Exh. JES-1T Dockets UE-220066, UG-220067, UG-210918 Witness: Jennifer E. Snyder

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION,

DOCKETS UE-220066, UG-220067, and **UG-210918** (*Consolidated*)

Complainant,

v.

PUGET SOUND ENERGY,

Respondent.

In the Matter of the Petition of

PUGET SOUND ENERGY

For an Order Authorizing Deferred Accounting Treatment for Puget Sound Energy's Share of Costs Associated with the Tacoma LNG Facility

TESTIMONY OF

JENNIFER E. SNYDER

STAFF OF WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

Advanced Metering Infrastructure (AMI) Benefits
Performance Based Regulation related to AMI
Demand Response Performance Incentive Mechanism and Metrics

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LIST OF EXHIBITS

Exh. JES-2	PSE Response to UTC Staff Data Request No. 188 - AMI Benefits Accrual
Exh. JES-3	PSE Response to UTC Staff Data Request No. 305 - Equity in AMI use Cases
Exh. JES-4	PSE Response to UTC Staff Data Request No. 307 - AMI Implementation Plan Customer Costs

1		I. INTRODUCTION
2		
3	Q.	Please state your name and business address.
4	A.	My name is Jennifer Elizabeth Snyder, and my business address is 621 Woodland
5		Square Loop SE, Lacey, Washington, 98503. My business mailing address is P.O.
6		Box 47250, Olympia, Washington, 98504-7250. My business email address is
7		Jennifer.snyder@utc.wa.gov.
8		
9	Q.	By whom are you employed and in what capacity?
10	A.	I am employed by the Washington Utilities and Transportation Commission
11		(Commission) as a Regulatory Analyst in the Conservation and Energy Planning
12		Section of the Regulatory Services Division.
13		
14	Q.	How long have you been employed by the Commission?
15	A.	I have been employed by the Commission since 2013.
16		
17	Q.	Please state your qualifications to provide testimony in this proceeding.
18	A.	I have a Master's degree in Environmental Studies with an emphasis in Energy
19		Policy and a Bachelor of Science degree, both from The Evergreen State College. I
20		completed Public Utilities Reports Guide's "Principles of Public Utilities Operations
21		and Management" in October 2016. I attended New Mexico State University's rate
22		case basics workshop in May 2016, the National Association of Regulatory Utility
23		Commissioners' (NARUC) Annual Regulatory Studies Program intermediate course

in August 2016, the International Energy Program Evaluation Conference in 2017 and 2019, as well as numerous other sector-specific workshops, trainings, and conferences. Most recently I have attended the NARUC Regulatory Training Initiative courses on Benefit-Cost Analysis for Distributed Energy Resources in May 2022 and Equity and Energy and Environmental Justice in State Public Utility Commission Decisions in June 2022. I represented Washington at the National Governor's Association Energy Efficiency Experts Roundtable in 2018 and presented on cost-benefit analysis at the Efficiency Exchange Conference in 2019.

As a Regulatory Analyst, I am responsible for the development of

As a Regulatory Analyst, I am responsible for the development of Commission Staff (Staff) recommendations concerning tariff filings, conservation plans, integrated resource plans, and clean energy implementation plans by regulated companies for presentation to the Commission at open public meetings and subject to adjudication.

A.

Q. Have you testified previously before the Commission?

Yes. With respect to Puget Sound Energy (PSE or Company), I have filed testimony in support of settlement for Microsoft's special contract, Docket UE-161123, and on the prudence of acquiring innovative technology in PSE's 2017 general rate case (GRC), Dockets UE-170033 and UG-170034. I have also sponsored testimony on various issues, including conservation program design, in Avista Corporation's (Avista) 2017 GRC, Dockets UE-170485 and UG-170486; and Cascades 2017 GRC, Docket UG-170929.

1		II. SCOPE AND SUMMARY OF TESTIMONY
2		
3	Q.	What is the scope and purpose of your testimony?
4	A.	I address PSE's demonstration of maximization of advanced metering infrastructure
5		(AMI) benefits, metrics related to AMI, and metrics related to demand side
6		management performance, including PSE's proposed demand response (DR)
7		performance incentive mechanisms (PIM).
8		
9	Q.	Please summarize your recommendations.
10	A.	PSE's asserts its AMI project, while not yet complete, will be completed during the
11		multiyear rate plan. Under the condition of completeness, Staff recommends PSE
12		continue to recover a return of its AMI investment and continue to defer the recovery
13		of the return on AMI investment until such time as the Company files an updated
14		AMI implementation plan that maximizes benefits to the Company and customers.
15		Finally, Staff recommends additional performance metrics to track AMI and demand
16		side management performance, as well as modifications to PSE's proposed DR PIM.
17		
18	Q.	Have you prepared any exhibits in support of your testimony?
19	A.	Yes. I prepared Exhibits JES-2 through JES-4.
20		• Exh. JES-2 shows the benefit categories PSE considered when developing the
21		AMI Implementation Plan and who PSE believes the benefits will accrue to.
22		• Exh. JES-3 shows the instances where PSE considered equity for AMI use
23		cases.

1		• Exh. JES-4 shows that PSE did not consider participant costs when
2		developing the AMI Implementation Plan.
3		
4		III. ADVANCED METERING INFRASTRUCTURE BENEFITS
5		
6		A. Background of AMI Investment
7		
8	Q.	Please provide background on the Company's AMI investment.
9	A.	The Company began replacing its Automatic Meter Reading (AMR) system with
10		AMI across its electric and gas service territory in 2016. PSE first requested a
11		determination of prudency and approval for recovery in rates of investments related
12		to AMI in the Company's 2019 GRC. In that case, Public Counsel recommended
13		the Commission disallow recovery of the AMI investment based on a significant
14		disparity between program costs and benefits. ² Staff disagreed and recommended the
15		Commission reject Public Counsel's request. ³
16		
17	Q.	What did the Commission decide about the AMI investment in the 2020 Order?
18	A.	The Commission reserved a final determination of prudency on the project until the
19		AMI installation was complete, and all customer benefits could be presented for
20		evaluation. ⁴ The Commission authorized the recovery of the test year AMI costs,

¹ Wash. Utils. & Transp. Comm'n v. Puget Sound Energy, Dockets UE-190529 & UG-190530, Order 08, 43, ¶ 135 (July 8, 2020) (PSE 2020 GRC Order).

² PSE 2020 GRC Order at 45, ¶ 140−142.

³ PSE 2020 GRC Order at 47, ¶ 148.

⁴ PSE 2020 GRC Order at 49, ¶ 156.

1		deferral, and pro forma adjustments through December 31, 2019, but required PSE to
2		continue to defer recovery of the return on each portion of the investment. ⁵
3		
4	Q.	Did the Commission provide guidance to PSE on how to achieve full recovery
5		on the AMI investment?
6	A.	Yes. In PSE's last GRC, the Commission clearly stated that the prudency of the AMI
7		investment "rests on PSE's ability to live up to its promises of multiple customer
8		benefits." ⁶ During the hearing and in the order, the Commission referred to a Utility
9		Dive article, describing the American Council for an Energy-Efficient Economy
10		(ACEEE) report, Leveraging Advanced Metering Infrastructure to Save Energy,
11		which warned that "[m]any utilities are underexploiting AMI capabilities and
12		attendant benefits, thus missing a key tool to deliver value to their customers and
13		systems." As part of its order, the Commission provided several expectations
14		regarding PSE's future proposal to recover the return on its AMI investment.
15		Specifically, the Commission stated that PSE should demonstrate:
16		1. Completion of the AMI project;
17		2. Plans for the Company and customers to receive maximum value
18		from AMI implementation;

 ⁵ PSE 2020 GRC Order at 200, ¶ 741.
 ⁶ PSE 2020 GRC Order at 49, ¶ 156.
 ⁷ PSE 2020 GRC Order at 50, ¶ 157 (quoting Most utilities aren't getting full value from smart meters, report warns, Utility Dive, Robert Walton (Jan. 13, 2020), available at https://www.utilitydive.com/news/mostutilitiesarent-getting-full-value-from-smart-meters-report-warns/570249/).

I		3. Review of the ACEEE report referenced in the Utility Dive article
2		"Most utilities aren't getting full value from smart meters, report
3		warns";
4		4. Analysis of applicability of six use cases (time of use rates, real-time
5		energy use feedback for customers, behavior-based programs, data
6		disaggregation, grid-interactive efficient buildings, and CVR or
7		volt/VAR optimization), as well as any other use cases identified by
8		the Company; and
9		5. Development of additional information or metrics demonstrating AMI
10		benefits to customers. ⁸
11		
12	Q.	Has the Commission provided any additional guidance relevant to the recovery
13		of AMI since the 2020 Order?
14	A.	Yes. In Avista's last GRC, the Commission allowed both the recovery of AMI
15		investment and the return on AMI investment. ⁹ While the Commission authorized
16		recovery, it noted that it was not completely satisfied with Avista's proposal and
17		imposed additional requirements. 10 To summarize, the Commission required Avista
18		to:
19		1. Develop and report further analyses of the six use cases for AMI;
20		2. Craft and report plans for <i>achieving benefits</i> through application of
21		each of the use cases of AMI; and

 $^{^8}$ PSE 2020 GRC Order at 49–50, $\P\P$ 156–157. 9 Wash. Utils. & Transp. Comm'n v. Avista Corp, Dockets UE-200900 & UG-200901, Order 08, 126, \P 376 (September 27, 2021)(Avista 2021 GRC Order).

10 Avista 2021 GRC Order at 80-81, ¶ 228 (emphasis added).

1		3. Develop and propose AMI performance-based regulation metrics and
2		measurements that the Commission may apply. Specifically, identify
3		such metrics and measurements relevant for each of the use cases of
4		AMI. ¹¹
5		The Commission also encouraged Avista to engage with stakeholders, for support
6		and feedback, when developing proposals for AMI performance-based metrics and
7		measurements. 12
8		
9	Q.	Is there anything else that has occurred since the 2019 GRC that PSE should
10		have considered when creating an AMI implementation plan that maximizes
11		customer benefits?
12	A.	Yes. As detailed in the testimony of Staff witness Deborah Reynolds, significant
13		legislation has changed the framework for electric and gas utility regulation in recent
14		years. As Reynolds explains, equity is a factor the Commission may consider when
15		determining if an investment or action is in the public interest. ¹³ In addition, PSE
16		describes AMI as necessary for PSE to comply with CETA, specifically because it
17		provides granular data for demand side management, renewable energy resources,
18		and customer programs. 14 In Staff's view, a forward looking plan developed by PSE

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consideration of equity.

to implement programs for achieving AMI benefits would be incomplete without

 $^{^{11}}$ Avista 2021 GRC Order at 127, \P 383. 12 Avista 2021 GRC Order at 81, n.284.

¹³ Reynolds, Exh. DJR-1T at 8-13.

¹⁴ Koch, Exh. CAK-7 at 37:3-6. *See also*, Sergici, Exh. SIS-3 at 12 ("AMI is also part of PSE's broader, company-wide initiative to modernize the grid and meet the objectives of the Washington Clean Energy Transformation Act. ('CETA').").

1		B. Criteria for Approval to Receive a Return on AMI Investment
2		
3	Q.	What criteria did Staff consider when evaluating PSE's request for a return on
4		AMI investment?
5	A.	In addition to the Commission's prudency standard, Staff reviewed the
6		Commission's guidance from both PSE's last GRC and Avista's last GRC, as well as
7		changes to the regulatory framework as described above. 15 With respect to criteria
8		specific to AMI, Staff expected PSE to demonstrate the following through its
9		testimony and exhibits in this GRC:
10		1. Completion of the AMI project;
11		2. Reports showing how benefits were achieved so far; and plans for the
12		Company and customers to receive maximum value from AMI
13		implementation;
14		3. PSE review of the ACEEE report referenced in the Utility Dive article
15		"Most utilities aren't getting full value from smart meters, report
16		warns";
17		4. Analysis of the applicability of six use cases (time of use rates, real-
18		time energy use feedback for customers, behavior-based programs,
19		data disaggregation, grid-interactive efficient buildings, and CVR or
20		volt/VAR optimization), as well as any other use cases identified by
21		the Company;

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¹⁵ Ball, Exh. JLB-1T at 18:21-19:10.

1		5. Development of additional information or metrics demonstrating AMI
2		benefits to customers; and
3		6. Consideration of applicable changes in legislation and rule,
4		particularly around equity.
5		
6	Q.	Did the Company meet all these criteria?
7	A.	No. However, the Company met some of the criteria. The AMI project, while not yet
8		complete, will be completed during the multiyear rate plan. It is also clear from the
9		Company's testimony that PSE thoroughly reviewed the ACEEE report and
10		thoroughly examined the applicability of the six use cases. ¹⁶
11		
12	Q.	What criteria did PSE fail to meet?
13	A.	The Company failed to appropriately demonstrate (1) how it planned to achieve or
14		maximize customer benefits, and (2) developed information and metrics
15		demonstrating benefits to customers, and (3) sufficiently considered equity.
16		
17	Q.	Please explain the analysis framework used in PSE's "Maximizing Customer
18		Benefits through PSE's Advanced Metering Infrastructure" report (AMI
19		Report) presented as Sergici, Exh. SIS-3?
20	A.	The AMI Report is based off a cost-benefit framework from a utility cost
21		perspective. ¹⁷ The cost-benefit ratio of 2.2 calculated for the Tier 1 and Tier 2 use

¹⁶ Sergici, Exh. SIS-1T at 5:23 - 6:20; Sergici, Exh. SIS-3 at 21; Koch, Exh. CAK-7 at 14:19 - 17:16. ¹⁷ Snyder, Exh. JES-4 at 1.

1		cases detailed in the AMI Benefit Implementation Plan ¹⁰ is not exactly a traditional
2		cost-test, rather it is a modified utility cost test (UCT) that incorporates the societal
3		costs of avoided emissions. 19 When quantifying benefits, PSE focused on five major
4		benefit categories: (1) Avoided Generation Capacity Costs; (2) Avoided T&D
5		Capacity Costs; (3) Avoided T&D Losses; (4) Avoided Energy Costs; and (5)
6		Avoided Emissions. ²⁰ The first four categories are clearly utility system benefits ²¹
7		while the fifth category, avoided emissions, is a societal benefit. 22
8		
9	Q.	Please explain how the Company failed to maximize customer benefits.
10	A.	The Company failed to distinguish customer benefits from system benefits,
11		essentially applying a UCT ²³ to the analysis used to review the AMI Benefit
12		Implementation Plan. ²⁴ The Commission's standard practice for demand-side
13		management resources has long been to rely primarily on the Total Resource Cost

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14

Test (TRC) that accounts for costs and benefits to both ratepayers and the utility.²⁵

¹⁸ Koch, Exh. CAK-7, Appendix C.

¹⁹ Sergici, Exh. SIS-1T at 20:11.

²⁰ Sergici, Exh. SIS-1T at 14:3, fig. 2; Sergici, Exh. SIS-3 at 18-19.

²¹ National Energy Screening Project, National Standard Practice Manual for Benefit-Cost Analysis of Distributed Energy Resources, 3-6 (August 2020) (NSPM for DERs), available at https://www.nationalenergyscreeningproject.org/national-standard-practice-manual/. ("Utility system benefits typically include all the utility system costs that would be avoided or deferred by implementing DER."). ²² NSPM for DERs at ix, Table S-5 (environmental costs and benefits, such as those caused by greenhouse gas emissions are societal impacts).

²³ NSPM for DERs at 3-1 ("Utility Cost Test (UCT), also known as the Program Administrator Cost Test (PACT), which includes the benefits and costs experienced by the utility system.").

²⁴ Snyder, Exh. JES-2 at 1 (explaining that the benefit-cost analysis for PSE's AMI investments in Sergici, Exh. SIS-1T and Sergici, Exh. SIS-3 "reflect benefits accrued to the utility system as a whole"). See also, Koch, Exh. CAK-7, Appendix C.

²⁵ NSPM for DERs at 3-1 ("Total Resource Cost (TRC) Test, which includes the benefits and costs experienced by the utility system, plus benefits and costs to host customers."); In the Matter of the Commission Investigation into Natural Gas Conservation Programs, Docket UG-121207, Policy Statement on the Evaluation of the Cost-Effectiveness of Natural Gas Conservation Programs, 5-6, ¶¶ 10-11, 13 ¶ 35 (October 9, 2013).

While AMI is not itself a demand-side resource, many of the use cases, including all
of the Tier 1 use cases, are energy efficiency, DR, and other distributed energy
resources. ²⁶ When the Commission described its expectation that "both the Company
and its customers receive maximum value from its AMI system," it indicated that the
plan should not focus solely on utility benefits. ²⁷ Therefore, Staff contends that
PSE's AMI Report and AMI Benefit Implementation Plan do not adequately plan for
achieving benefits through application of each of the use cases of AMI, where
customers receive the maximum value from AMI implementation.

Q. Has PSE demonstrated that it maximized customer benefits with respect to

AMI?

A. No. PSE has simply not demonstrated that it has maximized customer benefits because its cost-benefit analysis did not directly consider cost-benefit to customers, as part of its AMI Report and AMI Benefit Implementation Plan.

Q. If the system benefits cause rates to be lower, is that a customer benefit?

A. Not necessarily, especially in the context of benefit-cost analysis for distributed energy resources. Broadly speaking, customers benefit from an affordable and efficient utility system. However, Staff does not believe that these utility system impacts are sufficient in an analysis of customer benefits. A comparison of cost-benefit tests, as shown in Table 1 below, shows that a TRC accounts for customer

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²⁶ For example, time varying rates, behavior-based programs, load flexibility programs, conservation voltage reduction, lower metering cost for customers with distributed generation. Koch, Exh. CAK-7, Appendix C at 2. ²⁷ PSE 2020 GRC Order at 50, ¶ 157 (emphasis added).

costs (which impacts the maximization of customer benefits) in a way that a UCT does not. A major concern with the use of the UCT is that a utility may implement programs that are not in a participating ratepayer's economic interest because the UCT considers only the costs and benefits to the utility system, ignoring the impact on host customers.

Table 1: Comparison of cost-benefit tests²⁸

		Key Question	Categories of Benefits
Test	Perspective	Answered	and Costs Included
Utility Cost	The utility	Will utility system	Utility system impacts
Test (UCT)	system	costs be reduced?	
Total	The utility	Will utility system	Utility system impacts,
Resource	system plus	costs and host	and host customer impacts
Cost Test	host	customers' costs	
(TRC)	customers	collectively be	
		reduced?	
Societal	Society as a	Will total costs to	Utility system impacts,
Cost Test	whole	society be reduced?	host customer impacts,
(SCT)			and societal impacts
Jurisdiction-	Regulators	Will the cost of	Utility system impacts,
Specific		meeting utility system	plus impacts associated
Test (JST)		needs, while achieving	with achieving applicable
		applicable policy goals,	policy goals
		be reduced?	

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Q. What does Staff recommend PSE use as a cost-benefit test?

10 A. Staff believes that an analysis of customer and Company benefits, as requested by 11 the Commission in PSE's last GRC, should be based on a TRC. Specifically, Staff

²⁸ NSPM for DERs at 3-14, Table 3-5.

1	recommends PSE use a modified TRC that incorporates the social cost of carbon to
2	demonstrate the maximization of customer and Company benefits.

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A.

4 Q. Are some customer benefits considered in the AMI Benefits Implementation

Plan?

Yes. PSE provides the AMI Report, which mentions unquantified benefits such as customer satisfaction, increased reliability and resilience, and local job benefits.²⁹

These benefits are acknowledged in passing, but Staff has not been able to identify any attempt by the Company to plan for or maximize these benefits. PSE plans to evaluate customer costs and benefits *after* PSE obtains Commission approval to proceed with these programs.³⁰ The Company must show that the AMI system will be operated and utilized in such a way as to provide the maximum value to customers. PSE states that "specific distributional impacts and benefit accruals of the programs that are best determined after the program designs are finalized."³¹ While the distribution of benefits can only be accurately known after the fact, PSE needs to incorporate a forecast of customer benefits into program planning. Relying on large, estimated benefits of avoided system costs to assume that benefits accrue to customers is insufficient given the Commission's prior emphasis on the importance of PSE presenting all customer benefits for evaluation.³²

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²⁹ Sergici, Exh. SIS-3 at 25.

³⁰ Snyder, Exh. JES-2 at 2; Snyder, Exh. JES-4 at 1 ("If PSE obtains approval from the Commission to proceed with these customer-facing programs, PSE will factor in participant costs in its program design and deployment (i.e., deciding on the level of incentives) along with other program implementation and administrative costs.").

³¹ Snyder, Exh. JES-2 at 2.

³² PSE 2020 GRC Order at 50, ¶ 155.

1	Q.	To what extent did PSE consider equity when developing the AMI Benefit
2		Implementation Plan?
3	A.	Some of the individual use cases, specifically those included in the Company's Clean
4		Energy Implementation Plan (CEIP), have been or are being developed with some
5		consideration for highly impacted communities and vulnerable populations. ³³
6		However, there was no effort to plan for equitable outcomes at the portfolio level of
7		AMI use cases. As detailed in the testimony of Staff Witness Molly Brewer (MAB-
8		1T), the delivery system planning process used to consider grid modernization
9		project does not evaluate portfolios with an equity lens. ³⁴
10		
11	Q.	What is Staff's recommendation regarding AMI investment in this case?
12	A.	Staff recommends that the Commission withhold a final prudence determination,
13		authorize a return of the AMI investment, but continue to defer a return on the
14		investment until such time as the Company files an updated AMI implementation
15		plan, developed with adequate input from interested and affected people and
16		organizations, that maximizes both customer and Company benefits, develops
17		additional information and metrics demonstrating AMI benefits to customers, and
18		appropriately addresses equity.
19		

How does your recommendation impact PSE's electric and natural gas revenue

33 Snyder, Exh. JES-3 at 2.
 34 Brewer, Exh. MAB-1T at 15:1-5.

Q.

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21

requirements?

1	A.	Staff's recommendation to allow PSE to continue to defer a return on its AMI		
2		investments requires removing the return on rate base from PSE's electric and gas		
3		revenue requirements. Staff witness McGuire discusses how AMI rate base was		
4		removed from Staff's revenue requirement calculations. ³⁵		
5		Relative to PSE's as-filed electric Adjustment 6.24, Staff's Adjustment 6.24		
6		- which includes the impact of removing the electric return deferral as well as the		
7		return on electric AMI rate base going forward – reduces electric revenue		
8		requirement by \$22,839,972 in 2023, \$31,385,549 in 2024, and 30,399,006 in		
9		2025. ³⁶ Relative to PSE's as-filed Adjustment 11.24, Staff's Adjustment 11.24		
10		reduces natural gas revenue requirement by \$10,308,337 in 2023, \$15,532,836 in		
11		2024, and \$14,657,337 in 2025. ³⁷		
12				
13		IV. PERFORMANCE BASED REGULATION RELATED TO AMI		
14				
15		A. AMI Performance Metrics		
16				
17	Q.	Did PSE propose performance metrics directly related to AMI?		
18	A.	Yes, PSE proposed four metrics to measure performance of AMI:		
19		1. AMI bill read success rate - electric;		
20		2. AMI bill read success rate - gas;		
21		3. Remote switch success rate; and		

³⁵ McGuire, Exh. CRM-1T at 26:17-30:12.

³⁶ McGuire, Exh. CRM-8 at 4:24.

³⁷ McGuire, Exh. CRM-8 at 6:24.

1		4. Reduced energy consumption from voltage regulation	on. ³⁸	
2				
3	Q.	What is your opinion of the performance metrics proposed by l	PSE?	
4	A.	Staff believes that each of these metrics are useful but recommends	that PSE track	
5		the metrics with greater detail. That is, each metric should also include specific		
6		tracking related to both highly-impacted communities and vulnerable populations in		
7		order to better identify the equity impacts and implications of PSE's AMI		
8		performance.		
9				
10		B. Demand Side Management Metrics		
11				
12	Q.	Did PSE propose performance metrics related to demand side i	nanagement?	
13	A.	Yes. PSE proposed five metrics to measure performance of demand	l side	
14		management:		
15		 Peak load management savings; 		
16		2. Peak load management attributable to residential cus	stomers;	
17		3. Annual electric energy efficiency savings;		
18		4. Annual gas energy efficiency savings; and		
19		5. Number of customers participating in gas and electric	ic energy	
20		efficiency programs who are from highly impacted of	communities and	
21		vulnerable populations. ³⁹		
22		1 1		

³⁸ Koch, Exh. CAK-1Tr at 54:17-19. ³⁹ Lowry, Exh. MNL-4 at 5-9.

Q. What is your opinion of the performance metrics proposed by PSE?

A. Staff does not oppose including the proposed metrics but, as with the AMI metrics described above, recommends that metrics 2 through 4 should also include specific tracking related to both highly-impacted communities and vulnerable populations.

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Q. Does Staff propose additional performance metrics?

Yes. Staff proposes several additional performance metrics that should help provide additional detail regarding PSE's performance with demand side management. For DR, Staff recommends reporting not only the capacity available, but also the amount called on each year. This includes the amount of DR that shapes customer load profiles through price response, time varying rates, or behavior campaigns; the amount of DR that shifts energy consumption from times of high demand to times when there is a surplus of renewable or non-emitting generation; and the amount of DR that sheds load that can be curtailed to provide peak capacity and support the system in contingency events. Staff recommends PSE propose an evaluation method to measure the shaping and shifting of energy through DR and solicit feedback from the Conservation Resources Advisory Group. Staff also recommends that PSE consult with each of their various advisory groups when developing customer-facing programs to help determine additional metrics that will be helpful to illustrate PSE performance in demand-side management and develop baselines for potential future performance metrics or performance incentive mechanisms (PIMs).

1	Q.	Has PSE proposed a PIM for demand side management?
2	A.	Yes. PSE has proposed a DR PIM, also referred to as a peak load management
3		savings PIM, related to demand side management. ⁴⁰
4		
5	Q.	Describe how the DR PIM would work.
6	A.	Simply put, each year the Company would receive a reward of 15 percent the cost of
7		DR related expenses when it acquires 90 percent of its DR target and increases to 25
8		percent of DR related expenses if it exceeds 110 percent of its target. There is no
9		penalty incurred at any achievement level. ⁴¹
10		
11	Q.	Please describe the DR target proposed by PSE.
11 12	Q. A.	Please describe the DR target proposed by PSE. The DR target proposed in the multiyear rate plan is 23.7 MW for the 2022-2025
12		The DR target proposed in the multiyear rate plan is 23.7 MW for the 2022-2025
12 13		The DR target proposed in the multiyear rate plan is 23.7 MW for the 2022-2025 implementation period, exclusive of planned pricing pilots, and is based off PSE's
12 13 14		The DR target proposed in the multiyear rate plan is 23.7 MW for the 2022-2025 implementation period, exclusive of planned pricing pilots, and is based off PSE's proposed DR target in its PSE CEIP. ⁴² The proposed annual incremental targets are 5
12 13 14 15		The DR target proposed in the multiyear rate plan is 23.7 MW for the 2022-2025 implementation period, exclusive of planned pricing pilots, and is based off PSE's proposed DR target in its PSE CEIP. ⁴² The proposed annual incremental targets are 5
12 13 14 15 16	A.	The DR target proposed in the multiyear rate plan is 23.7 MW for the 2022-2025 implementation period, exclusive of planned pricing pilots, and is based off PSE's proposed DR target in its PSE CEIP. ⁴² The proposed annual incremental targets are 5 MW in 2023, 6 MW in 2024, and 12 MW in 2025. ⁴³
12 13 14 15 16	A. Q.	The DR target proposed in the multiyear rate plan is 23.7 MW for the 2022-2025 implementation period, exclusive of planned pricing pilots, and is based off PSE's proposed DR target in its PSE CEIP. The proposed annual incremental targets are 5 MW in 2023, 6 MW in 2024, and 12 MW in 2025. The proposed annual incremental targets are 5 Does Staff support a DR PIM?

the Company to forgo supply-side resources and the opportunity to earn a return on

⁴⁰ Lowry, Exh. MNL-3 at 53. ⁴¹ Lowry, Exh. MNL-5 at 2. ⁴² Jacobs, Exh. JJJ-3 at 39. ⁴³ Lowry, Exh. MNL-1T at 29:4-9.

said investment. PSE has failed to incorporate DR into its resource portfolio despite issuing approximately 15+ conservation and energy efficiency and targeted DR requests for proposals, excluding evaluation and marketing, in the years 2011 through 2020, indicating barriers to implementation.⁴⁴

Q. Does Staff support PSE's proposed DR PIM?

A. Not as proposed. PSE's proposed reward and threshold to receive the reward for the DR PIM are overly generous to the Company. The proposed reward begins at 15 percent of the program costs, a percent that is roughly twice PSE's weighted average cost of capital (WACC). The Company justifies this reward amount by claiming that DR expenses will likely be less that the cost of avoided supply-side resources; PSE should be financially better off than if it relied on supply-side resources; and achievement levels are less certain than for other utilities with historical experience with DR. Staff is not convinced by these arguments. PSE is required by law to acquire all cost-effective DR and the Commission has authority to penalize PSE for not achieving an approved DR target. PSE's proposed DR PIM sets up a potentially absurd situation where the Commission may consider a penalty for not meeting a target while also providing an incentive reward for achieving 90 percent of its DR target.

⁴⁴ In the matter of the Petition of Puget Sound Energy for an Order Approving Proposed Request for Proposals, Dockets UE-200413 & UE-200414, Open Meeting Memo for the October 15, 2020, Open Meeting, 3, n.5 (October 15, 2020).

⁴⁵ Lowry, Exh. MNL-1T at 30:18; Lowry, Exh. MNL-3 at 60.

⁴⁶ Lowry, Exh. MNL-1T at 30-31; 20-5; Lowry, Exh. MNL-3 at 60.

⁴⁷ RCW 19.405.050(3); WAC 480-100-665(3).

Q. What does Staff recommend for a possible DR PIM?

Staff recommends that the DR PIM initial reward threshold activate at 105 percent of the DR target instead of 90 percent and the second reward threshold activate if the Company exceeds 115 percent of the DR target instead of 110 percent, as detailed in Table 2 below. Additionally, the initial reward should be a percent of DR program costs equal to PSE's WACC, as determined by the Commission in this case, and increase to 15 percent of DR program costs if the Company exceeds 115 percent of the DR target. Finally, Staff recommends these calculations be based on the DR target that is approved by the Commission in the Company's CEIP. DR targets for 2024 and 2025 should be based off an approved CEIP update, if different from those approved in the CEIP.

Table 2: Staff recommended DR PIM structure

A.

<u>Year</u>	Achievement as % of DR Target	Reward as % of Program Costs
2023	< 105%	0%
	105%-115%	WACC %
	>115%	15%
2024	< 105%	0%
	105%-115%	WACC %
	>115%	15%
2025	< 105%	0%
	105%-115%	WACC %
	>115%	15%

- 1 Q. Does this conclude your testimony?
- 2 A. Yes.