

April 20, 2021

To: Washington Utilities and Transportation Commission

From: R. Court Olson, 15817 SE 26<sup>th</sup> St., Bellevue WA 98008

Subject: Docket UE-200980 --Puget Sound Energy Rate Increase

Dear Commissioners and Staff.

Thank you for inviting my concern and reservations about PSE's proposed rate increase.

My comments are organized into five sections, each of which begins below with ALL CAPS:

1. Relevant Personal Background
2. Overview
3. Gas, Market Contracts, Renewables and Resource Reliability
4. Decreasing Demand
5. Conclusion

#### RELEVANT PERSONAL BACKGROUND

After two bachelor degrees and a master's in Civil Engineering and Construction Management, I've spent four decades overseeing the design and construction of commercial buildings. Through experience, professional associations, and continuing education I've become well informed of how energy is consumed and wasted in buildings. This is relevant, since the Federal DOE reports that buildings represent about 80% of the demand on the national electric grid. Having participated in the last three series of PSE IRP technical advisory meetings (i.e. for 2017, 2019 & 2021 IRPs), I'm fairly well informed about PSE resource planning efforts. From those IRP meetings I've gained additional knowledge through dialogue with other technical advisers having different backgrounds from mine. I'm also a PSE rate payer.

#### OVERVIEW

PSE reports four primary causes driving their request for a rate increase:

1. Increasing cost of fossil gas;
2. Increasing cost of market (contract) power purchases;
3. Increasing cost of new and renewed transmission contracts; and,
4. Decreasing electricity demand.

I have reasons to question PSE's assertion that rate payers should bear responsibility for the first three cost developments. From my perspective, PSE could and should have been mitigating impacts of the first three cost trends with proper foresight and appropriate resource

planning. Also, the fourth assertion contradicts everything that PSE has been saying publicly and in IRP meetings over the past six years. I'll expand a bit on each of these thoughts.

PSE has known for several years that it would be soon closing their coal fired generating facility at Centralia. For nearly as long, they've also known that Colstrip plants 1 & 2 would soon close. Probably before, but at least by the time that the Clean Energy Transformation Act passed in 2019, they've known that Coalstrip 3 & 4 must soon close, too. Over the past decade, it has been public knowledge that costs for wind and solar generation options were trending downward and that both were projected to become less costly than coal and gas generation plants at about the same time that PSE would retire their coal generation plants. Now those coal plant closings are upon us, but PSE is woefully unprepared to replace those resources with the least cost options of wind and solar. Instead, they've maintained their fixation with fossil gas generation. (One has to wonder if this fixation stems from them also being a fossil gas utility).

When one compares how rapidly some progressive, for-profit, electric utilities in other states (e.g. Minnesota, Colorado, and California to name a few) are transitioning into wind and solar with PSE's plans presented recently in the following chart, it is apparent that PSE is stalling their clean energy transition and, potentially, boxing themselves into a dependency on long-term gas generation or market contracts, instead of the low and downward trending cost of wind and solar. They are likely going to have more volatile and higher supply costs than they would have if they were more rapidly transitioning to wind and solar. They may also end up with stranded assets, especially if they build new gas plants as they are currently leaning toward doing. Such higher costs should not be passed on to ratepayers.

### Annual resource additions for mid portfolio

Incremental Resource Additions	DSM Bundles	DSM C&S + PV	Total DSM	DER Solar	DER Storage	Total DER	Demand Response	Biomass	Wind	Solar	Storage	Peaking Capacity	
2022	37	37		-	3								
2022 - 2025 Colstrip and Centralia Retire in 2025	39	25	256	3	3	16	1	5					
2024	42	19		3	6		1		400				
2025	44	13		-	4		3		400				
2026	47	16		-	3		5		400			474	
2026 - 2030 CETA 80% Renewable Requirement in 2030	49	16	344	-	5	19	6	46				474	
2028	52	28		3	3		13		200	800	299	697	
2029	52	18		2	3		9			299			
2030	56	11		-	4		14		200	100			
2031	58	14		1	3		14		100				
2032	28	21		1	4		15		200				
2033	29	29		1	3		15		100				
2034	32	35		1	3		5		100				
2035	29	28		1	4		5		200				
2036	29	3		1	4		2		200			237	
2037	28	30		1	3		1		100	100			
2038	27	31	907	1	3	55	1	69	15	100	2,550	100	699
2039	27	45		1	3		1		200				
2040	24	49		1	3		1			100		150	
2041	21	24		1	4		1		200			75	
2042	19	27		1	4		1		300			100	
2043	16	45		1	4		1		200	200		175	
2044	17	60		1	4		1	15	350	200		75	
2045	15	68		1	4		1		200			25	
<b>Grand Total</b>	<b>817</b>	<b>690</b>	<b>1,507</b>	<b>28</b>	<b>89</b>	<b>118</b>	<b>121</b>	<b>15</b>	<b>3,750</b>	<b>1,396</b>	<b>600</b>	<b>948</b>	

Of course, connecting transmission lines to new wind and solar resources will add some legitimate costs to PSE's power mix. However, no ratepayer that I know would object to sharing that sort of cost, provided that PSE's energy production costs are being lowered at the same time with the cheaper costs associated with wind and solar.

#### GAS, MARKET CONTRACTS, RENEWABLES AND RELIABILITY

Volatility and higher prices for fossil gas seems likely in the years ahead. CETA requirements and the probability of a new carbon tax make this fuel option undesirable for any new investments. Existing gas plants (both peakers & CCTs) could/should be retired and/or used solely for reserve peak demand purposes, but only when clean resource options can't handle it. However, PSE is ramping up the use of their existing gas generation plants and planning to buy more in five years. The costs and risks associated with this fossil gas game plan should not be borne by rate payers, when it is highly likely that wind and solar generation costs will be lower and more stable for quite some time.

Experts have shown that the challenge of variable availability for wind can be mitigated with broad diversification of such resources across the NW region –e.g. WA, OR (on & offshore), Montana, Idaho, and Wyoming wind which have different wind frequencies and seasonality. Also, solar farms with overnight storage components can be readily used to handle base and peak loads in the summer and swing seasons. Of course, that would mean new transmission lines. However, PSE already has a jump on this with their Montana trunk line to Colstrip, if they would only support linkages of it to developing and attractive wind resources in that same area.

I must also point out that instead of developing transmission capabilities to new clean energy developments across the Northwest, PSE has been promoting and started to implement unnecessary transmission lines, such as their "Energize Eastside" transmission project that crosses through Bellevue and adjoining cities. I'll leave further discussion of that project, and perhaps others like it, for another day.

To wrap up this section, I'd be remiss if I didn't point out that PSE is behind the progressive utility curve on the implementation of Demand Response technology, too. That would help to handle peak demand periods, especially in the winter peak, and avoid building additional peaker generation facilities. Unfortunately, PSE has been very slow to develop this option in their resource mix, and that further boxes them in to needing expensive gas peaker plants. A good Demand Response system would help reduce the need for the gas peaker plants that PSE is so dependent on today, and probably will be well into the future. Rate payers shouldn't have to suffer the cost consequences of this poor planning.

## DECREASING DEMAND

It seems really contradictory that PSE claims falling demand as a reason for raising rates. PSE has been consistently and publicly forecasting upward electricity demand growth for many years, and they've shown this forecast in all IRP meetings that I've attended in the past six years. Nevertheless, electricity consumption trend lines have been relatively flat for a decade now.

Because new buildings, and to some extent the remodeling of existing buildings, are increasingly more energy efficient, the prediction of a declining electricity trend line seems plausible at first blush –especially since the Federal DOE says 80% of our power grid demand comes from buildings. However, the electrification of the transportation sector, and the rapidly developing popular interest in replacing current fossil gas that is used for space and water heating in buildings with electric heat pumps, makes me think otherwise. I expect that we'll likely continue to see a relatively flat demand line for electricity for quite some time.

I therefore feel strongly that PSE is wrong to project a significant surge in power consumption, either up or down, in the foreseeable future. Using a downward demand forecast all of sudden to justify a rate increase is clearly bogus, based on my good familiarity with buildings and transportation market trends.

## CONCLUSION

From my fairly well informed perspective, PSE has been asleep at the wheel and on a course toward a Titanic-like disaster. They appear to be blind to an “iceberg” of stranded fossil assets, likely highly volatile future fossil gas costs, and likely future volatility in market contract purchases. Surely, the alternative wind and solar resources will stay dependably low in the years ahead. PSE has known about the retirement of their coal generation facilities for several years, but they've not sufficiently planned for a clean transition to lower cost and clean energy resources, apparently due to a historical fixation with their fossil gas dependency. Ratepayers should not be responsible for such vision oversights. Existing gas peakers and CCT plants can be held in reserve for those winter peak times when renewable resources may not be available. Only new transmission lines to new and diversified clean energy resource locations make sense for ratepayers to fund, though such costs could well be offset by the lower production costs associated with wind and solar --especially when those production costs are compared with PSE's costs for past generation facilities using coal and fossil gas, and when compared to likely volatile market contract purchases.

I don't believe that there is sound reasoning to support PSE's request for a rate increase.

Thank you for your careful consideration.