Docket No. UE-210795 - Vol. II

In the Matter of Puget Sound Energy's Clean Energy Implementation Plan

January 24, 2023



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Page 36 Page 38 BEFORE THE WASHINGTON 1 Tuesday, January 24, 2023 UTILITIES AND TRANSPORTATION COMMISSION 2 6:03 p.m. 3 -000-In the Matter of: 4 5 PROCEEDINGS Puget Sound Energy's Clean Energy Implementation Plan) Docket: UE-210795 6 Pursuant to WAC 480-100-640 7 MR. DANNER: Alright. Good evening, 8 everyone. 9 Today is January 24th, 2023, and this is a 10 public hearing of the Washington Utilities and * VIDEOCONFERENCE * 11 Transportation Commission for the purpose of taking 12 public comment on the Clean Energy Implementation Plan PUBLIC COMMENT HEARING **VOLUME II** 13 filed by Puget Sound Energy in UTC Docket UE-210795. 14 I'm Dave Danner. I'm chair of the Commission, Pages 36-85 15 and I'm joined by my colleagues Commissioner Milt January 24, 2023 16 Doumit and Commissioner Ann Rendahl. 6:03 p.m. 17 By way of background, in 2019, the Washington 18 Legislature passed the Clean Energy Transformation Act, * All participants appeared via videoconference * 19 or CETA, which, among other things, requires that the 20 State's electric utilities remove coal power from their 21 portfolios by the end of 2025, be net carbon neutral by 22 2030, and be 100 percent carbon free by 2025. 23 The Washington Utilities and Transportation 24 Commission regulates the State's investor-owned REPORTED BY: Tia B. Reidt, Washington RPR, CCR 2798 25 utilities. To ensure that these utilities achieve the Oregon # 22-0001 Page 37 Page 39 **APPEARANCES** 1 target set out in CETA, the law requires each utility 2 2 to file a detailed plan, called a Clean Energy Washington Utilities and Transportation Commission: 3 4 **RYAN SMITH** 3 Implementation Plan, every four years starting in 2021, KRISTEN JENKINS 4 with updates every two years after a plan is filed. 5 ANDREW ROBERTS DAVE DANNER 5 These plans set out the utility's interim 6 MII T DOUMIT 6 targets and detail the actions of the utility to make ANN RENDAHI WASHINGTON UTILITIES AND 7 sure it will comply with CETA's 2030 and 2045 mandates. TRANSPORTATION COMMISSION 8 621 Woodland Square Loop Southeast 8 Tonight we are hearing public comment on the Lacey, WA 98503 9 clean Emergency Implementation Plan filed by Puget (360) 664-1160 9 Rvan.smith@utc.wa.gov 10 Sound Energy in December of 2021. In this plan, Puget 10 11 Sound Energy proposes an interim target of 63 percent COMMENTS BY: PAGE: 11 12 Nora Rainwater 10 12 renewable energy by 2025 with specific sub-targets for Frank Damiano 12 Karen Klein 13 13 distributed energy resources and measures to ensure 13 Peter Werner 15 14 that compliance costs are reasonable and that benefits 14 Jim Lazar 17 15 to customers are identified and equitably distributed. Pete Weymiller 20 15 Aubrey Newton 23 James Adcock 27 16 The Commission will review this plan in a formal 16 Brian Grunkemeyer 30 17 adjudication. Gary Lindahl 33 18 The parties to the case are Puget Sound 17 Adrian Falla 34 Kathy Brenniman 39 19 Energy, the Commission's regulatory staff, which 18 Devon Kellogg 45 2.0 functions independently from the Commissioners, because Richard Leeds 47 19 21 the Commissioners act as judges, and advocates for marginalized community - excuse me - as well as 22 20 21 22 23 industrial customers representatives for low-income 24 23 advocates, environmental advocates, and advocates for 25 marginalized communities of color.

Page 40 Page 42 with an "s," @utc.wa.gov, or call 1(888)333-9882, and By law, the Office of Public Counsel and the 1 1 2 Office of Attorney General represents the interests of 2 ask to speak with me, Andrew Roberts. 3 3 residential and small business customers of Puget Sound Next, we have a list of folks who would like 4 4 to -- who have already signed up to speak tonight. If 5 The comments we receive tonight, as well as 5 you are -- if you've already signed up to speak, we 6 written comments we received from the public, will be 6 have, Jodi Blackburn-Roehl, Nora Rainwater, Gary Gooch, 7 made part of the formal record in this proceeding. For 7 Kathy Brenniman, Frank Damiano, Danny --8 this reason, we will need to swear in all those who 8 MR. DAMIANO: Here --9 comment tonight. 9 (Speaking simultaneously. Unreportable 10 The Commissioners act as judges in this case. 10 crosstalk.) And for that reason, we're here tonight to listen to 11 11 MR. ROBERTS: -- Laura, and Karen Klein 12 your comments, but not to engage in debate with 12 [phonetic]. 13 commenters, or to answer questions. If you have 13 You do not need to provide your names to sign 14 questions about this case, we'll refer them either to 14 in tonight. We already have your names. 15 public counsel or to Andrew Roberts of Commission 15 We would like to ask anyone else who would 16 staff, who will speak to you in a moment. 16 like to provide comment tonight to please raise your 17 In fact, I will turn it over to Andrew Roberts 17 hand. You can raise your hand by using the "reactions" 18 right now to cover some meeting logistics. 18 button in Zoom or pressing star 9 if you called in over 19 So go ahead, Andrew. 19 the phone. 20 MR. ROBERTS: Okay. Good evening. 20 I see Peter Werner is raising his hand on the My name is Andrew Roberts. I'm a regulatory 2.1 21 video. I will --22 analyst with the Commission's Consumer Protection I got your name, Peter. 22 23 Center. I would like to cover some meeting logistics 23 MR. WERNER: That's correct. 24 tonight. MR. ROBERTS: Okay. 24 First, this hearing is being broadcast live on 2.5 25 I'm not seeing any other hands raised. Page 41 Page 43 1 1 TBW. We ask that everyone please mute your connections Okay. I see Jim Lazar, Pete Weymiller, Aubrey 2 2 unless you were called on to speak. If you're Newton. Sorry. That was -- that was Aubrey Newton. 3 3 participating via Zoom, you can mute your connection by Jim Adcock, Ryan Grunkemeyer, and Gary with their hands 4 clicking the microphone icon on the bottom of the 4 raised. 5 5 screen. A slash will appear across a microphone Okay. Is there anybody else? 6 6 And please try not to interrupt each other. indicating you've muted your connection. If you called 7 7 in, you can press star 6 to mute your phone. And when Is there anyone else who would like to provide 8 you're called on to speak, you can press star 6 again 8 comment today? 9 to unmute yourself. After you're done speaking, we 9 Frank Damiano, we have your name. Thank you. 10 10 remind everybody to please remember to mute themselves. Okay. If anyone was not able to raise their 11 Please wait to be called on for comment and do 11 hand, could you please speak up now. 12 12 MR. FALLA: I'm unable to raise my hand for not interrupt other speakers. 13 13 There are two options this evening to report reasons I cannot explain. MR. ROBERTS: Okay. 14 14 technical difficulties. The first is the use of the 15 chat feature in Zoom. The second is to call Ryan Smith 15 And your name is? 16 at (360) 664-1165. Once again, that's (360) 664-1165. 16 MR. FALLA: Adrian Falla. I have 17 The chat feature should only be used to report 17 communicated in chat. 18 18 MR. ROBERTS: Okay. Thank you. technical difficulties. We will not be accepting 19 comments via the Zoom chat feature. Please do not use 19 We have your name. 20 2.0 Okay. With that, I will turn the time over to the chat feature to provide your comments. 21 We ask everyone please limit their comment to 21 Chair Danner, Commissioner Rendahl, and Commissioner 22 three minutes is a that everyone that has a chance to 22 Doumit. 23 23 speak. Thank you. 24 24 MR. DANNER: All right. If you have questions about the case, please 25 email comments@utc.wa.gov. Once again, that's comments 25 Thank you very much.

Page 44 Page 46 1 countries, which is not very sustainable or, by the 1 Unless my colleagues have any introductory 2 comments they would like to make, we will get right 2 way, ethical. 3 3 into the public comment hearing. And another thing to think about is that other 4 And so I would ask if you are intending to 4 countries do not have the same eco-conscious ideas as 5 comment tonight, we need to swear you in. So please 5 we do. So if we obtain materials from other countries, 6 raise your right hand. 6 China, wherever, they are not even worried about what 7 Do you swear to tell the truth, the whole 7 they do to the land. 8 truth, and nothing but the truth? Please say "I do." 8 So I am asking that you think of these things 9 9 MR. LAZAR: Yes. in consideration of this if the whole point is to live 10 10 MS. NEWTON: I do. greener. We have to consider or other countries that 11 MR. DAMIANO: Yes. play into this because you know they don't have our 11 12 standards. 12 MS. KLEIN: I do. 13 Thank you. 13 MR. DANNER: All right. Thank you. Thank you very much. MR. DANNER: All right. Thank you very 14 14 15 We will start. 15 much, Nora Rainwater. Appreciate your comments. Jodi Blackburn-Roehl, you have signed up but 16 Let me turn to Gary Gooch. You signed up. Do 16 17 not clear whether you want to speak. Do you want to 17 you wish to speak tonight? 18 make comments tonight? 18 (No response.) 19 19 MR. DANNER: Gary Gooch? (No response.) MR. DANNER: All right. I'm not hearing 20 20 (No response.) MR. DANNER: All right. We'll turn to 21 21 anything. 22 Nora Rainwater, would you like to make some 22 Kathy Brenniman. 23 comments here? 23 Are you there? MS. RAINWATER: Yes, I would like to make 24 24 (No response.) 25 MR. DANNER: All right. Frank Damiano, a comment. 25 Page 45 Page 47 Can you hear me? are you there? 1 1 2 2 MR. DANNER: Yes, we can. Thank you. MR. DAMIANO: Yes, sir. 3 MS. RAINWATER: Okay. 3 MR. DANNER: Go ahead, then. 4 This is only about two minutes long. 4 MR. DAMIANO: The problem with these 5 When we disconnect from coal power and find 5 proposals is Puget Sound Energy wants to pass the cost 6 that wind power doesn't work well when the wind isn't 6 of their ideas onto us. I don't want that. They just 7 7 blowing, as Europe is realizing, and that the turbines increased the cost of natural gas this November 2022, 8 shred the birds flying into their paths, and that solar 8 and they increased the cost of electric and natural gas 9 needs a lot of sun to be most effective, a challenge 9 again this January 2023. 10 Regarding the proposal involving removing coal 10 here in the Northwest, and it's actually mostly auxiliary, not suited for sustained power, for the 11 as a source of electricity, I would like to suggest --11 12 thousands of households. We need to think about how 12 why not move toward clean coal technologies, which are 13 long it would take to get coal power back on line. 13 already working in other facilities? And, by the way, there are coal industry leaders that 14 Regarding the proposal involving wind and the 14 wind turbines, I have concerns: 15 have found very clean ways to burn coal. 15 16 Also, if we run out of electricity for our 16 A) Ice accumulation on the blades contributed 17 homes, having rolling blackouts, I don't understand how 17 to power outages during the 2021 Texas blackout. we'll be able to charge electric vehicles which have B) Wind turbines are prone to gearbox failure 18 18 batteries, by the way, that can and do ignite in only ten years. And the gearbox is costly to 19 19 20 spontaneously, taking hours or even days and thousands 20 replace. 21 of gallons of water to extinguish. 21 It goes without saying when the turbine is not 22 22 Furthermore, in the making of these spinning, it's not generating revenue or power. 23 lithium-ion batteries, that requires tons of earth to 23 Finally, the fiberglass blades on the wind 24 be dug up to obtain the materials to be used, in mostly 24 turbines last only 20 years. And they're not 25 poor countries, and that rapes the earth in the poor 25 cost-effective to recycle. Therefore, the blades are

Page 48 1 1 often sent to landfills. 2 2 Conclusion: We need to make sure we are not 3 solving one problem and creating another. 3 4 That's it. 4 5 MR. DANNER: All right. 5 6 Thank you very much. I appreciate your 6 7 comments. 7 8 Danita Geyer, are you there, and do you wish 8 9 9 to speak this evening? 10 10 (No response.) MR. DANNER: All right. 11 and controlling it. 11 12 We have someone signed up as Laura, with no 12 13 13 last name. Are you on the line? Do you wish to speak 14 14 15 tonight? 15 16 16 (No response.) 17 17 MR. DANNER: All right. 18 Karen Klein, are you there? Are you --18 19 MS. KLEIN: Hi. Yes. 19 20 20 Can you hear me okay? MR. DANNER: Yes. Thank you. 21 21 22 MS. KLEIN: Yeah. I would like to speak 22 power. 23 in favor of decarbonizing. I think that's a great 23 idea. I have nothing against wind power or any of the 24 24 25 other things that have been mentioned so far tonight. 25 Page 49 1 What I do have a problem with is the 1 2 2 regressive tax structure that we have in our state that 3 then this Commission is going to offload your costs 3 4 onto your general customer, who is suffering through, 4 5 5

MR. WERNER -- un-muted. MR. DANNER: Please go ahead. MR. WERNER: I come from -- I come from a back- -- I'm an electrical engineer, a retired electrical engineer; 40 years of controlling and converting power and energy, which are both very different for both -- primarily for industrial processes, but dealing with systems in the megawatt and above. So -- and I'm very very familiar and knowledgeable about the physics of converting energy

There's a lot of rabbit holes we can go down here. The primary one for me, at this stage, is the unrealistic expectation that wind -- voltaic solar and wind turbines are potential sources of energy. They're actually sources of intermittent and relatively diluted or regularly diluted, I should say, sources of power.

They do come from wind and solar energy, but in their transduction to turning turbines, they now are power systems. And both UTC and PSE and a lot of people conflate the issues relative to energy and

So they are not sources of energy. Energy is something you can store. It generally has mass and can be transported. There's no way of storing wind or

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you know, not only a pandemic, but an inflationary period and the like. And the average person cannot take, what I'm reading, is a 15.8 percent increase in their bill, you know, soon. And I think that's unreasonable.

And I think that we need to look to taxing billionaires in this state. And we need to look to our legislature to fund the decarbonization of fossil fuels by taxing the right people. And this is not fair for the average person in Washington state. And it's going to be hard on families. And I -- I'm just (inaudible Zoom audio) against it. We know that there's plenty of wealthy people that are for decarbonizing. Let them pay for it.

19 That's the end.

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MR. DANNER: All right.

Thank you very much for your comment.

22 Peter Werner, and then Jim Lazar.

Peter Werner, are you there?

24 MR. WERNER: Yes. I just -- I just --

MR. DANNER: All right.

solar, other than directly into batteries. But batteries themselves are no more a source of energy, unless charged, than empty tanks are a source of fuel.

So it's a dangerous path, I believe, in going down and expecting that you're going to take wind and solar and voltaic solar. You know, there's thermal solar. That's another source of steam. But that's my main concern.

If we were truly interested in reducing the problems with burning fossil fuels, and there are, okay? I think they're fairly overblown -substantially overblown. But if there is a concern in reducing the pollution due to the burning of fossil fuels, there should be a stellar interest in the fission of uranium or what other -- so right now uranium is the most logical source. And that seems to be totally off the board, from what I can read. Every -- all of the -- all of the efforts seem to be towards wind and solar.

And there's so many problems with turbines. A couple people have mentioned them, but wind turbines, the larger they get, the higher they are, the more massive they are on towers that are actually around the world beginning to fall down because they're extremely complicated systems to engineer effectively.

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In the mid ranges, in the high kilowatt levels, they're reasonably safe and doable, even though there are units that are up into the megawatts.

Anyway, I could go down a ton of rabbit holes here. I think all the folks involved in this have to look at it from a good practical engineering position and understand the difference between power and energy. There's a huge, huge difference between power and energy.

And with wind and voltaic solar, you're dealing with power. It's intermittent, and it diluted. And it's not energy. Unless you can store it and move it, it's not energy.

So I'll stop at that.

I'm sure you're well-intentioned. I'm very certain you're all well-intentioned. But many of you -- many of you are technically misguided.

MR. DANNER: All right.
Thank you for your comments.
Jim Lazar followed by Pete Weymiller.

Jim Lazar, go ahead.

MR. LAZAR: Thank you. And Good evening. I recommend that the Commission order in this docket direct PSE to include two additional measures in its next update of the CEIP.

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to a hundred percent clean energy.

These PUDs can access VPA power in the 2027 new contract process and serve these customers with clean energy. They will likely be able to provide service at rates comparable to or lower than PSE. So these customers will be worse off because of BPA's lower wholesale power prices.

Because these are counties in which PSE provides only electricity, not natural gas, PSE does not achieve economies of scope as it does, for example, in Thurston County, where it provides both electricity and natural gas.

As a result, those of us who take both services from PSE in essence subsidize those who take only electricity and pay more than our share of the admin costs. I believe shutting these customers will help lower costs for PSE's remaining customers. So please direct PSE to study these two items in the order in this docket.

Thank you.

MR. DANNER: All right. Thank you very much.

And Pete Werner, I think, followed by Aubrey Newton.

Pete Werner, go ahead.

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The first of these is to include examination of a service rule change, that water heaters and EV chargers over 3 and a half kw be served by smart circuit breakers or other control networks. This would make a great deal of additional demand response available on the order of a thousand at peak for water heaters alone.

The shape of these two loads is very peak coincident. Every new electric water heater already has a socket for control radio. Most 6 kw and above EV chargers also have controls enabled.

You can identify these with the interval data that smart meters provide. Water heaters typically hold a day's supply, so being curtailed for an hour here and there is just not a problem. Modern heat pump water heaters can be set to heat pump only mode and will not exceed the 3.5 kw limit. Every one of us would rather have our hot water and EV chargers interrupted if the alternative is a rolling blackout or purchase of extremely expensive power.

The second issue is that PSE should study the transfer of its customers in Skagit, Whatcom, Kitsap, and Kittitas Counties to electric service by the local public utility districts. This would reduce PSE loads, and thus accelerate the rate at which they could move

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MR. WEYMILLER: Pete Weymiller?

MR. DANNER: I'm sorry. Could you spell
that, sir?

that, sir?

MR. WEYMILLER: Can you hear me?

MR. DANNER: Yes.
MR. WEYMILLER: W-E-Y (inaudible Zoom

audio). And I'm sure you know how to spell the first name.

MR. DANNER: Yes.

MR. WEYMILLER: Okay. Very good.

Hello, Commissioners. And thank you for holding this hearing and for showing interest in the welfare of PSE Customers.

The Intergovernmental Panel on Climate Change is a globally-accepted authority on climate change, probably because their report is the consensus of 97 percent of publishing climatologists. Recently the IPCC reported that climate change is now widespread, rapid, and intensifying. We've witnessed this in recent years.

Two weeks ago, NOAA released a report showing that damage from climate changes this last year in the US total \$165.1 billion. We're already seeing how increasing temperatures evaporate more moisture in our atmospheric rivers locally, and we're still seeing

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droughts, forest fires, higher incidences of lightning strikes, higher risk -- the list goes on. A large share of greenhouse gases come from our energy sector. Not only do fossil fuels poison our land, water, and air, they're overheating our planet quicker than even the IPCC predicted.

I appreciate the PSE committing to their target goal of RE of 15 percent, and then exceeding that for the last two years. And I appreciate them, too, for their commitment to implement significant wind power. After ten years, we're counting on them to live up to their word and make this rubber meet the road.

But we need them to take advantage of all of the opportunities right now to meet this climate challenge, and to do it right - - do right by PSE customers that are under PSE care only.

Some of us are doing our part. I have 58 solar panels on a home in Gig Harbor. I'm in contract to have panels and battery backups installed on two more homes that I recently purchased in a low-income neighborhood in Bremerton.

This is a community of honest and hard working people who help each other out. Most of our homes are 80 to 100 years old, with inadequate insulation and outdated appliances. A neighbor and I have heat pumps,

things worse. Please don't wait for RFP and jump on all the opportunities to modernize our electricity generation and use. We can always change the plan later. Let's cover all bets.

Right now will be known as the defining moment for PSE. Will they step up to the challenge of social responsibility for their loyal but captive customers? Please, let's together put PSE and their customers at the leading edge of innovation at a time that it is needed most and avoid the delay that will be costly for so many stakeholders on so many levels.

Thank vou.

MR. DANNER: All right. Thank you.

And then we will go to Aubrey Newton, followed by Pete Werner.

All right. Aubrey Newton, are you there? MS. NEWTON: I am.

Good evening, Commissioners. Thank you for the opportunity to speak this evening.

As mentioned, my name's Aubrey Newton, and I'm speaking this evening on behalf of the Washington and Northern Idaho District Council of Laborers. We represent thousands of construction workers who build our states and energy infrastructure. We are also an affiliate of the Laborers' International Union of North

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but our electricity was still over \$250 a month. And this is before the 8.7 percent increase.

How are any of my neighbors supposed to get ahead to buy energy and cost-saving insulation and RE technology? Some neighbors offset heat costs by burning wood, creating more dangerous particulates.

We've already experienced historic, self-inflicted damage to our environments, and we know that (inaudible Zoom audio) greatest opportunity in history to reduce our greenhouse gases.

Recently passed were a bipartisan infrastructure bill and the Inflation Reduction Act with funds to address this very emergency. And the cost of RE technology has already dropped significantly with increased innovation scale. Solar panels are now 50 percent lower than when we installed ours. But the time is now. The technology is here. The funding is here. We just need to do the right thing and be responsible to customers that rely on us.

Sure, it may be easier and cheaper in the short run to (inaudible Zoom audio) delays and (inaudible Zoom audio) the RFP (inaudible Zoom audio) as a result to adopt a minimum 2 percent RE to become compliant, (inaudible Zoom audio) all of us from reading our target goal. (Inaudible Zoom audio) make

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America, or LIUNA, which represents over 500,000 workers in the United States and Canada. Again, we thank you for the opportunity to submit comments on PSE's CIP this evening.

When compared to other investor-owned utilities, Puget has taken steps to promote high-quality labor standards. The company's 2021 All-Source RFP, for example, gives preference to projects that utilize project labor agreements as well as projects constructed with high labor standards, including family-sustaining wages and benefits and employment opportunities for local workers. PSE is also requiring union labor provisions in its future Green Direct program projects. We commend the company for these efforts.

In order to capture the full value, though, of clean energy employment benefits, we offer suggestions to the company's job-related customer benefit indicators, or their CBIs. PSE's six employment metrics are intended to assess the quality and quantity of jobs created to the extent to which local workers and highly-impacted and vulnerable communities have access to these jobs.

We believe, however, that absent specific employment targets and baseline data, the proposed

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metrics will provide an incomplete picture of net benefits. The company and the Commission can use data related to the Lund Hill Solar Farm developed by Avangrid for PSEs Green Direct program as a baseline to measure the indicators. Alternatively, the company can compare proposed clean energy job metrics to the quality of fossil fuel construction jobs.

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Because our members have been employed on both clean energy and fossil fuel construction jobs, and our local affiliates regularly visit construction job sites, we know that the clean energy sector has lower local employment rates and offers lower wages and benefits compared to fossil fuel related energy, projects. Therefore, the Commission and the utilities can also reference public infrastructure projects in Washington State for targeted hiring rates of local workers, registered apprentices, and workers from historically disadvantaged communities.

Furthermore, PSE and the Commission can utilize union collective bargaining rates and prevailing wages and benefits as a baseline to assess the quality of clean energy construction jobs.

If the Commission does not adopt these recommendations, the Commission should order PSE at least to work with labor stakeholders to establish

MR. WERNER: Understood.

MR. DANNER: So now we will go, then, to

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Jim Adcock, followed by Brian Grunkemeyer.

MR. ADCOCK: Thank you.

MR. DANNER: Jim Adcock, are you there?

MR. ADCOCK: Yeah. Thank you.

Can you hear me?

MR. DANNER: Yes, I can.

MR. ADCOCK: James Adcock, electrical engineer, MIT stakeholder, and leading Puget Sound critic for the last dozen-plus years.

What Puget should be doing? Maximizing energy efficiency, maximizing demand response, such as demand response in electric water heaters. These are lowest costs. They are always lowest costs. Lowest costs

Next, wind power. Lowest cost wind power. Wind power is about \$35 a megawatt hour; less than just the fuel costs of running natural gas generation.

Every wind tower Puget build saves ratepayers money. It does not cost us money. It saves us money. But Puget tells us IPR stakeholders that is not what they are going to do. They are not going to build what Puget calls renewables overbuild. It is not overbuild unless more than 100 percent of Puget's power comes

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employment targets for local workers and workers from highly-impacted and vulnerable communities and to determine the appropriate data sources to measure the quality of clean energy jobs.

Again, we'll be submitting these comments further to the Commission via email for further review. and we thank you very much for your time this evening. Thank you.

MR. DANNER: All right. Thank you very much. I appreciate your comments.

Peter Werner, do you wish to speak?

MR. WERNER: Yes. I already did, but I would be --

13 14 MR. DANNER: Oh.

15 MR. WERNER: I would love to keep talking. 16

But...

MR. DANNER: I'm sorry. I'm getting you mixed up with Pete Weymiller. So pardon me for doing

20 MR. WERNER: And I think he -- anyway, 21 I'll let you go.

MR. DANNER: All right.

If you have additional comments, we would accept written comments, as Andrew Roberts laid out earlier.

from renewables.

Instead, Puget wants to build more natural gas generation but simply call that generation hydrogen generation. And by calling it hydrogen generation, Puget claims it qualifies for CEIP. This is what Puget is telling IRP stakeholders. So that is what Puget is really doing. Continued business as usual, building yet even more natural gas generation, but not even to serve their own ratepayers, but rather to serve California ratepayers. Most of this new natural gas power will be going to California. We pay to build it, but the power goes to California.

CBIs. Puget invents CBIs out of thin air to justify what Puget wants to build, which is not lowest cost, not nearly lowest costs, but rather the most expensive and the least amount of greenhouse gas reductions so that Puget can get to a Puget-invented 2 percent off-ramp without doing the real required greenhouse gas reductions.

Puget will get to 2030 having spent nearly an additional 20 percent on taxpayer rates in addition to natural gas fuel cost inflations. And then besides [indecipherable], not show any real substantial greenhouse gas reductions, not getting to the 80 percent, as required by CETA.

7 (Pages 60 to 63)

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our solution.

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Off-ramps. The 2 percent off-ramp does not exist until after 2030, but Puget is required by CETA to get 80 percent -- to get to 80 percent by 2030. So there is no 2 percent off-ramp excuse for Puget not to get to 80 percent. But Puget is claiming they can make that excuse. No, they can not. Puget can not avoid the 80 percent by 2030 requirement simply by wasting ratepayer monies in sufficient amounts to get out of that requirement. Puget must get to 80 percent by 2030 period.

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There is, on the other hand, a different off-ramp. There is the cost containment alternative compliance payments that the legislature built into CETA to keep ratepayers from getting ripped off. Rather than pay an excess amount of ratepayer money for any method, Puget can just use alternative compliance. So Puget should never be paying more per megawatt hour for any method than the price of natural gas generation plus the alternative compliance payment, which gives you total something like \$120 per megawatt hour.

So if Puget wants to spend more than about \$120 per megawatt hour on some method, UTC must simply say clearly, no, that is too expensive. Nothing should cost ratepayers more than about \$120 per megawatt hour, period. That is why the legislature put the cost

We shift charging for electric vehicles to the best time of day to keep EV charging green and cheap. And we can help charge cars before weather events cause power outages to improve resiliency. I want to raise the bar for our vision and ambition by talking about

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We've done work with utilities in Australia and the US to avoid EV charging during peak times. In Australia, we were able to shift about three-fourths of the charging to off-peak times, and we helped to soak up excess solar. In Australia, they frequently have negative power prices, so this shifting was a great way to lower total system costs. We can do the same thing by importing solar from California.

In Maine, we were able to shift 85 percent of the power away from their peak period. And with a project with Rocky Mountain Power, we modeled that we can save 45 percent of the carbon emissions used to charge your car.

This technology is ready for my company and several others. We could have helped reduce carbon emissions last year. It's time to embrace demand flexibility to reduce carbon emissions now.

So getting to the CEIP, I think PSE should be looking at a higher amount of demand response. We

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containment cap in there. \$120 max. Not \$550 per megawatt [indecipherable].

In summary, I believe this is all turning into an unmitigated disaster with Puget wasting money willy-nilly, at the same time failing to meet significant greenhouse gas reductions. This is to be expected. Monopoly power behavior. This is why UTC exists, to stop utility monopolies from engaging in this kind of egregious behavior, so-called environmental hostage taking. Please stop Puget from doing this egregious behavior. Do not let them get away with this.

Thank you for your consideration.

Thank you.

MR. DANNER: All right. Thank you very much, James Adcock.

> Brian Grunkemeyer, are you there? MR. GRUNKEMEYER: Yes. Yes.

MR. DANNER: Yes.

You would like to make comments?

MR. GRUNKEMEYER: Absolutely. I'm Brian Grunkemeyer from Redmond. I'm also

a PSE customer. But I'm also the founder of FlexCharging, an electric vehicle demand flexibility

provider.

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would like to replace demand response with demand flexibility where utilities incentivize doing the right thing everyday instead of begging people to shut off power on a few peak days. However, DR is a good step in the first direction. Or a small -- a small first step.

And to echo Jim Lazar's point, smart hot water heaters are a perfect idea for our region, especially since our state already requires smart hot water heaters to be installed everywhere.

Execution-wise, I would like to make sure that PSE actually builds something quickly as a result of this CEIP. They have, in the past, issued RFPs, but not necessarily acquired any resources as a result of that RFP. That process makes you wonder whether it's just a legal requirement as opposed to a more deliberate way to expand their portfolio.

And lastly, the Sierra Club and Northwest Energy Coalition both provided very good comments. Please review them if you haven't.

Thank you very much.

MR. DANNER: All right. Thank you very much. Appreciate your comments.

All right. We have an individual who

identified themselves as Gary.

Page 68 Page 70 1 Gary, are you on the line? 1 inside Census Tract 0900. I have begun gathering information in recent 2 MR. LINDAHL: I am. 2 3 3 Can you hear me okay? weeks to brief our homeowners association board, since 4 MR. DANNER: Yes. 4 all of our members were surprised by the 5 You didn't provide a last name. Do you wish 5 October 22nd -- excuse me, October 2022 announcement of 6 to do so or --6 a planned biodiesel peaker plant .2 miles directly to 7 MR. LINDAHL: Yes, I do. Last name is 7 our west. 8 8 Lindahl, L-I-N-D-A-H-L. Whidbey Seabrook developer Tenaska is angling 9 MR. DANNER: All right. Thank you. 9 for a contract with PSE. We are playing catch-up, so 10 MR. LINDAHL: And I'm also a professional 10 we are unclear where their proposal may fit in this 11 engineer. 11 draft CIP. So I apologize for not being well-oriented 12 MR. DANNER: Okay. 12 to the specifics of the discussion on the document in 13 13 Go ahead, then. hand. But we will catch up. 14 MR. LINDAHL: The CEIP appears to be 14 The [indecipherable] family, the site owners, 15 15 overly reliant on intermittent, unreliable solar and pitched the site to the developers as remote and 16 wind. I think this will lead to a less reliable grid. 16 secluded. Their application studiously underplays our 17 And the CEIP mentions a maximum power output expected 17 proximity as a low-density residential zone in the 18 18 from wind and solar. I find that very misleading northeast, approximately .2 miles. because the maximum power for these systems is rarely 19 19 Soundview Estates is a development which has 20 20 achieved for more than an hour or two a day. 241 homes built. 230-plus families have purchased 21 It also mentions a battery peak power, but not 21 homes there, including my own. We have 269 active 22 the energy capacity of the battery, which would be like 22 registered voters. Our personal capital investment in 23 kilowatt hours. I also find that very misleading. 23 our homes to date is in excess of \$152 million. And They throw out these big numbers, but it's kind of 24 24 there are 99 more homes currently under construction at 25 meaningless. 25 Soundview West, which is even closer to the proposed Page 69 Page 71 1 1 They also mentioned a biomass, which I find plant. 2 2 amusing. If we're going to burn stuff for energy, why I have some metrics on why our Census Tract 3 not build waste energy facilities like Europe does? So 3 080900 does not deserve to be saddled with the 4 burying garbage is just a cheep methane generator. 4 emissions of a 219 megawatt biodiesel peaker plant 5 The plan for more base load power is surly 5 pumping its emissions 60 feet over our heads. 6 6 lacking. I didn't see anything on small modular Our immediate neighbors comprise a population 7 7 reactors. I think Bill Gates could help you with that, living in poverty at level 8 out of 10. Babies in our 8 8 vicinity are at risk for low birth weight at level 9 by the way. 9 I know we do have a lot of water power in this 9 out of 10. In a single-parent household, that level is 10 10 state. But, as you know, the earth is heating up. 9 out of 10. Overcrowded housing is level 9 out of 10. What if we run out of water like Lake Mead is 11 We're 9 out of 10 for premature deaths. Our social 11 12 12 vulnerability to hazards overall is 8 out of 10. We're experiencing right now? I think this whole plan is a 13 plan for disaster, and we need to focus a lot more on 13 already at level 10 out of 10 for toxic releases from 14 base load power. 14 facilities on the RSEI model. And we also enjoy 15 Thank you for your time. 15 proximity to not one, not two, but 3 EPA Superfund 16 MR. DANNER: All right. 16 17 Thank you very much. Appreciate your 17 We may well meet Department of Health 18 18 standards for environmental health disparities and a 19 Adrian Falla, are you there? 19 designation as a highly impacted community. We'll be MR. FALLA: I am. Thank you. 20 20 exploring that pretty energetically in the coming 21 MR. DANNER: All right. 21 weeks. 22 22 Please go ahead. Our census tract score is level 7 out of 10 23 23 MR. FALLA: Hello. for sensitive populations. And our downwind tract also I'm a one-year resident of Soundview Estates, 24 24 includes tribal lands.

Our district has historically been electorally

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which is a roughly two-year-old development located

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Page 72 Page 74 1 passive, with low voting rates at level 9 out of 10. I 1 MS. BRENNIMAN: Yes. Great. Thank you. 2 promise you, we're going to fix that. 2 Thanks for the opportunity to speak. 3 Biodiesel emissions include some components 3 So my concerns are about the environment and 4 which pose known adverse health impacts and others, but 4 climate change. 5 very little is known as yet. We are expecting to 5 The wind energy has been hailed as the least 6 develop our concerns with greater knowledge of the 6 polluting and least harmful to the environment among 7 airshed patterns that are modeled. 7 the renewable energy resources. We have been told that 8 8 We are playing catch-up with a vengeance. And their greenhouse gas emissions are low, and so it's 9 we've already gained significant initial insights from 9 assumed that we impact global warming climate change 10 initial public records requests we filed with various 10 the least. And when energy is renewable. So these are agencies, including PSCAA for the Seabrook application significant advantages. However, there are a number of 11 11 negatives. And the number one is our threat to 12 itself, which is quite interesting. 12 wildlife. We've obtained voter registration records, FEC 13 13 Wind turbines are known to disrupt wildlife in 14 contribution histories for elected officials in the 14 15 15 area and so forth. We're very aware of the razor-thin multiple ways. Wherever commercial wind farms are 16 margins by which local races are decided. 16 located, the birds have a hard time surviving. Whether 17 I just wanted to let you know that we will be 17 they're small or big, Birds stand a slim chance of 18 18 paying close attention and getting engaged with the surviving a direct hit with the turbine blades. And 19 Commission in every way that we can. 19 with many turbines located in an area, it's no wonder 20 20 Thank you. that the population of birds goes down. MR. DANNER: All right. Thank you. 21 21 I'm a resident of Whidbey Island, and I see 22 Appreciate your comments. 22 bald eagles and other migratory birds in the area. And 23 That's -- let me go back to some folks that I 23 the continued extinction of bird species would be a 24 called on earlier who did not respond. tragedy for all of us. In the US alone, the annual 2.4 25 25 Jodi Blackburn-Roehl, are you on the line, and bird toll estimated to be 500,000 and 700,000. This Page 73 Page 75 do you wish to comment this evening? 1 1 doesn't take into account the insect fatalities. 2 2 (No response.) It's estimated that a single wind turbine can 3 MR. DANNER: All right. 3 kill up to 40 million insects nationally -- annually, 4 Gary Gooch, are you on the line, and do you 4 I'm sorry. So the impact of the insect and bird 5 wish to comment this evening? 5 population of a region is bound to have a negative 6 6 (No response.) effect on the environment as well. 7 7 MR. DANNER: Kathy Brenniman, are you on Besides the slaughter of the flying species in 8 the line? 8 the animal kingdom, large-scale wind farms disrupt the 9 (No response.) 9 habitat of all wildlife. When large tracts of land are 10 MR. DANNER: Danita Geyer? 10 cleared for setting up a wind farm, the transformation 11 of the landscape can adversely affect all wildlife in 11 (No response.) 12 MR. DANNER: And Laura, who did not 12 the region. Destruction of habitat, fragmentation 13 13 provide a last name? habitat, disruption of migratory paths, and loss of 14 feeding and breeding grounds can lead to a decline in 14 (No response.) 15 MS. BRENNIMAN: Hello? 15 the reproductive abilities and reduction of population. 16 MR. DANNER: Yes. Who is this? 16 All these have a negative effect on the biodiversity of 17 MS. BRENNIMAN: Yes, this is Kathy 17 the region, which may have a domino effect on the 18 Brenniman. Sorry. My -- it was muted earlier --18 environment. 19 MR. DANNER: Oh, okay. 19 And it affects local weather. The blades of 20 20 MS. BRENNIMAN: -- so I did respond. the turbine turn to generate electricity. It also has 21 MR. DANNER: Okay. 21 inadvertent consequences. It creates disturbance in 22 22 the air that can have far-reaching effects on the We can --23 23 MS. BRENNIMAN: Thank you. environment. The turbulence created by wind turbines

is known to warm up the surface temperature at night

and pull it cool it during the day. The warming can

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MR. DANNER: We can hear you. I hope you

24

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can hear us.

Page 76 Page 78 1 raise the temperature by up to 2.7 degrees Fahrenheit, 1 MR. DANNER: Did we just disconnect? 2 and cool it down by up to .7 decrease Fahrenheit. This 2 (No response.) 3 is from a 2018 study by Harvard University scientists. 3 MR. DANNER: No? Okay. This research supports more than ten other studies that 4 4 Carol [sic] Brenniman, I'm afraid we lost your 5 have observed warming near operational US wind farms. 5 connection. 6 There's also noise pollution. Though 6 All right. At this point that is everyone who 7 commercial wind farms are typically located far away 7 has signed in to speak. 8 from human habitation, there are instances where people 8 Let me ask if there is anyone on the call who 9 9 living in the vicinity of wind turbines are affected by has not spoken and did not sign in who wishes to speak the sounds wind turbines produce when their blades 10 10 this evening. You can either use the raise your hand turn, making a whooshing sound. The generators kept 11 11 function or simply speak up. 12 within the wind turbine also generates a humming sound. 12 (No response.) 13 Sound generated by large turbines can be heard up to a 13 MR. DANNER: All right. mile away. And this is known to impact sleep patterns, Hearing nothing, that concludes the public 14 14 15 and at times the mental health of people. 15 comment this evening. And I personally have experienced this in 16 We have -- again, I want to make clear that we 16 17 Texas. My sister has a ranch with turbines on 17 will be receiving written comments. 18 adjoining ranches, and the noise is unrelenting. The 18 Let me ask my colleagues, do we have a cutoff 19 value of their properties also decline drastically. 19 date for written comments at this point? 20 The disturbing effects of noise pollution on 20 MS. RENDAHL: Commissioner Danner, it's 21 animals and birds still remains unknown. And the 21 usually a week after the hearing is concluded. I 22 22 safety issues at sea, setting up wind (inaudible Zoom believe the hearing concludes next Wednesday, the 1st. 23 audio). Wind turbines at sea may be a solution to 23 MR. DANNER: Okay. 24 reduce its negative impact on humans and wildlife on 24 MS. RENDAHL: So I believe the deadline 25 the land; however, it can disrupt the lives and 25 would be the 8th in our --Page 77 Page 79 1 MR. DANNER: Okay. 1 habitats of sea creatures. 2 MS. RENDAHL -- usual practice. 2 The (inaudible Zoom audio) location is another 3 problem. Typically wind farms are located far away 3 MR. DANNER: All right. 4 from cities and towns. Intentionally, remote locations 4 That is my understanding as well. So we will be receiving written public 5 are chosen for setting up wind farms so that 5 6 large-scale land acquisition is possible. However, 6 comments through February 8th. And as you can see on 7 7 the slide, here are the ways to provide comments. this means paving new roads and transporting machinery 8 and construction material to the site. 8 MS. RENDAHL: Commissioner Danner, there 9 The same is the case with offshore wind farms. 9 was a hand up from someone with the initials "DEK." They can increase boat traffic, leading to more 10 And I don't know if that person wished to speak or not. 10 11 greenhouse gas emissions and pollution. In the 11 I just wanted to let you know. 12 (inaudible Zoom audio) phase, also they increase 12 MR. DANNER: Okay. I do not -- I do not 13 traffic in the region and adversely impact the 13 see that. environment. 14 Andrew Roberts, do you? 14 15 The carbon footprints of turbines. The 15 (No response.) 16 manufacturer of wind turbines needs metals and other 16 MR. DANNER: All right. Let me ask again. 17 materials. Collection of these raw materials as well 17 Is there anyone on the line who wishes to as the manufacturing process are often run using fossil speak to us this evening? 18 18 fuels. After manufacture, the turbines need to be (No response.) 19 19 20 transported to the location of the wind farms. 20 MR. DANNER: Okay. 21 Further, the construction of the wind farms 21 MS. BRENNIMAN: I think I was cut off. But 22 and the setting up of the turbines are an additional 22 maybe it ran too long? 23 assault on the environment. It requires 60 gallons of 23 MR. DANNER: Well, I do see a "DEK" with a 24 oil to lubricate the tur-... 24 hand up. 25 (Pause.) 25 MS. KELLOGG: Hi, there.

Page 80 Page 82 1 1 listening to my thoughts. This is Devon Kellogg, DEK. 2 2 Thank you. MR. DANNER: All right. 3 And how do you spell your name? 3 MR. DANNER: Thank you. 4 MS. KELLOGG: It's D-E-V-O-N, Kellogg 4 And we very much appreciate your coming out 5 K-E-L-L-O-G-G. 5 tonight and offering them to us. 6 MR. DANNER: Okay. 6 So thank you very much. 7 And do would you wish to comment this evening? 7 I see another hand up. Anne K? 8 MS. KELLOGG: Yes. 8 ANNE K: Yes. I didn't sign up to 9 MR. DANNER: Okay. 9 comment. So I know you're at the end of your time. So 10 MS. KELLOGG: Although I am a novice. So 10 I humbly request a few moments for actually my husband, 11 I'm trying to just incorporate all of the reading Richard Leeds, here to make a comment. 11 12 through the summary of the CEIP and listening to the 12 MR. DANNER: All right. 13 testimony. ANNE K: All right. Thank you. 13 I just wanted to just share my concerns about MR. DANNER: He is welcome to go ahead. 14 14 15 meeting the climate goals of the CETA. 15 ANNE K: Thank you. 16 And just to address some of the concerns 16 MR. LEEDS: I was hoping that you might 17 people are having about, one, the birds, about the wind 17 have information for the comparative environmental 18 turbines. I know that Autobahn, who is very concerned 18 impact, both in the -- in the full -- full gamut of 19 about bird welfare, they actually support clean energy 19 impacts comparing wind with -- with fossil fuels of 20 and wind as part of that. It's just a siting issue, 20 different types, natural gas, oil and coal. 21 where they're located. 21 I've certainly seen huge amounts of 22 And I know that if you're comparing that to, 22 devastation at the mining level, the railroad 23 like, buildings, it's a very small fraction. So 23 transportation level, the refinement, the burning, and there's -- I don't want to say it's not a concern. I 24 24 certainly the number of wind turbines to equal -- a 25 just think that the bigger concern of the climate is 25 fossil fuel plant is not one-to-one, so I would think Page 81 Page 83 1 1 that there might be something in the per kilowatt hour much more applicable to the bird survival. 2 2 And the other comment I had is about the or megawatt hour or hundred megawatt hour production so 3 3 reliability. And I'm wondering, as a homeowner and a that we could get a better understanding of the 4 person who is interested in purchasing electric 4 comparison of the environmental damage done in the --5 vehicles and those kinds of newer technologies, 5 in the production and the full lifecycle. 6 6 And, of course, we do see how much fly ash is electrification. And I know that a lot of that is now 7 7 required in our state, is going to be over time, that used in various different places. And the dilution of 8 those offer opportunities for battery storage on site. 8 fly ash into the ground where it's distributed after 9 And that, to me, is -- I don't know if that's 9 it's been used is part of that lifecycle. 10 10 So thank you very much for entertaining these considered in the CEIP or -- but I would really like that to be part of it, for both, you know, the 11 questions. 11 12 12 making (inaudible Zoom audio). MR. DANNER: Thank you. 13 13 Instead of spending a lot of time and resource And could I ask, could you spell your name for 14 us for the record. 14 or energy and costs and resources making big battery 15 sites, to have distributed batteries that are going to 15 MR. LEEDS: Richard L-E-E-D-S. Leeds. 16 be pretty much in every home soon. And those 16 MR. DANNER: All right. 17 batteries, as I understand, for example, the Ford 17 Thank you, Richard Leeds. I appreciate it. 18 18 MR. LEEDS: Oh, and we're -- we're big F-150, can power a home for up to a week or more. 19 supporters. So thank you very much for being here. 19 So these are things that I hope are being 20 considered, as well as distributed generation, as well 20 MR. DANNER: And thank you for 21 as with solar and those kinds of things. 21 participating this evening. 22 So anyway, thank you for letting me talk as, 22 All right. Is there anyone else on the call 23 23 you know, a teacher and a parent that's not really who has not commented who wishes to comment this 24 knowledgeable about this but has a lot of concern and 24 evenina? 25 25 investment in having this succeed. I appreciate you (No response.)

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1	MR. DANNER: All right.	
2	In that case, we have come to the end of our	
3	public hearing tonight.	
4	As I said, we will continue to receive public	
5	comments in writing. As you can see on the screen, you	
6	can email comments to comments@utc.wa.gov. We also	
7	have a public comment forum. And a PO Box, PO Box	
8	47250, Olympia Washington 98504.	
9	So with that, unless my colleagues have any	
10	other comments that they wish to make tonight?	
11	(No response.)	
12	MR. DANNER: All right.	
13	Hearing nothing, we will adjourn this meeting.	
14	And thank you all for participating. We	
15	really appreciate it. This is a very important part of	
16	what we do.	
17	So with that, thank you.	
18	We're adjourned.	
19	(Public Comment Hearing adjourned at 7:07 p.m.)	
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22		
23		
24		
25		
	Page 85	
1	CERTIFICATE	
2	<u> </u>	
3	STATE OF WASHINGTON	
4	COUNTY OF PIERCE	
5		
6 7	I, Tia Reidt, a Certified Court Reporter in and for the State of Washington, do hereby certify that the	
8	foregoing transcript of the Public Comment Hearing, on	
9	January 24, 2023, is true and accurate to the best of my	
10	knowledge, skill and ability.	
11	IN WITNESS WHEREOF, I have hereunto set my hand	
12	and seal this 31st day of January, 2023.	
13		
14 15	Sunsk	
16	/S/ Tia B. Reidt	
	Tia B. Reidt, RPR, CCR 2798	
17	NOTARY PUBLIC, State of	
	Washington.	
18	My Commission expires	
1.0	5/15/2026.	
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