Committee, and the Integrated Resource Planning Stakeholder Group.

- Q. What other steps is PSE taking to more equitably deliver gas and electricity services to customers during this transition to cleaner energy?
- A. PSE believes that all customers should benefit from the transition to clean energy and, in particular, those communities that typically experience disproportionate impacts must help to inform decision-making so that benefits and burdens associated with the transition are equitably distributed. As part of our Beyond Net Zero Carbon initiative, the Company is forming a Beyond Net Zero Carbon advisory group, which will provide input on PSE's commitment to reduce carbon emissions on both its natural gas and electric supply. The membership of this group, when final, is expected to include representatives from organizations or communities who may not regularly engage with PSE or the state on environmental, utility, or energy issues and can provide their perspectives on carbon reduction. The additional feedback received through these efforts informs our understanding of our customers' preferences as we work to provide them better energy service.
- Q. Do you have any further thoughts on PSE's efforts to comply with CETA?
- A. Yes. PSE is building out its electric system to meet the state's future energy goals.

 As discussed by PSE witness Kazi Hasan, these goals go far beyond the traditional provision of safe and reliable service to include environmental and

social considerations, and they create an increased need for timely, consistent cost recovery. This filing presents PSE's proposal for a multiyear rate plan that is necessary to implement a clean electricity future; it is forward-looking, adaptive, and focused on investments that enhance safety and reliability while promoting clean energy and the broader customer benefits required by CETA.

E. PSE's Response to Gas Decarbonization Initiatives

- Q. Why is PSE addressing decarbonization of its natural gas delivery system?
- A. State and municipal policies and customer demands are clear that natural gas delivery systems will need to emit far lower carbon emissions in the future. For example, the Washington Climate Commitment Act, which was signed into law by Governor Jay Inslee in May 2021, solidifies Washington state as a national climate leader with the most ambitious limit on emissions of any state in the nation. In addition, the State Energy Strategy, legislative proposals, and municipal actions demonstrate the growing interest in moving more urgently toward decarbonization. Given the safety and reliability aspects of the natural gas system, we cannot transition the system in a reactive manner; PSE must conduct the analysis and enable our system to accommodate the changes necessary for decarbonization in order to meet our standards for safety and reliability while taking care not to leave our most vulnerable customers behind.

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Q. Please elaborate on the climate legislation enacted in Washington in 2021.

In 2021, both the CCA and the Low Carbon Fuel Standard (HB 1091) were signed into law. PSE supported both bills during the legislative session because they can further enable PSE to continue to provide clean energy that is also safe and reliable. The CCA should establish an economy-wide price on greenhouse gas emissions that is linked to other jurisdictions to facilitate cost-effective reductions across the region. The legislation contains provisions that can protect PSE customers from significant cost increases and encourage investment in clean energy that benefits PSE customers directly. The Low Carbon Fuel Standard will allow PSE to invest credits back into accelerated investments for customers in transportation electrification.

Q. What are the risks associated with state decarbonization initiatives?

A. Many customers in the Pacific Northwest rely on both electricity and natural gas for their energy needs. As PSE is implementing state policy, it bears increasing risk that existing, and even nascent, technologies may not meet the ambitious requirements established in statute or yet-to-be finalized regulations. There is increasing concern that efforts to completely serve customers by electrification only, or decrease the number of gas customers, will adversely impact customers with the prospect for blackouts because of (1) the time to bring new generation resources on to the system, (2) limited transmission and the amount of time to build or upgrade existing transmission, and (3) the use of piped energy to serve

customers during extreme weather events. While PSE works to comply with the state's energy policies, PSE and our customers face increasing risks to safety and reliability if policies fail to account for the structure, physics, and financing of the electric and piped-energy systems.

F. Customer Partnerships Will Be Key To Achieving the Decarbonization Goals Set by Washington State, PSE and Its Customers

- Q. How does PSE plan to engage with its customers on the decarbonization goals?
- A. As previously discussed, PSE is engaging with customers through stakeholder advisory groups to promote equity and inclusion as it moves to a clean energy future. In addition, PSE is ramping up initiatives and opportunities for customers to actively engage in ways that will further PSE's and customers' decarbonization goals. Greenhouse gas emissions from the transportation sector represent approximately 45 percent of Washington State's total greenhouse gas emissions. As part of the state's efforts to reduce these emissions, PSE is strongly committed to supporting decarbonization of transportation by offering electric vehicle charging programs for customers, as discussed in the Prefiled Direct Testimony of William T. Einstein, Exh. WTE-1CT, and operating a clean and reliable electricity grid. Other examples of expanded opportunities for customer engagement include new rate designs and technologies that include customers, such as the proposed time varying rate pilots described by PSE witnesses Dr. Ahmad Faruqui and Birud Jhaveri. PSE's CEIP includes new distributed energy

resource programs that seek to engage customers through investments in small-scale distributed renewable resources and storage, with a commitment to equitably distribute the benefits of these programs.

- Q. How do PSE's customer choice programs factor into the clean energy equation?
- A. PSE has a variety of customer choice programs that directly connect to PSE's commitment to move Beyond Net Zero Carbon and facilitate our customers' efforts to reduce their carbon emissions. These programs are all voluntary in participation and fall largely into three areas: renewable electricity programs for electricity customers; carbon offset and renewable natural gas programs for natural gas customers; and transportation electrification programs.

PSE has been a leader in offering renewable electricity programs for customers over the last 20 years since the initial launch of the Green Power program in 2001. This program is now the fifth ranked utility program in the United States for Green Power sales and the fourth ranked program for Green Power customers, according to the National Renewable Energy Laboratories 2020 Green Pricing Programs Rankings. Combined together, our renewable electricity programs serve more than 80,000 customers. Further, PSE's Green Direct program has received several regional and national industry awards for its design and was quickly subscribed by its customers. PSE is adding to our portfolio of electric products by

 launching its community solar program that was filed in Docket UE-200998 and has been highly requested by customers.

For our natural gas customers, PSE has provided a carbon offset program for more than ten years. This program has seen exponential growth over the last three years as interest grows among customers looking to reduce their carbon emissions. In early 2022, PSE will launch its new renewable natural gas program to provide customers with another option to incorporate renewable natural gas into their gas service, as filed in Docket UG-210194.

PSE's Up&Go Electric program has provided electric vehicle drivers with new options for charging vehicles in our service area. These pilot programs have connected new charging stations at customer residences (multi-family and single family), workplaces and public locations. The Up&Go Electric program has also educated customers about the benefits of electric transportation and helped customers learn about new vehicles. Additionally, PSE has partnered with many agencies and service providers of underserved customers to electrify fleets and install charging stations. PSE will be expanding this program over the coming years as it implements its five-year Transportation Electrification program recently acknowledged by the Commission in Docket UE-210191.

G. PSE Is Taking Steps to Advance Equity as it Moves Towards a Clean Energy Future

- Q. What steps is PSE taking to advance equity as it moves towards a clean energy future?
- A. PSE is working on several fronts to advance equity as it moves to a clean energy future. As we strive to be our customers' clean energy provider of choice, we have developed a Diversity, Equity, and Inclusion ("DEI") playbook that guides our activities. DEI is an essential part of our journey, but DEI is not just internally focused. It informs how we connect in the community; how we do business with, and our expectations of, third parties and suppliers; and how we serve our customers. As such, we have four focus areas for DEI: our community, our customers, our people, and our suppliers.

Workforce diversity is a key focus area, and PSE is promoting diversity in hiring through intentional efforts to solicit candidates from diverse local communities; engagement with the Professional Diversity Network, a resource to promote PSE positions in diverse job forums; and through early education engagement through a partnership with iUrban, a locally owned minority led community organization focused on STEM+Arts education for underrepresented middle and high school students.

PSE is also working to promote supplier diversity by expanding identification of diverse suppliers who can contribute to the Company's needs. Vendor evaluation in our procurement processes is being revised to assess and include vendors'

diversity supplier efforts. PSE witness Dawn Reyes discusses supplier diversity in more detail.

Deliberate actions are being taken to diversify the Company's customer engagement and outreach. As previously discussed, PSE formed the EAG to consider ways to equitably distribute benefits and reduce burdens to make the clean energy transformation affordable, accountable, and accessible. PSE is also working to include more public outreach and stakeholder consultation in its resource planning work and other areas. PSE is using the newly created designations of highly impacted customers and vulnerable communities to understand how to more equitably design and execute resource planning and selection, program design and implementation, and in the design and operation of low-income assistance programs to provide opportunities for all customers.

III. PSE FACES FINANCIAL CHALLENGES AND THE PROPOSED RATE PLAN WILL ASSIST PSE TO MEET THESE CHALLENGES

- Q. Does PSE face financial challenges now and over the course of the multiyear rate plan?
- A. Yes. PSE faces significant financial challenges now and in the coming years, as discussed by PSE witness Kazi K. Hasan.

Q. What are some of the financial challenges PSE faces?

- A. By the time the rates from this case go into effect in January 2023, PSE will be carrying more than four years of net capital expense and operations expense growth that has not been included in rates. In addition, as discussed by PSE witness Kazi K. Hasan, the Tax Cuts & Jobs Act of 2017 significantly reduced cash flow from deferred taxes in two ways: the reduction of the corporate tax rate from 35 percent to 21 percent and the elimination of bonus depreciation. PSE estimates the impacts of tax reform reduced its cash flow by \$149 million annually. These financial challenges impact the credit metrics ascribed to the Company by rating agencies. If a downgrade of these metrics were to occur it would impact the financial strength of PSE and result in higher interest rates. This would increase the costs to customers as PSE invests in new capital and programs to, not only maintain our existing system, but also transition our system consistent with CETA and the CCA.
- Q. What are the operational requirements that could be constrained by limited financial resources without adequate rate relief in this case?
- A. There are multiple competing operational requirements and investment priorities that place demands on PSE's financial resources, and these would need to be constrained without adequate rate relief. As previously discussed, PSE must acquire a significant amount of clean resources in the coming decades and must take steps immediately to meet requirements under CETA and the CCA. For new

generating resources, PSE must secure the transmission to deliver these resources to PSE's customers. As PSE replaces fossil-generated resources, PSE will need to enhance demand-side and distributed energy resource programs and acquire significantly more megawatts of new renewable resources to replace the lost capacity. PSE will also need to have adequate flexible capacity on its system to effectively integrate new renewable resources at the lowest reasonable cost. At the same time as PSE moves forward with electric system transformation, it must continue to invest in its existing electric infrastructure to provide safe and reliable electricity to its customers by improving the worst performing circuits, keeping trees from causing outages on transmission and distribution lines to the greatest extent possible, engaging in an electric market with sometime-limited supply, and providing for PSE's capacity needs during severe weather events such as the unprecedented heat event experienced in 2021.

On the natural gas side, research, experimentation, and demonstration of emerging technologies and fuels facilitates the move toward resource diversity as we await the final requirements of the CCA. As a prudent utility, PSE must continue to assess practices to determine how and when we can scale innovative resources and methods to decarbonize our natural gas system. Additionally, PSE will need to double down on its efforts to limit leaks on the natural gas system, which is important for reducing PSE's carbon footprint as well as providing a safe and reliable natural gas system, as discussed in the Prefiled Direct Testimony of Catherine A. Koch, Exh. CAK-1T.

in order to achieve PSE's core mission of providing safe, clean, affordable, and reliable service to customers and providing customers choice as to how they interact with PSE. These technologies have much shorter depreciable lives than traditional utility assets, and it is critical for PSE to be able to timely recover its technology investments. In addition, effectively mitigating cyber security risk has become increasingly complex in the face of elevated levels of cyber penetration attempts aimed at both utility and third-party vendor cyber assets, and we must address these risks consistent with federal requirements. This is discussed in more detail in the Prefiled Direct Testimony of Margaret F. Hopkins, Exh. MFH-1T.

Information technology and the use of digital tools are rapidly becoming essential

- Q. How does PSE's proposed rate plan address these financial challenges PSE faces while also balancing the interest of customers?
- A. PSE's multiyear rate plan provides additional certainty by setting rates over a three-year period and allowing annual power cost updates. It addresses PSE's growing regulatory lag by including plant in service by and during the rate effective date, as well as annual rate increases to address investment and operating expenses projected in the outer years. It allows for flexibility in timing of plant, recognizing that exogenous circumstances can cause plans to change. And it includes a capital structure that increases over time to be consistent with PSE's projected actual capital structure. At the same time, PSE's proposed multiyear rate plan balances the interests of customers and includes features that will benefit customers during this transition to a cleaner energy future. Customers

have the opportunity to share in excess earnings, should they occur. Performance measures line up with PSE's Beyond Net Zero Carbon and equity goals and modernize PSE's existing service quality metrics. Performance measures are discussed in the testimonies of PSE witnesses Mark N. Lowry, Catherine A. Koch, William T. Einstein, and Joshua J. Jacobs. PSE worked with stakeholders to create a flexible regulatory approach that will allow PSE to provide leadership in the transformation of the energy industry, while improving the reliability and benefits of reasonably priced energy to customers. All of this will provide benefits to customers during the rate plan period.

IV. INTRODUCTION OF PSE WITNESSES IN THE CASE

- Q. Please introduce the other witnesses who are testifying on behalf of PSE in this case.
- A. The following is a list of the 36 witnesses, in addition to myself, who are filing direct testimony and a brief summary of their testimony. The witnesses are grouped by general area of testimony.

A. Financial:

• Kazi K. Hasan, Senior Vice President and Chief Financial Officer for PSE, provides an overview of PSE's requests for a 9.9 percent return on equity and an equity ratio that increases from the current level of 48.5 percent to 50 percent over the course of the multiyear rate plan. He discusses PSE's financial status following tax reform and the outcome of the 2019 general rate case decision, and steps PSE has taken to control costs and earn its authorized rate of return. He testifies that PSE's proposed multiyear rate plan allows PSE to maintain financial strength

while providing services to customers and carrying out state energy policy.

- Cara G. Peterman, Corporate Treasurer for PSE, describes PSE's requested capital structure, cost of capital, and overall rate of return for each year of the multiyear rate plan. She discusses PSE's credit ratings performance and the factors that have affected PSE's performance. She demonstrates that PSE has reduced its cost of long-term debt and that PSE's requested overall rate of return during the multiyear rate plan is consistent with the authorized rate of return in 2019 and 2020. Finally, she demonstrates compliance with regulatory commitments regarding capital structure and cost of capital.
- Stephen J. King, Director, Controller and Principal Accounting Officer for PSE, presents PSE's income statement and balance sheet and addresses the processes and procedures to validate the completeness and accuracy of financial information used in the test year for electric and gas revenue requirements. He also discusses the calculation of PSE's capital structure and provides the Affiliated Interest and Subsidiary Transaction Report.
- **Joshua A. Kensok**, Director of Financial Planning and Analysis for PSE, explains (1) how PSE's financial planning system, tools, processes, reporting, and governance operate, (2) how they have performed over time, and (3) why they can be relied upon for developing and administering the multiyear rate plan. He also provides the planned capital spending, plant in service, and O&M spending for each year of the multiyear rate plan.
- Matthew R. Marcelia, Director of Tax and Finance IT Projects for PSE, addresses the treatment of accumulated deferred income taxes and excess deferred income taxes in the multiyear rate plan, the restating adjustment for income taxes, and potential tax law changes and their likely impact on the multiyear rate plan.
- Ann E. Bulkley, a Principal with The Brattle Group, presents evidence regarding the appropriate return on equity for PSE and assesses PSE's proposed capital structure for ratemaking.
- Todd A. Shipman, CFA, a Principal with Utility Credit Consultancy LLC, addresses credit ratings, the factors that affect credit ratings and the effect that regulatory decisions have on ratings. He discusses PSE's credit profile and ratings that are under pressure because of cash flow concerns and increasing financial burdens to transition to a clean energy future. He

testifies that adopting PSE's proposed multiyear rate plan will stabilize PSE's credit profile and ratings and will benefit both PSE and customers.

B. Generation/Power Supply/Electric and Gas Resources

- Ronald J. Roberts, Vice President of Energy Supply for PSE, discusses PSE's approach to acquiring electric and natural gas energy resources, the prudency of the Tacoma Liquefied Natural Gas Project, and PSE's remaining contractual obligations related to the Colstrip Steam Electric Station.
- **Joshua J. Jacobs**, Vice President of Clean Energy Strategy for PSE, describes PSE's decarbonization efforts, Beyond Net Zero goals, and 2021 Clean Energy Implementation Plan. He also explains the investments PSE must make to further these efforts.
- Paul K. Wetherbee, Director of Energy Supply Merchant for PSE, testifies regarding power cost issues, including PSE's projected power costs, how those costs were calculated, new resources included in the power cost projection, and transmission contracts.
- **Ryan P. Blood**, Director of Northern Generation for PSE, discusses PSE's plans to regrout and modernize the Baker River Hydro generating station.
- **Kyle C. Stewart**, Director of Enterprise Risk Management for PSE, testifies regarding risk in western energy markets and explains why PSE must reduce its reliance on bilateral Mid-Columbia trading to meet capacity requirements.
- **Janet K. Phelps**, Manager of Energy Analysis Power Costs for PSE, addresses PSE's proposal to annually update variable power costs included in the PCA power cost baseline rate and to retain the PCORC to recover in rates fixed costs associated with new and renewed resources.
- Mark A. Carlson, Director of Generation and Natural Gas Storage for PSE, describes the production O&M expenses that PSE presents for recovery in this proceeding, how PSE determined those expenses, and the purpose behind and projects related to those expenses.
- **Zacarias C. Yanez**, a Commercial Acquisitions Manager on the Resource Acquisitions Team for PSE, describes the prudence of (1) the Colville Slice Agreement Extension, a three-year extension with Douglas PUD of the agreement with the Colville Tribe for a 5.5 percent share of the output

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of the Wells Hydroelectric Project, and (2) the Chelan Slice Agreement, an agreement with Chelan PUD for a 5 percent share of the output of the Rocky Reach and Rock Island Hydroelectric Projects.

 Colin P. Crowley, Manager of Resource Acquisition for PSE, describes the 2018 All Resources RFP evaluation and results and requests a determination of prudence for all costs associated with the Clearwater Wind Power Purchase Agreement.

C. Electric and Gas Delivery and Project Management

- Dan'l R. Koch, Vice President of Operations for PSE, provides an overview of PSE's electric and natural gas operations, how PSE invests in the ongoing operations and maintenance of electric and natural gas infrastructure, how PSE prioritizes natural gas and electric transmission and distribution projects, and the prudency of the Energize Eastside transmission project for which PSE seeks recovery in this proceeding.
- Catherine A. Koch, Director of Planning for PSE, describes the planning process PSE uses to optimize investments that benefit customers, PSE's transmission and distribution work, and storm deferrals. She provides detailed descriptions of PSE's work focused on customer and public safety, customer growth, grid modernization, and pipeline modernization. She provides testimony on the progress of PSE's AMI investment, including the benefits resulting from the investment and requests recovery of the investment and the return on the investment in this case.
- Roque B. Bamba, Director of Project Delivery for PSE, provides an overview of how PSE manages capital infrastructure projects and programs, including how PSE's approach allows PSE to invest wisely, how PSE optimizes the benefits from each project or program, and why flexibility is needed for PSE to optimize benefits. He also describes certain major projects in greater detail.
- Dr. Sanem I. Sergici, a Principal with The Brattle Group, testifies
 regarding the ways in which PSE is planning to maximize the customerfacing benefits of AMI.

D. Information Technology/Facilities/Human Resources

• Margaret F. Hopkins, Senior Vice President of Shared Services and Chief Information Officer for PSE, provides an overview of PSE's Information Technology ("IT") vision and highlights key risks and

challenges IT faces in support of corporate strategic efforts to achieve Beyond Net Zero Carbon emission by 2045. Her testimony also addresses how IT supports safety, clean energy, and reliability and explains why IT modernization programs are necessary to meet customer expectations, state requirements, and threats to PSE's infrastructure.

- **Suzanne L. Tamayo**, Director of Information and Technology ("IT") for PSE, describes the IT capital investments related to business enablement and systems modernization that PSE seeks recovery for in this case and reports on the status of PSE's Get to Zero program.
- Dawn M. Reyes, Director of Corporate Share Services for PSE, addresses recent and planned major facility changes and PSE's procurement processes.
- Thomas M. Hunt, Director of Compensation and Benefits for PSE, describes the elements of PSE's compensation and benefits programs, the steps PSE takes to compete in a challenging labor market and retain a skilled workforce while controlling wage and benefits costs, and changes in the labor market and to the PSE program design since 2019, including those related to COVID-19.

E. Rates/Customer Programs/Performance Based Ratemaking

- **Jon A. Piliaris**, Director of Regulatory Affairs for PSE, provides an overview of the multiyear rate plan including the development of rates, performance-based elements, customer protections, and the regulatory process. Additionally, he addresses the allocation of Colstrip decommissioning and remediation costs, the treatment of distribution costs related to the Tacoma LNG facility, and a proposal for the removal or modification of certain outdated reporting requirements.
- Susan E. Free, Director of Revenue Requirements and Regulatory Compliance for PSE, discusses the revenue requirement calculations for the multiyear rate plan, demonstrates that PSE's current rates are insufficient for its current operations, presents proposals for rates subject to refund, the review process for property that will become used and useful after initial setting of rates, and the recovery of Colstrip decommissioning and remediation costs. Her testimony also provides an updated baseline rate for PSE's PCA mechanism for each of the rate years.
- William T. Einstein, Director of New Product Development for PSE, summarizes PSE's product development process, the ongoing Green

Direct customer collaborative work, and the sale of the gas Water Heater Rental service and discontinuation of the gas Conversion Burner Rental service. Additionally, his testimony addresses cost recovery for PSE's upcoming time-varying rate pilots; PSE's current electric vehicle pilot products and services; PSE's transportation electrification plan filing; the Distributed Energy Resources necessary to implement the CEIP; and PSE's Voluntary Renewable Natural Gas service.

- PSE's efforts to serve the community and customers, including work to assist those impacted by the COVID-19 pandemic, efforts to meet customer expectations for efficient and convenient service, and expanded assistance programs and payment options for customers. Her testimony also provides an overview of how Customer Solutions supports PSE's clean energy transformation.
- Ned W. Allis, Vice President of Gannett Fleming Valuation and Rate Consultants, LLC, testifies regarding the Depreciation Study that Gannett Fleming prepared for PSE setting forth the calculated annual depreciation accrual rates by account as of June 30, 2021, for all electric, gas and common plant.
- Mark N. Lowry, President of Pacific Economic Group Research LLC, provides testimony and a report that offers a constructive overview of performance-based ratemaking and discusses metrics and other provisions of PSE's multiyear plan.
- **Dr. Ahmad Faruqui**, a Principal with The Brattle Group, describes the objectives of PSE's Time Varying Rates pilot, the time-of-use ("TOU") rates to be tested in the pilot and how those rates were developed, the pilot design and how it compares to best industry practices, and the evaluation, measurement, and verification process that will be used to evaluate the TOU rates.
- **Birud D. Jhaveri**, Manager of Pricing and Cost of Service for PSE, presents PSE's restated and normalized test year revenues from electric operations, electric cost of service study and rate design, the derivation of projected rate year revenue, the overall rate impacts for the projected rate years in the multiyear rate plan, the evaluation of PSE's decoupling mechanisms, updated allowed revenue for PSE's electric and natural gas decoupling mechanisms, an energy burden analysis, proposed low-income discount rate for qualifying customers, electric residential block study, and PSE's time varying rate pilot.