Public Comments by Case

Total Comments: 99

In Favor: 19 Opposed: 60 Undecided: 20

Filing Support	Commenter	Source	Comments
No			
	Christian A Lunn	E-mail	Good day: I oppose Puget Sound Energy's Clean Energy Implementation Plan as totally inadequate, too little too late, using old technology in today's world, and buckling to their Off Shore Investors who never pay taxes in our state or country. Anyone can listen to the head of the United Nations Climate change group, who says we are at or beyond the tipping point NOW! PSE Just another big company reaping profits and another regulatory agency unwilling to do its job and fulfill its obligation of Public Trust and protecting the public interest, in this case the public's very existence! Make them triple the commitment in half the time with no profits until they get the ship upright as much as they can in this State of Washington. I can see Mt Rainier and it's mid and lower glaciers from my home. I have pictures from early 40s that my father Otto Lunn took of Mt Rainier and the glacier area. where he skied a lot. Those glaciers are all gone, their is no potential runoff in the coming years to let me water my garden and feed myself. My father was a major Chief Design Engineer in the 50s and 60s and all that work, knowledge and realization has gone for naught. Many of those designs and decisions were wrong for today's world and he began to question those in the later years of his life in the mid 70s. Shame on the country, virtually every level of regulation, every company, and every town and county for their failures, and mine for not putting

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Staff Lead: Jennifer Snyder Case: 210795 Title: PSE CEIP PI Coordinator: Andrew Roberts

> my life on he line to help stop this insanity. This was a war, we did not fight, and we lost!

I refer you to a decent small release Kevin Bacon film made decades ago about the end of the earth and showing how it happened. Most of that film made in Oregon has already begun to happen (earthquakes in mid America, the high flooding, the massive and engulfing fires, the ending of the food chain.. it is all here right now and soon the killing of Washingtonians by fellow Washingtonians over water, food, housing, transportation and more will begin. We are living every aspect of that movie now!! Today!

I realize I am talking to government and utility power at its biggest and in this instance its worst as it supposedly protects its interest, but maybe someone at corporate and governance levels will wake up and turn their individual tide. I doubt it, and even though I am 85 I most likely will watch and participate in the end of the earth in the few years I have left.

Christian A Lunn

Laurie Ekberg

E-mail UTC: Docket UE-210795

Coal is a stable, secure, reliable, energy source. Hydro-electric power is reliable energy. This is affordable energy.

Wind turbines and solar panels are not reliable and are too expensive. When there is no wind or sun, there is no energy. They destroy natural habitats and farms. There is no farm, in wind farm. Wind turbines are extremely noisy, and the noise is frightening. Frozen wind turbines and solar panels provide no energy.

Electricity blackouts and rotating outages were a problem in the Texas Power Crisis of 2021.

The United Nations goals are not possible. Let's keep the lights on, the heat on, the stove and refrigerator on in Washington.

Thank you. Laurie Ekberg Kent, Washington

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		Sent from my T-Mobile 4G LTE Device Get Outlook for Android
Max A. Albert	E-mail	To whom it may concern: I oppose this intention to shift to expensive and unreliable sources of electricity. "Clean" energy doesn't exist, and the only things it's likely to achieve are higher electric bills, dead birds and brown-outs. Sincerely, Max A. Albert
Don Laford, PE & CCM	E-mail	I received the Puget Sound Energy publication of the WA State Plan It is very disappointing that the PLAN excludes Nuclear Power – Which is CLEAN The state has Existing Nuclear Columbia Generation station output 1200 MW. The state also has an 80% complete mothballed Nuclear unit "Satsop Unit #1" at Elma WA that could be completed and significantly add to WA CLEAN ENERGY. Please add Nuclear Power to the plan. Wind Farms and Conservation will help, but will not sustain reliable power growth in the future for WA State. Don Laford, PE & CCM Sent from Mail for Windows
Pam Cohen	E-mail	Why don't you folks concentrate on hardening the grid??. If there is no grid then not to trouble yourselves with wind and solar. as there will not be any way to supply electricity. Wind and solar can be effected by weather. (Texas). Also how would you like to be stuck at top of I 90 in your EV for 10 hours. When our power is out we know the crews will restore asap. This is a very serious matter, and you should use common sense.
Richard L. Yager	E-mail	May I ask what causes climate? Wind, temperature, ocean currents, precipitation, pressure, typhoons, tornadoes, etc. have been a part of earth's history from the beginning. These are driven by the constant and irreversible nature of earth's changing dynamics along with its relationship with the sun and moon. As these dynamics change, so does the weather. Earth's rotation is slowing, the moon is moving further away, earth's axis in

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relation to its rotation around the sun is changing. In other words, the earth's climate has never been static but ever changing. These factors are not man made and to think we can alter them is sheer fantasy. May I ask why, during the early and mid-70's, we were concerned about global cooling and the possibility of another ice age? This at a time our nation was much more industrialized and without any emission controls. May I ask, do wind and solar pay for themselves or do they rely on government subsidies? Between production, transportation, lease of sites, construction, and maintenance, is there a windmill or solar farm out there that pays for itself without a subsidy? Given the limitations placed on wind and solar by climate they can never be relied upon for the constant and immediate needs of both the private and public sector. Where will the necessary supply of rare earth minerals come from for this plan? What powers the industries that mine them? May I ask how much do we currently rely on China for our clean energy needs and how much more in the future? Is relying on China a good idea? May I ask how does your plan replace the fossil fuel need that currently drives all commerce (shipping, rail, trucking, air, mining, etc.) within your stated goals? The lion's share of all electricity is produced by coal and natural gas fired power plants. Here in the Pacific Northwest, we are fortunate to have hydroelectric. Given the desire of many environmentalists to remove dams, is there a risk of losing this resource or its expansion? And finally, I recently spoke with the proud owner of a Tesla. When I asked him what produces the electricity he uses in his vehicle he had no idea. He also didn't know how long the batteries lasted or the cost to replace them. I believe it's 7-9 years and \$20,000. Given the initial sticker price of an all-electric vehicle, I don't see the masses embracing them unless, of course, they are subsidized. Richard L. Yager A realist (non-woke) L. Y. E-mail The "clean energy plan" notice sent to us by Puget Sound Energy is missing a strategy: No where is there any mention of a priority to keep energy at the lowest possible cost to consumers. There are plenty of other politically correct gibberish such as "equitable energy futures", "inclusive" etc. Consumers want TWO things: 1. Low cost 2. Reliable. Neither of which seems to matter to Puget Sound Energy or our elected "leaders". Clearly. You fool no one.

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Philip H. Nusz	E-mail	E-Mail: comments@utc.wa.gov
INUSZ		UTC - Utilities and Transportation Commission
		P.O. Box 47250
		Olympia, Washington 98504
		RE: PH Nusz - Comments - Docket UE-210795 - PSE's CEIP - Puget Sound Energy's, Clean Energy Implementation Plan:
		UTC Commissioners: David V. Danner - Chair
		Ann Rendahl
		Milt Doumit
		11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
		I have read PSE's, CEIP summary, which proposes an increase in so called "Clean Electricity" from about 35% now, end of 2022, to 63%, almost double by the end of 2025.
		This seems like an enormous change, in a short three-year period; if it is to be done reliably, and cost effectively in terms of the customer's cost, and the federal and Washington state subsidies (taxpayer's costs).
		It's ironical, in the last decade or so, while we have more technology and electrical infrastructure than ever before, our electrical grids in the state of Washington, and the USA in general, seem to be more fragile.
		Following are some issues which concern me, and suggestions I have for consideration as we transition to clean and sustainable energy.
		1. Comments and Suggestions:
		• Prepare for Unexpected Clean Energy Consequences: Following are some examples where clean energy, without adequate backup has caused serious problems.
		a. Heat - California - 2020, 2022: September 2020, high temperatures caused numerous rolling blackouts. September 09-11, 2022, numerous energy saving Flex-Alerts were issued, and EV users were asked to refrain from charging their vehicles in the afternoon and evenings.
		b. Cold - Texas - February 2021: Massive outages for days due to cold weather and freezing rain.

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- c. Wind Germany 1-st Half of 2021: Coal generated power exceeded wind power, due to the lack of wind, January to March.
- d. Drought Italy January-May 2022: Hydroelectric power typically produces +40% of their electricity. Due to extended drought, it was reduced by 40%.
 - Develop a Practical, Not an Ideological Clean Energy Program:
- Let Clean Energy Mature at its Natural Pace: New technologies generally progress in the most economical, most reliable, and most effective manner when left to mature on their own; in a manner which conforms to the real-world conditions. On the contrary, forcing technology typically commits resources to equipment and systems which are costly, inefficient, unreliable, and will out of necessity become obsolete much sooner than they would have otherwise.
- Diversity Increase Clean and Conventional Power Supplies: By diversifying and increasing both, while beefing up the transmission system at the same time, the grid will end up being the most robust in the short and long term. Then, as time goes by, the least efficient and most costly sources can be replaced, as clean and renewable energy technologies advance. This seems to be the approach China and India are taking.
- 2. Adding Electrical Loads: Washington and the USA are promoting increased electrical energy usage.
- Electric Vehicles (EV): Each new EV, driven 10,000 miles per year is equivalent to adding one-quarter of a typical single-family home to the grid, based on the Writer's calculations.
- Heat Pumps as Gas Fired Furnace Repacements: They becomes less efficient as the temperature drops. Some sources comment that conventional units are marginal below 40-DF, when they are needed the most.
- Bringing Industry Back to America: While industry is good for our country, it takes energy, especially heavy industry like chemical and metal production.
- Limiting Gas Hook-Ups in Particular Areas: If instituted, the homes and businesses will use much more electrical power than they would have otherwise, with gas fired furnaces, water heaters, fire fireplaces, ranges, and other commercial equipment.
- 3. Energy Sources:
- Renewables: Because clean, renewable sources such as wind and solar are generally the first to be used, whenever a new home, EV, or electrical appliance is added to the grid, the extra power has to be supplied by

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	some conventional fossil fueled or nuclear power plant.
	• Marginal: Generally, all of the grids in the USA have become marginal; because of the added loads, and the shut-down of lower efficiency plants, and the so-call dirty coal fired plants. Consequently, the grids are having a difficult time providing power without blackouts, or pleads for cutbacks by customers during severe hot or cold weather periods.
	• Dilemma - New Electrical Loads Require Additional Conventional Power: Essentially all of the new loads must be provided, or backed up with conventional power.
	Assuming all the additional loads could be supplied by new renewables, about the same amount of backup conventional power will have to be added to the grid, to cover those times when the sun doesn't shine, and/or the wind doesn't blow.
	This dilemma will persist, until revolutionary forms of energy storage, and/or production are developed.
	Sincerely, Philip H. Nusz
	Attachment: EML-ENERGY-PSE-CEIP-UTL-CMISH-221214.DOCX (Copy of this letter.)
Bruno E-mail Bechtold	I logged on the clean energy plan and learned absolutely nothing. I saw a fancy plan using a lot of fancy works. What I want to see is where is PSE going to get this clean energy. How many wind turbines will be required to keep the lights on in Seattle while charging all those Tesla cars.
	Until Gates and Buffet finish developing atomic energy this is a exercise in futility. And atomic energy scares me.
	I want to see substance not pipe dream words.
	Bruno Bechthold
Glen E-mail Rasmussen	Sirs: I realize that my comments and preferences are politically incorrect and will probably be about as effective as talking to a tree, but I would like to have my say.
	I oppose your clean energy plan, specifically to increase wind and solar sources and to eliminate coal. Wind and

PI Coordinator: Andrew Roberts

Title: PSE CEIP

Case: 210795

Staff Lead: Jennifer Snyder

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Richard Colenso	E-mail	
Darlene Robinette	E-mail	Let it be on record I oppose every action of said plan. There is NO way at all replacement energy will be affordable or sustainable for even a fraction of residents. Using the term "equitable" is always a sign of pure propaganda laden speak. Again, it is a NO to the plan until such time as a viable, affordable energy source is actually located and made usable. Darlene Robinette Seattle, WA
		solar have high capital costs, paid for by my tax dollars, and are intermittent. Therefore when capital costs are included with operational costs, the energy they produce is much more expensive than from hydro, nuclear, or coal sources. Low-cost energy is essential to revitalize our economy. I would prefer nuclear power as our primary source. This country has vast coal deposits, and we should be using coal and not exporting it (to be burned less carefully elsewhere). And please don't consider eliminating any existing hydro sources. I have a MS degree in chemistry, have spent a career in engineering type work, and have studied the climate change and global warming controversy from a scientific and Factual perspective. I conclude the very small climate and temperature changes have not been caused by man, nor could we cause it we wanted to. For example, earth's tiny temperature variations are almost perfectly synchronized with the solar sunspot cycle: cause and effect. And carbon dioxide is plant food. It's that simple! We have been swept up by global warming activists with a political agenda not including good science or a rational analysis of real data. These radicals have persuaded our population and more importantly the government, run by people with little or no scientific understanding, to switch to "green" or "clean" energy sources, no matter how much that raises the cost of energy or how much that throttles our economy. There are thousands of qualified scientists who agree with me on this. There are books written about this. Do your homework. Don't just cave into what's "politically correct." "Now go do the right thing!"

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		Mine comes from the most reliable dictionary of Western speech. EQUITABLE implies a less rigorous standard than JUST and usually suggests equal treatment of all concerned. R.W. Colenso
Chris K.	E-mail	RE Clean Energy plan AND rates. PSE moving to 63% so called renewable energy is finefor those who desire to pay the accompanying rates. I believe that a utility should stick to the traditional purposes of providing: 1) A reliable power grid and cost effective infrastructure that plans for future needs. 2) Endeavor to achieve low cost energy to the benefit of the utility consumers. and thats where the goals END. Everything else is politics that should NEVER be part of ANY Utility. CK PSE and TPU consumer and voter.
Nancy Murphy	E-mail	*** See Attachment ***
Jena Gilman	E-mail	External Email I would like to express my concern over an over-reliance on terrestrial wind farms by Puget Sound Energy in their Clean Energy Implementation Plan, similar to the ones now degrading the habitat and viewscape in Kittitas County. There are so many other ways to implement their clean energy goals, including solar, offshore wind, more efficient turbines at existing dams, tidal, wave and, not least of all, conservation. The dangers to our plummeting populations of bird life is an obvious shortcoming of terrestrial wind. However, I am also concerned that the installation of more of these very tall turbines is degrading the scenic viewscape of our state, the most beautiful state in the Union. I grew up in Moses Lake and now live in North Bend, where I am a PSE natural gas customer and, indirectly, a PSE electricity customer as well. I have spent most of my life enjoying the views of Grant, Kittitas and King Counties. However, the Wild Horse Wind Farm, in particular, has greatly affected that view and even the wonderful view of Mt. Stuart from the Ellensburg area has been negatively affected by the intervening wind towers of the Kittitas Valley Wind Farm. Please eliminate or reduce the reliance on terrestrial wind for the Clean Energy Implementation Plan. Thank you, Jena Gilman

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Dick Daniels	E-mail	My mistake. Only 23% of electricity from PSE is generated by coal, as per PSE March, 2020. Effect will still be disastrous to our supply of electricity and our cost of living.
		Dick Daniels
		From: Richard Daniels Sent: Thursday, January 5, 2023 2:17 PM
		To: comments@utc.wa.gov Subject: Public Comment re Energy Plan
		Considering that approximately 40% of PSE's current electricity is generated by coal, the plan to remove coal as a source of electricity by the end of 2025 is impractical, unachievable and dangerous.
		Wind and solar power are unreliable. Brown outs and black outs are the catastrophic results of reliance upon wind and solar, affecting homes, businesses, hospitals, etc. Wind and solar power use more natural resources at a higher cost than what they produce, short and long term.
		Eliminating coal will drastically reduce available electricity, the ensuing competition causing prices to skyrocket, impacting availability and affordability for individuals, as well as for small and large business and manufacturers.
		Wind turbines sound feasible to NIMBY Western Washington residents and politicians, but in Eastern Washington they already create serious auditory and visual pollution.
		Ask yourselves, "Where is the money going?" and "Who is making a killer profit?" from this boondoggle
		Your goal may look nice on paper but it is the product of absolutely no common sense.
		Dick Daniels
Walt Elliott	E-mail	PSE is missing an historic opportunity to serve Washingtonians and be a national, if not a world leader. The Plan should include a focus on nuclear and hydro. 1. Energy demand increases with the cold temperatures and that hydro is providing most of the energy. Reverse the illogical decision that hydro power isn't a renewable in Washington. It's Washington's carbon-free power ace and we have a lot of untapped hydro without salmon impact.
		 When we need the energy (when it is very hot and very cold) Washington wind energy is minimal. Look at BPA's reports. Restore the WPPSS nuclear project. Given wind and nuclear capacity factors WPPS project's power

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		generation would have been equivalent to about 8,000 wind turbines. Walt Elliott
Lance Kaufman	Web	*** See Attachment for comments from AWEC***
Marcos Compos	E-mail	*** See Attachment ***
Court Olsen	Email	*** See Attachment ***
Richard Davis	E-mail	*** See Attachment ***
Deborah Stuart	E-mail	*** See Attachment ***
Mr. Kenneth Peterson	E-mail	It is my opinion that the public should NOT bear any costs of the proposed PSE Clean Energy Implementation Plan by increasing utility bills of Washington residents. Any increase in utility bills should be absorbed by PSE and the State of Washington. Both PSE and the State of Washington make millions of dollars in revenue each year and it would be unfair to Washington residents to incur any increase in utility bills In addition to the above comments, in light of recent events of vandalism, it is my opinion that the electrical infrastructure, especially electrical substations, need to be hardened to prevent such occurrences in the future. It is the responsibility of PSE and the State of Washington to ensure the safety of the infrastructure and of its citizens. Both PSE and the State of Washington should be responsible for hardening the electrical infrastructure without any financial burden to Washington residents. Mr. Kenneth Peterson
C Brownlee	E-mail	PUBLIC COMMENT SUBMISSION ON PUGET SOUND ENERGY'S CLEAN ENERGY IMPLEMENTATION PLAN DATED DECEMBER 17, 2021 UTC FILING UE-210795

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I am not a climate specialist nor am I an energy specialist. I am just an ordinary concerned citizen trying to understand, as best I can, the climate change hysteria that is gripping our politics and our energy industry, because the decisions being made today will have an enormous impact on all our lives. I believe there is no reason to be concerned about changes in our climate because we humans really can't affect that much by what we do or don't do. Climate change is real today, as it always has been historically, but the latest attempts to blame it on human activity are a power play, a way to control our lives and suppress our freedoms. There is much research by very qualified professionals to say that the science of climate change is a long ways from being settled. However there is intense political pressure to silence anyone who dares to challenge or deny that climate change is due to human activity.

Our climate is in constant flux and change. God designed it that way. Carbon in the form of CO2 is an integral and critical part of our ecosystem. Without it, there would be no plants and we could not survive. Science tells us that as CO2 increases, plant growth also increases and vice versa. So our ecosystem is marvelously designed to be self-balancing and self-sustaining.

50 years ago, the doomsayers were predicting another ice age and the end of the world in less than a generation. When the planet started to warm up within a few decades, the warnings suddenly changed to a threat of "global warming" and once again the end of the world. When, less than a decade ago, the climate showed a cooling trend, the generic term "climate change" was coined and remains the latest fashion today. Our climate is constantly in flux, alternating from warming to cooling and back again. That is the way it has been for all of known history. We can't change the nature of our climate, or for that matter, control it. I repeat, it is designed to operate in this manner.

Big-government and over-regulation are not the way to deal with the issues of climate change. Given truthful information and access to resources, each person should be able to choose the energy source they prefer and that best suits their needs. Capitalism and the American way of life will ensure they make the right decision. History proves this.

People only need access to the facts and the freedom to make informed choices, and they will generally make the right decision. I love this about America. That's probably why millions of people around the world are dreaming about coming here, legally or illegally.

COMMENTS ON PSE'S CLEAN ENERGY PLAN

1. Date of Plan

This is stated to be a 4-year plan, and we are now past 1 year into the plan timeframe. Is this a hearing to approve the plan, or is the public hearing a report on the progress that has been achieved along the road to

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implementing the plan? Does PSE require UTC approval to fully implement the plan or is PSE simply updating the UTC on the plan's progress? Is UTC an approval agency or a monitoring agency?

2. Plan Progress

PSE sets a goal of achieving 63% "Clean" electricity by the end of 2025. The achieved percentage at 12/17/21 was stated to be 35%. What is the achieved percentage as at 12/31/22? Has any progress been made in implentation of the plan?

A major component, and a stated objective, of the plan is elimination of coal as a source of electricity by the end of 2025. Is it realistic to eliminate a major source of our electricity before the replacement sources are established and proven economic and reliable? That does not seem to me to be a very smart way to deal with this perceived problem of so-called "dirty?" energy. The root of the coal question is in the computer-generated models that predict that carbon is our greatest problem and will ultimately destroy our planet unless we do all we can to reduce or eliminate its use in our energy production as well as our everyday living – elimination of all fossil fuels as a source of energy.

3. Proposed wind and solar generation

I traveled by automobile fairly extensively through central Germany in 2016 and 2018. I saw first-hand the eyesores created by "utility-scale" solar and wind farm installations. I am definitely not in favor of creating the same kind of installations in this country. I believe they are not practical and, as Germany has experienced, not reliable enough to justify dependence on these "renewable" sources. In their attempt to solve a perceived problem, they generate a host of other problems we can't understand or predict.

4. DER's

Wind, solar, battery storage, Biomass and other forms of DER's need to be assessed in terms of long-term reliability and economic viability. Just forging ahead with this plan in the name of carbon footprint reduction without weighing reliability and economic factors seems to me to be shooting ourselves in the foot. Mankind will not benefit from converting agricultural land to energy production, because we will be reducing already limited food production in the process. Is it better to experience some degree of climate fluctuation, which has always been our experience, or to die of starvation because our agricultural assets and resources are being converted to so-called "clean energy" applications.

5. Energy efficiency

Improving energy efficiency is a very worthwhile goal as long as the efficiency is cost-effective. All sources of

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Staff Lead: Jennifer Snyder Case: 210795 Title: PSE CEIP PI Coordinator: Andrew Roberts

energy need to be critically evaluated for their long-term costs and benefits.

6. Benefit distribution

I definitely do not understand why equitability and inclusiveness are components of this plan. It sounds very woke to me, like special recognition or benefits need to be afforded to certain groups to more equitably allocate "limited" resources. The focus should not be on creating special classes, but on allocating our limited energy resources equally and fairly to everyone, regardless of all the politically correct classes our politicians are trying to separate us into. The focus should be on providing as much economic and reliable energy that PSE can generate, without politically tieing their hands and intentionally limiting their access to possible energy sources. Our capitalist, free-enterprise system will eventually lead us to the best results, without government interference.

There can never be a carbon-free future for the energy industry. We must have carbon to survive on this planet. God, who alone is in control, designed our climate system to operate in this manner. Carbon is fundamental to human survival.

I appreciate you taking the time to consider my comments.

C. Brownlee

Ken Marzocco

E-mail RE: Docket UE-210795

I am writing regarding the Hearing for PSE's Clean Air Implementation Plan. With a degree in Mechanical Engineering and many years of experience working in the energy sector, I believe all proposals need to be both technically sound and in the best interest of customers. Several initiatives proposed by PSE seem to fail in one or both above-mentioned criteria, for example:

Expansion of residential/distributed solar generation:

- 1. It is well documented that the Pacific Northwest (PNW) is the very worst location in the USA for solar generation. The "sun index" in WA is 0.67 vs 1.19 in NV.
- 2. Solar installations located in the southwest can generate roughly 60-80% more energy compared with those in the PNW. In addition, markets in the southwest have peak electrical demand in the summer versus winter in the PNW when solar generation here is minimal ($\sim 1/10$ of summer generation).
- 3. In CA, the flawed economics associated with net metering for solar generation results in more than a billion dollars per year in additional costs to the utility's customers. To remedy this injustice, CA very recently changed the compensation model away from net metering and instead will compensate solar generation based on the market price of electricity.
- 4. The estimated installed cost of a 5 kW residential solar system is \$15,750. Using an interest rate of 6% over a 20-year period the annual cost would be \$1356. In the PNW, a 5 kW system would generate an estimated 5000 kWh per year. The wholesale cost of electricity in the PNW averages approximately \$0.04/kWh, therefore the

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solar installation would generate ~\$200 of electricity per annum. The annual loss would therefore be \$1156/year ignoring maintenance expenses, costs for PSE to connect the system to the grid, PSE overhead as well as, performance degradation and eventual demolition/disposal of the solar panels. One could argue that the economics are improved due to various subsidies, but these costs are also ultimately borne by customers through other Utility charges and taxation.

- 5. PSE proposes to rent roofs from low-income families and install PSE owned solar facilities. The extra cost, for roof rental and administration, will only make the economics worse. Assuming PSE would pay \$300/year for a roof rental then the loss would be at least \$1436/year.
- 6. With WA real estate amongst the most expensive in the country, how many low income families actually own homes which have relatively new roofs that will last the life of the solar system?

In summary, PSE's proposal to help low-income families by renting roofs for solar generation will likely benefit PSE at great expense to their customers. The program would cost customers >\$5 for every \$1 that goes to a low-income family. Any charitable program should not cost PSE's Customers multiples more than the value received by the charitable recipients.

Battery Storage:

- 1. The cost of battery electricity storage is extremely expensive compared to using natural gas fired peaking units. In December 2022, The NREL (National Renewable Energy Laboratory) reported that Utility sized battery storage costs \$446/kWh or \$446,000/MWh. Therefore, a system designed to supply 60 MW for just 4 hours would cost \$107,040,000.
- 2. Batteries can supply electricity for a very short window after which they are useless until they are recharged. Alternatively, peaking units can run indefinitely. Relying on battery storage would place PSE's customers at risk of prolonged outages during winter storms resulting in lives lost and tremendous financial loss.
- 3. PSE proposes using the batteries for both emergency backup and peak shaving. These two uses should be evaluated separately since any energy used for peak shaving will not be available during unpredictable emergencies.
- 4. The manufacturing of Lithium batteries results in a large carbon footprint which can only be offset if green energy is available to charge the batteries.
- 5. PSE claims batteries would reduce emissions if they were charged using renewable electricity. The reality is that only 35% of the electricity is currently "clean" and there is little chance surplus clean power will be available during the life expectancy of the batteries.
- 6. Utility-scale battery storage technology is evolving. The NREL forecasts cost will drop by more than half in the next decade. Any investment at this time will be wasted.

Since any incremental electrical load must currently be met with natural gas or coal fired electric generation, PSE's plan would result in the combustion of hydrocarbons to charge the batteries in order to reduce the usage of hydrocarbon fired peakers. The net result would be a large capital expenditure and increased overall emissions. I believe this is an example of greenwashing.

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		In summary, I do not dispute the need to reduce emissions, but it appears that the proposed capital intensive changes will have minimal positive impacts other than benefiting the shareholders of PSE at the expense of its customers. As one alternative, PSE could invest in utility scale solar projects in the southwest where they would have a much better return. This would benefit PSE's customers by helping reduce mid-Columbia spot prices in the summer. As a better option, PSE could negotiate a long-term purchase agreement with BC Hydro (the utility north of the WA border). BC Hydro is a net exporter of green electricity, and they transmit large volumes through WA to CA. The supply of electricity from British Columbia is set to grow substantially once the Site C hydroelectric facility is commissioned. Site C is forecasted to generate 5100 GWh per year starting in 2025. Climate Change is a global issue and employing strictly a local focus is ineffective while wasting the limited resources (money and minerals) available. Ken Marzocco
Sue Stronk	Web	I am a member of CENSE and want to attach below a letter from Don Marsh which he sent to the Transmission Corridor work group. PSE should have gone to EFSEC for review of this Energize Eastside Project—this project is far from being completed and vetted that it is prudent by the WUTC. PSE should not receive a dime for this project until it is complete and has gone through the proper process. This project is a money grab for PSE when other cheaper solutions exist for a small peak shortage if one exits at all. PSE should be forced to EFSEC review—read below—Sue Stronk Per Don Marsh: I reviewed the video of your Feb. 10 Work Group Meeting, and I had some observations that may provide further insights regarding PSE's "Energize Eastside" project and the permitting process.
		I lead the Coalition of Eastside Neighborhoods for Sensible Energy (CENSE), a well-informed group that has opposed the Energize Eastside project for nearly 8 years. Although PSE has done a lot of public outreach (skeptics may say, marketing and influence campaigns), our main concern is whether the project is actually needed. PSE and other speakers in the Work Group mentioned the unprecedented population and economic growth in the Eastside area, making a transmission upgrade an apparent "no-brainer." But the stated purpose of the project is to serve peak demand during an N-1-1 failure emergency. In 2015, PSE predicted peak demand would grow at a rate of 2.4% per year, roughly twice the rate of population growth. PSE's system-wide shows that peak demand has instead fallen during the past decade, as documented in PSE's 2021 Integrated Resource Plan.
		PSE could easily prove the need for the project by showing actual historical peak demand data specific to the Eastside. But PSE has stubbornly refused to do so, claiming that information is restricted by CEII (Critical Energy Infrastructure Information). The company claims the data is so secret, it can't even be shared with

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professional experts or people who have obtained CEII clearance from FERC. In essence, PSE asks the residents who will be impacted by the project and all 1.2 million ratepayers who will pay for it to trust that PSE has correctly determined the need. We say, "Trust, but verify."

Since PSE insists only experts can access the data and understand the need for the project, we have requested that PSE take the project to EFSEC. We trust the experts at EFSEC have sufficient access and experience to verify that PSE has good data and analysis underpinning the project. Instead, PSE chose to pursue the much slower and complicated strategy of obtaining five land use permits. Unfortunately, the cities lack the staff and expertise to evaluate a project as complex as this one. In fact, the City of Newcastle has explicitly stated they cannot rule on the questions of need, safety, or alternatives because they don't have the staff resources. With the city refusing to recommend approval or rejection of PSE's land use permit, the outcome for that section of the power line depends on the ruling of a land use Hearing Examiner with no experience in transmission planning.

PSE complains that multiple land use hearings give opponents the chance to appeal the same issues multiple times. This statement is incomplete. Each municipality has different land use codes that require separate consideration. For example, the Newcastle City Council passed an ordinance requiring a safe distance between PSE's new transmission poles and two 60-year-old petroleum pipelines that share the same narrow transmission corridor. No other Eastside city has an equivalent ordinance. The physical conditions are different in Newcastle, and the land use codes are different. Therefore, different issues may be appealed.

As you know, EFSEC could have granted a permit overriding local land use codes within one year. PSE's Lorna Luebbe said the company didn't think the project qualified for examination by EFSEC. Really? A project that runs through four cities isn't covered by EFSEC's charter? Sara Leverette said PSE preferred to work with local interests rather than overriding the locals through EFSEC. If PSE really cares about local preferences, perhaps the company noticed that opponents submitting written and oral testimony in the Newcastle public hearing outnumbered supporters by a ratio of five-to-one.

PSE could have lessened the effectiveness of local opposition by being more responsive to data requests or by taking the case to EFSEC. Since PSE has refused to do either, the company is jeopardizing \$100 million and eight years of effort already expended on Energize Eastside. There are many lessons to be learned for the company and future infrastructure projects in our region. An eight-year debate is not in the best interest of anyone.

I hope this perspective is useful to your group as we all desire clean, safe, reliable, and affordable energy to serve our future needs.

I'm happy to answer any questions that might arise from my comments.

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			Best regards,
			Don Marsh President, CENSE.org
Ra	achel	Web	Ue-210795 clean energy plan Are you crazy!? This idea is Hitler insane and undoable. We do not want worthless windmills everywhere!! Not only a blight but they murder thousands of birds and kill anything around them!!!! They are unreliable and use OIL PRODUCTS to build and maintain!!! How stupid are you idiot COMMIES!? Expensive and useless!!! Just another commie attack on poor working citizens!!;;
			Your "zoom" meetings are also just ANOTHER COMMIE WAY OF KEEPING MOST PEOPLE FROM COMMENTING ON YOUR INSANE ELITIST IDIOCY!!!!!
	ois oppema	Web	Taken verbatim by Melissa Castaneda-Kerson This is a good way to deprive us of our energy. It is not supported by good science, Co2 is helpful for growing food. I encourage you to check the science and oppose the use of windmills and solar panels both of which make us reliant on China. This is for a distraction of our ability to compete with China.
	erri W lackburn	Web	I am AGAINST this proposal: Clean Energy Implementation Plan: The total energy expenditure to create, including energy to mine materials and fabricate a windmill will not be recovered in the life of a windmill. Plus, windmills and their parts, have a limited lifetime and presently there is no way to recycle those materials. Also, windmills are unreliable in generation of consistent power and have to have a backup power source. If they overgenerate power, there is no cost effective way to store that energy. Large batteries have the same shortcomings I listed above in fabrication.
	nul ndberg	Web	***See attachment for first comment from customer*** ***Second comment from customer*** Places I have very short day this cuting place.
			Please, I beg you. abandon this entire plan. Our civilization is not ready to be powered by solar cells, windmills, and unicorns.
			The Pacific Northwest has plenty of clean energy in hydro, nuclear, and clean coal.
			CO2 is not toxic; it is essential to the survival of life on earth.
			"Climate change" alias global warming, is not a crisis; it is a hoax designed to control some people and make

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		others very rich.
		Both windmills and solar cells are: 1. an environmental catastrophe, both in the manufacturing and in the disposal. 2. unable to handle our energy needs, especially when it's not sunny or the wind is not blowing. 3. deadly to native wildlife. 4. far more expensive than our present electricity.
		Further, since much of the materials for the manufacture are sourced from China or other communist nations, any big push to go wind and solar is bound to weaken America and strengthen our nation's enemies.
		So, if you care at all about America, please stick with what works.
		Thank you for listening.
		Paul Lindberg 34134 SE Kent Kangley Road, Ravensdale, WA 98051
Diane Lasken	Web	Taken verbatim by Melissa Castaneda-Kerson: I am 58 years old on Social Security and get \$326.00 a month and my property taxes have been raised in Everette. Going forward with clean energy makes no sense. I put in a new gas furnace that is very efficient and my water heater is gas. What are people supposed to do if you cut out the very utilities that we rely on. The electric grid is going to collapse if we do this. This will not benefit the environment much. To make the batteries they have to dig for cobalt in Africa and only pay people a dollar a day. This is not ok. How do we recycle the batteries and windmills. This is basically going to destroy the middle class. I have to take what little money I have to help my daughter. The government is so greedy for tax dollars. How many people have stock in the green energy. This has nothing to do with humanity. We have abundant natural gas why are we making China rich. If the government wants to drive more people into poverty, they will proceed with this.
В	Web	GREEN ENERGY KILLS!: birds, fish, the fishing industry, the folks in the cold who can't afford energy bill, truckers, farming, folks who can't afford food, landfills choked with windmill parts that cannot be recycled GREEN ENERGY HELPS SUPPORT CHINA!!!
Jeanne Kinnaird	Web	Although clean energy is a goal, the implementation of products and devices (such as windmills and solar panels) is becoming more and more fanatic as time goes by. We are a nation of electricity and automobiles. The blind dash into unknown resources can truly damage this country. I do NOT want to be part of "the green new deal". It is absolute folly at this point in time Politicians are using it as a means to stay in office, without thinking of future consequences. The windmills and solar panels wear out and cannot be recycled,at least, at

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		present. I know that there are benefits to clean energy in the future, but no need to go hell bent for leather attaining it.
Brian Miller	Web	Re: Docket UE-210795 I am opposed to the aggressive schedule toward 63 percent clean energy by the end of 2025. After seeing what happened to Texas during a winter cold snap, I am not assured of reliable, cost-effective electrical distribution. I understand that the clean energy policies are driven by environmental and political considerations, at the expense of efficiency and effectiveness.
David Dennis	Web	Taken by CTC I work for a petroleum energy company in Washington and this threatens my job and hundreds, if not thousands, employed in the petroleum industry in the NW. The mismanagement of the forest in WA by the governor has emitted more emissions into the environment than coal. How do you prove the coal train port in Vancouver, for clean coal, it would outstrip the benefits that this clean energy with all the mining of the elements over in foreign countries, killing children. And I would like to preserve the dams in Washington. They have served us well for many years. I do support spillways around the dams to support fish migration.
Andrew Balicki	Web	Comments typed verbatim by Melissa Castaneda-Kerson Clean energy is nonsense because it is costly. Everything is rising and I feel it will make our economy collapse. It is good but the people can't afford it.
Frank Damiano	Web	***First comment received 1-28-2023*** The problem with this proposal is PSE wants to pass the cost of their ideas on to us instead of using low cost reasonable solutions. Regarding the proposal involving removing coal as a source of electricity, why not move toward "clean coal" technologies which are already working in other facilities? Regarding the proposal involving large scale wind generation, I have concerns as should the UTC! 1) Ice accumulation on the blades contributed to power outages during the 2021 Texas Blackout which caused deaths. 2) Wind Turbines are prone to gearbox failure in only10yrs & it is costly to replace. Goes without saying when the turbine isn't spinning it is not generating revenue or power. 3) The fiberglass blades last only 20yrs and they are not cost-effective to recycle. Therefore, the blades are often sent to landfills. In conclusion, we need to make sure we aren't solving one problem & creating another. Thank you for representing us UTC. ***Second comment received 2-5-2023***
		Docket UE-210795 I am sorry, but the last time I tried sending my statement it did not seem like it was sent. I am opposed to PSE's proposals. The problem with these proposals is PSE wants to pass the cost of their ideas on to us. That is wrong. They already profit from us. They just increased the cost of natural gas this November 2022 and increased the cost of both electric and natural gas again this January 2023!

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	Regarding the proposal involving removing coal as a source of electricity, I would like to suggest why not move toward "clean coal" technologies which are already working in other facilities. Regarding the proposal involving ramping up large scale wind resources, I have concerns. 1) Ice accumulation on the blades contributed to power outages during the 2021 Texas Blackout which caused deaths. 2) Wind Turbines are prone to gearbox failure in only 10yrs and the gearbox is costly to replace. Goes without saying when the turbine isn't spinning it is not generating revenue or power. 3) The fiberglass blades last only 20yrs and they are not cost-effective to recycle. Therefore, the blades are often sent to land fills. In conclusion, we need to make sure we are not solving one problem and creating another. Thank you for representing us! Sincerely, Frank Damiano
Web	The Clean Energy Implentation Plan that PSE wants to implement wishes to deliver clean energy while maintaining affordability our customers expect. Not having seen the cost benefit analysis, I am assuming the cost to produce this future "clean" energy will be the same or less than the cost to produce current energy. I am also assuming the increase in clean energy production from 35% to 63% and removig coal as a source of electricity, will also result in lower energy costs to consumers. While the goals set by CETA is great, most consumers do not have the additional means to pay for any increase in energy costs. I am strongly against any part of this plan that will increase energy costs to consumers regardless of environmental benefit. Having Washingtonians pay for increase energy costs while other energy consumers throughout the world relies on conventional energy production will have negligible outcome on overall climate goals.
Web	Your planning on replacing renewable power with solar, that does not shine much in the NW. And wind mills that won't turn much and gas thats not running out. I am Not in favor with any of the woke leftist ideas in the lest
Web	I am totally against the plan to move toward clean energy. States (Texas for example) and countries (Sri Lanka) that have moved heavily into clean energy have experienced brown outs or even total disfunction of their electrical grid. I believe that PSE should take a very slow move toward clean energy. Instead of 63 percent by 2025 i would recommend about 40 percent.
E-mail	***See attachment for PSE Rebate Flyer and additional comment from customer*** Greetings Utilities and Transportation Commissioners, I am a climate-concerned parent and PSE customer living in Redmond, WA providing public comment on Docket UE-210795 (PSE's CEIP). First, I have concerns about the inclusion of "renewable natural gas" as a form of "renewable energy" in the 2021 PSE CEIP "Acronyms and Definitions Section".
	Web

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Additionally, I would like some assurance that PSE's plans to increase the percentages of renewable energy in their portfolio does not include simply moving some of the current energy use from electric to gas appliances with incentives, or increasing their "renewable natural gas" (RNG / biomethane) portfolio. Right now, PSE is incentivizing gas upgrades for certain appliances. However, there are no listed incentives for moving from gas to electric. (Please see https://www.pse.com/en/rebates and attached PSE Rebate Flyer.pdf). This goes against PSE's stated goal of becoming "net zero" by 2030 and "zero carbon emissions by 2045" for natural gas, with "30% by 2030". https://www.pse.com/en/press-release/details/pse-sets-beyond-net-zero-carbon-goal When I asked PSE last May about how they plan to reach their 2030 and 2045 gas decarbonization goals without incentivizing customers to switch to electric, they responded with a link to their renewable natural gas program (link below) and references to ongoing work on the CEIP and a "hybrid heating pilot study". https://www.pse.com/green-options/Renewable-Energy-Programs/Renewable-Natural-Gas-Residential Renewable natural gas (RNG or biomethane) can, at best, provide only around 15% of current gas usage. Studies show the best use of biomethane is for hard-to-decarbonize sectors, not for easily electrified appliances in our homes and buildings. https://www.sightline.org/2021/03/09/the-four-fatal-flaws-of-renewable-natural-gas/ These approaches overestimate the value of, as well as the costs and limitations of biomethane as a viable solution for meaningful emissions reduction from natural gas use in homes and buildings. Further, it does little to address the health and safety risks, and climate impacts of methane, the primary component of natural gas in any form. https://www.nature.com/articles/d41586-021-02287-y Please ensure that the goals of CETA are not undermined by PSE's natural gas incentive programs, and that biomethane is not considered a form of "renewable energy" for the purposes of CETA compliance. Thank you for your consideration of these matters. Devon Kellogg and Family ***See attached comments*** Mr. & Mrs. Mail Cordell C. Sunkel

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Bruce A. Haigh	Mail	***See attached comments***
Haigh Karen Messmer	E-mail	Docket Number: UE-210795 Following are my comments on the PSE Clean Energy Implementation Plan. Karen Messmer The PSE Plan needs to be changed to assure it will meet the requirements of the Climate Commitment Act. PSE should be held accountable for delivery of installed measures and should not be allowed to simply count the number of communications they have had with customers. The most egregious program that PSE should stop is the OPower shaming program that I have been subject to for many years now. I fail to see how the costs for this program are justified by energy savings, and it is harmful. The program uses comparisons with my 'neighbors' to attempt to change my energy use behavior. The problem is that I could have changed my behavior for any number of legitimate reasons. For example, if I purchased an electric car and saw an increase in my energy use, I would receive a negative notice from PSE showing me that I
		am using more energy than my neighbors. My emissions have gone down and I am using a more efficient form of energy for my transportation. Or, in my case, when I was caring for a family member in my home, using more energy for heating and other uses, PSE informed me that I was using more energy than my neighbors and recommended several savings measures. This shaming and negative competition does not influence me to use less energy. I have already implemented all of the measures that they recommend to me on their emails and paper mail communications. The UTC should not allow PSE to count their communications as actual efficiency measures. PSE could potentially use some other method to communicate with me about my energy use, but shaming me and my neighbors is simply wrong and harmful. This program should be stopped.
		What I am especially concerned about is the social aspects of this program, which pits neighbors against each other instead of supporting a positive community. I have provided a more detailed description of the problems with the OPower program below. DETAILED CONCERNS ABOUT PSE'S OPOWER PROGRAM Today I received yet another one of PSE's program communications mailings regarding my past two-month energy use. I have been receiving these notices for several years. I find this OPower program to be demeaning, invasive and wasteful. Apparently the intent of the program is to intimidate me about my energy use by comparing me to my neighbors. The outcome of this comparison is supposed to be a reduction in energy use. The program information is e-mailed and also paper-mailed to me separate from my bill every two months. I have to wonder how much PSE is spending on this program. The graphics and details show my energy use compared to my 'neighbors' who have similar homes. On some
		reports the communication informs me that I am a 'good' energy user. Apparently, some of my 'efficient neighbors' are 'great' so they get a bigger smiley face icon. If I used 'more than average' I would get a straightmouthed face icon. PSE has changed the specific on how they communicate my 'score' for the past time period.

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We should foster community cooperation, not competition

Here's the problem – in order for me to WIN – others must LOSE. Pitting me against my neighbors does not build socially resilient communities. There will always need to be a group of 'neighbors' who use the most energy, so that the 'best' performers who use less energy can be told to feel good about being better than their neighbors.

This type of social marketing is facilitating a wrong-headed community approach to energy efficiency. Our 'competition,' if there must be any at all, should be for a collectively improving renewable energy supply, efficient use of energy and reduction in use.

PSE is encouraging me to waste money

The material I receive also has very broad promotional information for energy-saving actions that I have already taken.

Our home was assessed several years ago by a PSE contractor and we added insulation to our attic.

Every socket in our home was retrofitted with CFLs years ago and is now almost completely retrofitted to LEDs. We replaced our refrigerator with an energy efficient one several years ago.

We use a programmable thermostat.

Our heating system ducts are in the heated space, so sealing them will not save energy for us.

Each of these types of actions are listed as 'quick fix' or 'smart purchase' or 'great investment' for me in the communication about my (bad) energy use. Doing any of them again would in fact be a waste of money for my household.

Negative marketing targeting certain populations

A different concern about this social marketing is the way this might be treating seniors or folks who use their home on a more full time basis than others. Consider the following home use profiles that may use more energy than their neighbors.

- Seniors who are less able to be out and are perhaps caring for an even less able family member.
- Families with workers on different shifts who use their home 24 hours a day for activities.
- Home-based workers.

It is possible that one household flew to Hawaii and drove their car several hundred miles during a two-month time period. Meanwhile, the stay-at-home senior drove their electric car to the grocery store. Which of these did more harm to the environment? Should we shame one of them with an intimidating message? Should we praise one for being 'better than their neighbors?'

Stop this wrong-headed mean spirited program please

I would be happy to have PSE stop these messages to my household, but I am more disturbed about the overall message and tone that they are creating. I want PSE to stop the entire program and stop fostering a competitive 'some must lose so that some can win' tone in our community.

Irion A. Sanger

See attached comments from NIPPC

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Kevin Jones et. al.		***See attached comment from VCAG and comment from Don Mash and Kevin Jones received 10-25-21***
James Adcock		***See attached comments for comments submitted on 1-23-22 and 1-11-23***
Don Marsh		***See attachments for comments received on 11-18-2021 and 2-2-2022 and comment received 10-25-2021 from Don Marsh and Kevin Jones***
Simon ffitch		***See attachments for comments and attachment A from The Energy Project***
Gloria Smith	Web	***See attachment for comments from Sierra Club***
Paul A Vlastelica	Web	filing ue-210795 not in favor of this clean energy plan. Going green is going to cost everyone more money. Take a look at California. Fossil fuels is the way to go. Green energy is a farse. A socialist scheme. It does not work and a waste of money
Peter H Werner	Web	The concern is PSE's indicated expectation to rely primarily on Wind-Turbines and Voltaic-Solar sources for their provision of Electrical Power to their consumers while simultaneously advancing the utilization of BEVs over HEVs. From a practical and engineering prospective - these are each, and particularly both, very wrong headed, and potentially dangerous. The conventional E-Grid requires large-numbers, of relatively large-scale, 4-pole AC Generators - rotating near-synchronous (1800 RPM) to sustain itself (ie 'Rotating Iron'). Wind-Turbines and Voltaic-Solar systems are simply intermittent diluted sources of Power - they are not direct sources of Energy. The expectation that large scale battery systems will suffice as E-Energy 'reservoirs' is as illogical as considering empty tanks as sources of fuel - ie. the battery systems need to be charged (filled) by the same e-power being generated by W & S, Do they really expect 'excess'? Relying on W & S to satisfy large-scale E-Power provision has proven unworkable around the world - look at Germany and France. There is so much wrong with the concept - and I dearly want to be a contributor to the 'conversation. I am a retired Electrical Engineer who spent most all of my professional life engaged in the conversion and control of electrical and mechanical power and energy - as well as the development of large-scale EVs. For my and my neighbors' sakes, please engage me. Thank You - Peter H Werner, PE
Phil Hutchinson	Web	https://www.seattletimes.com/seattle-news/environment/puget-sound-energy-rethinks-pilot-program-to-move-people-off-natural-gas/ At least part of the reason the governor in partnership with the UTC jacked up our PSE residential bills was to pay for this misguided program. So may I assume that this rate hike will be revisited and the increase will be reduced to account for the money you will no longer be needing? If not, I would specifically like to know where this money that is no longer needed will be going.

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Lar	rry Nelson	Web	Your mandate is to provide reliable and affordable energy. Your Green New deal Energy program is the opposite of what you need to do. Solar and wind power is a pipe dream and not to be taken seriously. It will lead to black outs and increased costs we can not afford. Your " equity " program is happy Bull ST. and needs to be canceled!
	verly holes	Web	UE-210795 Wants information published to the public about how many and what birds are being killed. Wants the windmills painted so birds don't fly into them.
Gar	ry Lindahl	Web	The CEIP appears to be overly reliant on intermittent, unreliable solar and wind. I think this will lead to a less reliable grid. The CEIP mentions the maximum power output expected from solar and wind, but not the fact that the maximum power is rarely achieved for more than an hour or two with these systems. It also mentions battery power, but not the energy capacity – very misleading. Biomass is also mentioned. If we are going to burn stuff for energy, why not build waste to energy facilities like Europe does. Burying garbage is just a cheap methane generator. The plan for more base load power is sorely lacking. I did not see anything on small modular reactors. What if we run out of water like Lake Mead? This whole plan is a plan for disaster. I would like a reply from an engineer.
	rbert thcote	Web	Amanda Maxwell Executive Director and Secretary Washington Utilities and Transportation Commission Dear Ms. Maxwell, I (Herb Hethcote) and my wife (Leslie Marshall) live on Bainbridge Island, WA. We are very concerned about Puget Sound Energy's 2021 Clean Energy Implementation Plan (Docket UE-210795). I am a Co-President of Climate Action Bainbridge, which has been encouraging our community in making the transition to clean energy. The City's Climate Change Advisory Committee on Bainbridge Island has created an ambitious Climate Action Plan which targets a reduction of greenhouse gas emissions by 25% by 2025 and by 90% (compared to 2014 levels) by 2045. Bainbridge Island is taking many local actions to reach its ambitious goals. However, the major source of our greenhouse gases is our electricity use. We are dependent on Puget Sound Energy for our electricity. Unfortunately, we have little control of the speed at which Puget Sound Energy acquires renewable energy and implements programs to reduce demand. We believe that PSE is dragging its feet in making the clean energy transition. We need real leadership from our utility that recognizes the urgency of the climate change threat. Docket UE-210795). I am a Co-President of Climate Action Bainbridge, which has been encouraging our community in making the transition to clean

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		energy. The City's Climate Change Advisory Committee on Bainbridge Island has created an ambitious Climate Action Plan which targets a reduction of greenhouse gas emissions by 25% by 2025 and by 90% (compared to 2014 levels) by 2045.
		Bainbridge Island is taking many local actions to reach its ambitious goals. However, the major source of our greenhouse gases is our electricity use. We are dependent on Puget Sound Energy for our electricity. Unfortunately, we have little control of the speed at which Puget Sound Energy acquires renewable energy and implements programs to reduce demand.
		I urge the Utilities and Transportation Commission to take several key steps to accelerate PSE's transition to clean energy.
		• Require PSE to incorporate into their CEIP data that recognize the effects of climate change. PSE's temperature projections do not currently recognize the significant shifts that have been occurring over the last 20 years. Yet climate change is the compelling reason we need to make the transition in our energy systems.
		• Require PSE to speed up its programs to reduced electricity demand, such as by broadly implementing Time Varying Rates and Demand Response.
		• Require PSE to speed up its acquisition of solar and wind resources and battery storage and facilitate its customers acquiring rooftop solar and batteries.
		By accelerating these programs, PSE can avoid building a very expensive gas-powered plant, as specified in their 2021 Integrated Resource Plan. In our efforts to get off of fossil fuels, the idea of building a gas-powered plant is ridiculous.
		With Washington's Clean Energy Transformation Act, the UTC must play a major role in regulating the factors that enable a rapid transition to clean energy in our state. We encourage you to provide real leadership in this new role
Judy Frei	Web	Taken verbatim by Melissa Castaneda-Kerson for the Consumer commenting about UE-210795. "I find this really disturbing and pushing it through at the state level, which is owned through China, this company represents a holding for the main owner of the company in China. I am not in favor of diminishing the options that are available for the people. We should not be dictated by a foreign company. They are not for our Country. This bill restricts the use of coal fire, diesel, gasoline oil, this will limit us. My recent high bills are becoming catastrophic. I am on a fixed income and the rest of the Country is hurting as well. The fans or windmills fail, and it isn't a good thing to rely on one thing. I saw that the wind turbines are killing the bird

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			population how is that environmentally friendly?"
	Donna	Web	We cannot count on solar or wind only. Cost to much. And it's not reliable. I don't what to be like what happen it Texas. THANK YOU. Donna
	John D Giuliano	Web	Docket UE-210795 should not be approved. All of 'green energy' options currently in consideration, excepting hydro, are full of hidden costs. The numbers given do not reflect these costs, which, of course are passed to the utilities' customer base. Please do not let P C proposals affect the living standards here in our state. Thank you, John
Undecided			
	Mark Resler	E-mail	*** See attachment***
	Pete H Werner	E-mail	Reference: Washington State UTC Docket UE-210795
			Consumer ID: Puget Sound Energy / Account No 220009142054
			Subject: UTC Clean Energy Implementation Plan Washington's Clean Energy Transformation Act
			A clean environment should be a goal for all involved in providing goods and services, particularly Electric Power Providers. However, satisfying those goals via approaches that the risk compromising the sustainability of those provisions is questionable. And that is what I fear is happening.
			First, there is a significant difference between Power and Energy – and much of UTC's 'conversation', relative to the two Subjects, conflates the two.
			Energy sources have mass, and can be stored and transported, to be utilized as demands develop. Examples include: biomass, fossil fuels, and hydro ponds. These forms of Energy are converted to steam (or in the case of hydro, water-flow) to Power turbine-driven electric generators, the flows to which are governed to satisfy demand. Conventionally, these are large-scale (quantity and capacity) AC machines, maintained at near-synchronous speed, to support the fixed 60 (50 in Europe) hertz AC grid.
			Wind Turbines and Solar-Voltaic arrays, although potential providers of usable Power, are not sources of Energy. As well, each of their availability and magnitude characteristics are both intermittent and diluted. Also, their respective electrical output forms are not directly compatible with the synchronous AC utility grid. Solar-Voltaic (SV) output is inherently DC. Wind Turbine unit-output, although 'generated' as AC, is converted to DC, then, as with SV, Pulse-Width-Modulated PWM) onto the synchronous utility grid. Also – PWM electric Power provision is progressively problematic relative to Electric-Power-Noise, which will require further

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		mitigation apparatus.
		Some advocate that storage-battery systems would resolve the non-energy aspects of Wind and Solar, indicated above. Although a charged battery does represent a form of stored electric energy, it still needs a source of power to effect the charged state. As such, batteries themselves are no more a source of Energy than empty tanks are a 'source' of fuel.
		As an electrical engineer well versed in the conversion and control of Energy and Power (mechanical and electrical), I am concerned as to the plans, for E-Power provision, being advertised by the UTC and PSE.
		Thank You for the Opportunity to Comment
		Peter H Werner (PE)
Dana Illo	E-mail	*** See Attachment ***
John Williams	E-mail	*** See Attachment ***
Dan Mathias	E-mail	*** See Attachments for 2-23-22 comment and 2-28-2022 supplement***
Hans Loechelt- Yoshioka	E-mail	Hi I would like to comment on the clean energy implementation plan UE-210795. Since I can't attend the public hearing on Jan. 24, I have some questions I would like the Commission to addres about their clean energy plan:
		 In winter when snow covers the solar panels, how will they produce energy? How do the solar panels produce energy at night?
		 3. Solar panels and wind farms generate heat, how will this impact global warming? 4. How much energy is required to produce a wind turbine? How many years does it take for a single wind turbine to generate enough power to equal the power in its manufacturing, basically to reach an energy zero starting point? Same goes for solar energy? 5. The blades on the wind turbine currently can't be recycled and get buried in land fills, this isn't very clean or green. How much energy is used by bulldozers and other heavy equipment to dispose of the used wind turbine 6. How much money and energy does it take to transport the wind turbine to its production field? 7. How many years does it take for a solar panel to recoup it's cost of production and disposal? 8. How many more birds, including eagles will die from the new wind farms? How can the death of all these birds be beneficial for the environment?

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		9. To combat global warming ships out at sea follow cloud whitening programs and over land jets spray on a daily basis chemtrails, which spread out and cover the sky to reduce the solar radiation hitting the earth. I have seen beautiful blue skies turned white in just hours from all the chemtrails released by military jets. All this global solar dimming can be viewed daily from weather satellites. So, how can solar panels even produce half of their solar energy with all this cloud whitening taking place?
		In the United States of America burning coal for energy is clean, compared to countries like China and India. Just look at Germany when they switched to solar and wind and cut their coal energy production, it was a disaster. It is a MAJOR mistake to cut fuel production from coal.
		Thank you for considering my questions.
		Hans Loechelt-Yoshioka
Ann Fletcher	Web	*** See Attachment ***
Satpal Sidhu, Whatcom County Executive	Web	*** See Attachment ***
Katie Ware	Web	*** See attachment for comment from Renewable Northwest***
Stewart Putnam	E-mail	*** See Attachment ***
Chris Marks	E-mail	*** See Attachment ***
Ray Thorne	E-mail	Hello,
		I would like to take a few moments to comment on the PSE clean energy implementation plan. I am concerned about removing coal fired plants entirely within two years. I think we need to transition out of coal fired plants over time, and either modify them, or replace them with natural gas fired plants. Natural gas would be cleaner than coal, and much more reliable than wind and solar.
		It would help provide stable, baseline power when wind turbines are not working, and reduce the risks of catastrophic grid failures such as happened down in Texas during the frigid winter event about two years ago. I would like to have more small scale nuclear power plants for energy generation as well.
		Have you and PSE considered consulting with the U.S. Navy regarding their ship and submarine based reactors, and implementing such technologies and small scale reactors into our future power generating capacity?

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Staff Lead: Jennifer Snyder Case: 210795 Title: PSE CEIP PI Coordinator: Andrew Roberts

> Exciting research at Lawrence Livermore Laboratory has made using nuclear fusion one step closer to reality. Long term, in the future, this could be fantastic. And very safe and clean.

I am not a fan of windmills. They are a blight on the landscape, and require large amounts of acreage and look hideous. I think they have a negative environmental impact, and are inefficient and wasteful. Very little generation for the amount of space taken up, and are often not close to transmission lines, for example.

Solar energy continues to improve, but is not as efficient as natural gas, nuclear, and hydroelectric power. Again, large tracts of land and acreage are required and the manufacturing of solar panels is environmentally toxic and damaging when you take into account all of the mining of rare earth and precious metals, the toxic chemical processes needed to manufacture them, and the inability to recycle the panels at the end of their useful life. These are huge negatives in the long run, and should be considered in any clean energy planning. As technology improves, hopefully solar panels will become smaller, and less toxic to produce and dispose of in the future.

A lot of dams are being removed to protect salmon. Rather than entirely breaching and removing dams, has there been any discussion of modifying them to be more fish friendly, and to retain hydroelectric power sources?

I am also concerned about the security of our nation's power grid. It is antiquated and needs to be modernized and hardened. It needs to be protected from such things as solar flares, electromagnetic attack, terrorist attacks, and sabotage. I think this should be as much if not more of a priority in the short to intermediate term as clean energy.

I am all for clean energy, and we are making great strides in that direction, but let's allow technologies to improve and mature in the coming years, rather than by setting arbitrary time tables and goals that may be getting ahead of ourselves, and leave us short of the reliable energy we need. Please focus on safety, reliable baseline power, and modernize and secure the grid and transmission infrastructure. We need to manufacture more of our own equipment, such as transformers in the United States, not in countries like China who are adversarial to us.

Thank you for your time and attention.

Ray Thorne

Patrick Read E-mail External Email

Just one comment - Since most of the energy generation would be from solar, wind and water - what do you do to supplement/backup during periods of heavy cloud cover, no wind and drought?

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			Patrick Read
	Gerald R. Wheeler	Web	Re:Docket UE-210795 I will accept going green as long as there is no rate increase because of it. I am concerned that there will be a lot of unemployed coal miners if the plan is approved. Gov. Inslee wants the world to go green, but it is not always the best solution.
	Mike Rosas	Web	RE: Docket UE-210795. I have read the plan, and while it appears to be well crafted, I find it to be somewhat beyond my paygrade for me to comment one way or the other. I however, was pleased to see it in place. My comment is not directed at the plan itself, but more toward what the future might bring. I cannot help but to see a lot of time and money being spent acquiring space for new landfills to accommodate wind turbines and solar panels, once nuclear fusion breakthrough occurs. The cart is before the horse currently and much more time is needed for all questions to be answered, rather than simply stamping a date on it to check the box. Thank you.
	David Plummer		***See attached comment***
	Brian Grunkemeyer		***See attached comments from FlexCharging***
	Jessica Yarnall Loarie		***See attachment for comments on behalf of Sierra Club***
	Staff comments	Web	***See attachment for comments from Staff***
	Deborah M Wright	Web	Clean energy is important to me. I am in favor of the many ways we can create clean energy with no waste products. I would like to see more incentives for individuals to install solar, wind, thermal power. If the energy company pays the individual producer - the rate could be lower than for outside providers. Individuals feel safer when they produce thier own or contribute to the production of their own electrical power
Yes			
	Jay Zischke	E-mail	Below is a comment stemming from PSE's email re the CEIP submittal. I have not read the document, however, I acknowledge my support for the summary of goals and objectives listed in the email. Moving from 35% to 63% "clean" energy by 2025 sounds impressive. Regardless of cost, we need to move as rapidly as possible. I would like to add an idea that possible both the UTC and PSE can help facilitate; The concept of providing
			significant incentives for both schools and Fire/Emergency response facilities to incorporate solar into their structures. A relatively new school was constructed here in North Kitsap County which also accommodates all the school buses for the north County districts. A significant acreage of open metal roofing was available for

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			possible solar installation - the school bus system particularly, (metro buses possibly) are ripe for evolving to electric. That technology is happening and a central bus barn hub provides a substantial storage potential for local communities during power outages as well as running the school at times. Ideally the majority of public buildings should be required to construct with solar in mind. The impediment at the moment is the substantial added cost - this is where utilities can help provide these incentives. Not all citizens are willing to pay more taxes for things like this, but possibly enough support the concept to create a program and plant a seed.
			Thanks for the opportunity
			Jay Zischke Indianola, Wa
	James T. Jones	E-mail	To Whom It May Concern:
			I applaud Puget Sound Energy's proposal in its Clean Energy Implementation Plan to place more emphasis on Distributed Energy Resources. I believe that decentralization of the power grid is in everyone's best interest in the long run. I hope the Washington Utilities and Transportation Commission will strongly support this aspect of the Plan in particular.
			Yours, James T. Jones
	Гоd Bookless	E-mail	***See Attachment***
	Debby Jackson	E-mail	***See Attachment***
I	Andrea Avni	E-mail	*** See Attachment ***
	Steven Bergman	E-mail	*** See Attachment ***
	Michael Laurie	E-mail	*** See Attachment ***
	Deborah Rudnick	E-mail	*** See Attachment ***
	Bruce Bowman	E-mail	*** See Attachment ***

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Fran K	orten Mail	*** See Attachment ***
Michae	el Cox E-mai	*** See Attachment ***
Anne Newco	Web	*** See Attachment ***
Joe De Mayor Bainbr Island		*** See Attachment ***
Dow Consta King C Execut	County	*** See Attachment ***
Mary l Pauly, Issaqua Mayor	ah	*** See Attachment ***
Marga McKib		I enthusiastically endorse all the goals outlined in the «Public Comment» flyer, and urge the WTC to approve PSE's Clean Energy Implementation Plan to achieve them Margaret McKibben
Pete Weym		Hello commissioners and thank you for holding this hearing, and for showing interest in the welfare of PSE customers. All governing bodies should be declaring a climate emergency. Some already have like the City of Tacoma and the Puyallup Tribe. The Intergovernmental Panel on Climate Change is the globally accepted authority on climate change, probably because their report gains the consensus of 97% of publishing climatologists. Recently the IPCC reported that climate change is now widespread, rapid, and intensifying. We've witnessed this in recent years. 2 weeks ago NOAA released a report showing that damage from climate change this last year totaled 165.1 billion dollars in the US alone. We're already seeing how increasing temps evaporate more moisture into atmospheric rivers and create higher pressure systems from our northern latitudes that are now slowing hurricanes, prolonging the disasters. Our forests are already overheating, and wood boring beetles are flourishing, and more fuel is being produced for forest fires, and there are greater risks of lightning strikes with the increased heat energy creating volatility in the atmosphere. Our once pristine waters are warming, creating habitats for parasites, and making it hard to breathe for our vulnerable and threatened salmonoids and their food sources. This should be a concern as Treaty rights

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are being enforced more rigorously and billions of state dollars are being spent to improve salmon waterways. Clean fresh water in general is becoming a valuable commodity in the PNW as drought conditions continue in Eastern Washington and Oregon, and water quality issues arise from a quickly increasing population and the sprawl and waste treatment that comes with it.

And I don't think it helps Washington to get voted the prettiest state!

In addition acidification of Puget Sound from greenhouse gases is impacting shellfish populations.

The IPCC's latest warning was that urgent and significant actions were required to reduce the carbon in our atmosphere before environments change so much that the native natural community cannot survive. They claim that the change could soon be irreversible in some communities, and for some it's inevitable given current conditions.

A large share of greenhouse gases come from our energy sector. Not only do the fossil fuels poison our land, water, and air they are overheating our planet quicker than even the IPCC predicted.

I've lived in the Puget Sound since 1970. I have 3 homes and Puget Sound Energy is our only possible utility. How can PSE best show the most socially responsible for their customers and their children's children? I appreciate PSE for committing to their target RE goal of 15% and then exceeding for the last two years! And I want to thank them for their commitment to implement significant wind power. After 10 years we're counting on them to live up to their word and make the rubber meet the road. But we need them to take advantage of all of the opportunities to meet the climate challenge, and to do right by their customers that are under their care only.

Some of us are doing our part. I have 58 solar panels on a home in Gig Harbor. I am in a contract to have panels and battery back-up installed on two more homes that I recently purchased in a low income Bremerton neighborhood. This is a community of honest hard workers who help each other out. Most of our homes are 80 – 100 year old, with inadequate insulation and outdated appliances. A neighbor and I have heat pumps but our electricity was still over \$250/month, before the 8.7% increase! How are any of them supposed to get ahead enough to buy energy and cost saving insulation and RE technology?! Some neighbors offset heat costs by burning wood, creating more dangerous particulates.

We are already experiencing historic self-inflicted damage to our environments, and we know that it will worsen without immediate and meaningful action. We are also witnessing the greatest opportunity in history to reduce our greenhouse gases. Recently passed where the Bipartisan Infrastructure Bill and the Inflation reduction act with funds to address this very emergency. The cost of RE technology has dropped significantly with increased innovation and scale. Solar panel costs have dropped 50% since we installed ours!

But the time is now!! The technology is here, the funding is here, PSE just needs to do the right thing and be responsible to the customers that rely on them. Sure, it may be easier and cheaper in the short run to claim delays in the RFP results as an excuse to adopt the minimum 2% RE to become compliant, exempting all of us from reaching our target goal.

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

Right now, the costs for solar is cheap and there are funds for residential and business solar, batteries and EVs.

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Roberta Carter	Web	In order to preserve and protect our environment now and in the future, Puget Sound Energy should be encouraged to change to clean energy as quickly as possible. Every change in that direction, no matter how small, helps to maintain and improve future generations' quality of life.
James Ross		***See attached comments from JSR Capital***
		An information campaign blitz can inspire PSE customers to engage and save with solar and other RE technologies knowing how affordable they are. There are easy ones like smart thermostats and DRs for water heaters. But we need everything on the table and can scale back later. Like for water heaters DRs for EV charging will further increase efficiency and decrease outage risks; community solar will help many in my neighborhood; and green hydrogen has great promise. Adopting these in the plan now, for adjustments later will be a win for everyone, and everything, including yours and PSE's reputation for making a significant dent in mitigating the climate crisis. And local businesses and economies will benefit from the increased RE installations. The motto of many who are promoting climate action is to think globally and act locally. Our planet's climate emergency cannot wait until 2025 while decision makers procrastinate for only short-term profits. This is the time for PSE to act responsibly, for their customers, for humanity, and for PSE's long-term and holistic bottom line. It is not the time to take the easy or cheap way out for the short term. Right now will be known as a defining moment for PSE. Will they step up to the challenge and show social responsibility for their loyal but captive customers? Please, let's together put PSE and their customers at the leading edge of innovation at the time it is needed most, and avoid a delay that will cost so many stakeholders on so many levels. Thank you for your time. Sincerely, Pete Weymiller Biologist, MS Environmental Policy

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