Mary Repar

08 August 2022

To: Goldendale Energy Storage Draft EIS
Sage Park, Washington Department of Ecology
Central Regional Office
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Subj: State Environmental Policy Act (SEPA) Draft Environmental Impact Statement (DEIS) for the Proposed Goldendale Storage Project (hereafter called the "Project")

Dear Department of Ecology,

I have great respect for the professional DoE staff that strives to keep the people of WA state safe and secure in their environment. For the most part, together we mostly succeed. That being said, after reading most of the document, especially the executive summary and cumulative impacts sections, I will say that this document is the most egregious SEPA that it has been my displeasure to read. The applicant, Free Flow Power Project 101 LLC (hereafter known as "FFPP)" has not done enough research, data gathering, analyses, and synthesis to make this proposed Project in any way, manner, or form feasible. The location of the project is itself extremely suspect. The data gaps are mind boggling and the citizens of Klickitat County should be up in arms about this proposal.

Just because a project styles itself as "green" or "renewable" does not make it so. We should be very careful as we work to address climate change and our energy needs, that we do not replace old, environmentally unsafe technologies with new, environmentally unsafe technologies.

First, do not harm should be the predicate for future energy replacement projects. The Precautionary Principle exists for a reason: it exists to protect us from our own worst human tendencies to miscalculate present and future harms, cumulative impacts and effects, and our own quality of Life in favor of quick, easy fixes, monetary recompense, and those things that will not inconvenience us or make us change our ways of doing things. Quick and easy means that most, if not all, of the time we end screwing our environment and, in the end, ourselves.

The lack of a full sweep of hydrologic data, seismic and seismic mapping data, deep coring throughout and outside the project area (since no project exists within its own boundaries!), test drilling (specifically to see if and where there is bedrock to anchor the project tunnels), stratigraphic data and analyses, etc.

Page ii is a show stopper and as far as I am concerned makes this entire project totally unfeasible and a danger to the Columbia River Gorge National Scenic Area, the Columbia River and its environs, and to the humans and wildlife that inhabits this area. "In some cases, implementation of mitigation measures would reduce but not completely eliminate the significant adverse impacts (my bold) and, in some cases, mitigation has not yet been identified. There are identified in the Draft EIS as significant and unavoidable adverse environmental impacts to Traditional Cultural Properties, archaeological sites, culturally important plants, and other Tribal resources (my bold)...However, to date, there is no information available about mitigation proposed by or supported by the Tribes that would reduce the level of impact to less than significant..."

When I read this I didn't know whether to laugh or cry. That paragraph on its own tells us why this project is totally unfeasible. Enough cultural and environmental damage has been done to the NSA (and other lands) through development and expansion in the last seven centuries. We should be doing better not worse in the 22nd century!

The old aluminum smelter, a cleanup site, has already made the project area dangerous, i.e., existing toxins, etc., and the environmental damage done by smelter operations is not totally known. Adding another environmentally dangerous project on top of an existing environmentally dangerous project is extremely dangerous, short-sighted, and illogical and unreasonable.

Page v, Potentially required permits, licenses, and approvals. There is NO POTENTIALLY REQUIRED. These would ALL be required before the first shovel hits any dirt. And, all these permits require data to be gathered, assessed, and cumulative impacts to be analyzed. Let's see—explosives, endangered species, historic preservation, clean air and water, possible killing of eagles, stormwater, earth movement, etc., and other impacts that are not well defined because data that would impact this environment has not even been gathered! This is not right. Data comes first, analysis second, and then maybe we can talk about proceeding to the next step.

Page S2. The CGA smelter that operated from 1969 to 2003 is on the WA DoE's Hazardous Sites List, added in 1990. Why it was not closed in 1990 is an open question since it's hazardous! According to the DEIS, investigation of contamination on the site and development of cleanup actions are proceeding through a separate process. No, this separate process is critical to the decision making process because the data gathered during this separate process is what will determine if the Project goes forward at all. If the investigation shows that the contamination is dangerous and ongoing then the Project is dead in the water and it should be stopped.

"Need" in this case is more a want and not all wants make sense. Definitely, this project on this contaminated site does not make sense because it includes extreme adverse effects to the environment and to all the inhabitants of the NSA.

State SEPA rules and regulations should be as strong or stronger than National Environmental Policy Act (NEPA). Why there are separate tracks for these two acts for this project is questionable.

page S4. Cumulative impacts to Tribal first foods and spirit foods, tribal lands, treaty resources, tribal cultural resources, to geology, air and water quality, fish, wildlife, cultural resources, transportation, tribal religious resources and the waters of the United States (which belong to all Americans), impacts to tribal cultural and other resources that won't be possible to mitigate, and

whether off site mitigation will be sufficient to replace lost or adversely impacted habitats, habitat and terrestrial species impacts, additional water demands on fish and other aquatic resources (and the waters that support them and the overall habitat conditions necessary for their health and well-being, impacts and reduced function of stormwater retention, impacts on hydrology/water flows, stream reach functions, and impacts on wetland habitats, etc. My head hurt when I read the list of impacts. Any one of these if adversely affected would bring into question the feasibility of the Project. All of them together make the Project unfeasible in its entirety.

Page S5, Shaft and tunnels. The elevation difference between 2950 feet at the upper reservoir and the lower reservoir elevation of 590 feet, is 2360 feet. It appears that the vertical shaft from the upper reservoir to the power and water conveyance tunnel is somewhere in the 2000 foot range. In reading the DEIS, and granted I had to do a swift read through because the comments are due August 9th, it appears that most of the geology cores were down to only 40 feet. Since the area is a unconsolidated alluvial fill, probably from the Missoula floods, I think that a more in-depth and full geological examination of all the faults and strata in the area must be done.

Page S6, water replacement. The 360 acre-feet if water each year to replace water lost through evaporation (and possibly leakage) is at best a guesstimate. Our summers are getting hotter and more humid and the water loss could be higher. Are the residents of Klickitat county and the rest of us in the NSA willing to lose more water out of the Columbia and other sources so a LLC can make money selling energy to California or Oregon or other states? I'm voting NO.

Pages S7, S8, S9, S10, and S-11, Summary of Impacts and Proposed Mitigation. The number of adverse and significant impacts on these pages is jaw dropping. These pages were very difficult to read because the summary descriptions are horrible and dangerous and should not be allowed, but it is the Impact Findings that are so egregious as to warrant lawsuits before the first shovel of dirt is dug. Seriously. The Summary of Proposed Mitigations make all the adverse and significant effects all better because, you know, we can mitigate anything because we really want to build this dangerous and environmentally unsound project, because, well, we can't think of better and safer and more environmentally sound projects and, heaven forbid, that we are inconvenienced in our daily lives by bothersome pesky environmental issues.

Mitigation is a myth with which we humans delude ourselves so we can do things that, although they would cause adverse and significant impacts and have severe effects on our environment, we still want to do them and will do anything to get them done. Mitigation is a myth. Off -site mitigation is a balm to our consciences (maybe!) and has, to my knowledge, never been shown to be scientifically equal to the no action alternative. Off-site mitigation should not exist as an alternative.

Cumulative impacts, direct and indirect, matter. If habitat functions and quality for some species would be affected during Project operation then we need to know what functions, quantify the quality, and specify species.

I'm not sure if we citizens are viewed as being stupid or that we don't know how to read and cogitate, but when I read the following item, it made me quite angry: "Plants, mammals, reptiles, and invertebrates could experience mortality and birds could experience disturbance during the 5-year construction period, but species viability would not be adversely affected." First, there has to be data collected over any period in order to assess whether species would or would not be adversely affected. Second, there is no data to back up the not adversely affected comment. And

third, birds and invertebrates and other species are part of our environment and what we do impacts them and their survival. We should not be killing other species because we want our lights to shine longer at night or because we want air conditioning in the Summer. Every living thing on this planet has a niche and no one niche is any more important than the other. Just because we humans don't understand all the processes of the Earth doesn't mean that we should disregard them or their effects and impacts.

All of the impacts and effects can be avoided if the NO ACTION alternative is chosen.

Page 1. This SEPA does not provide a comprehensive evaluation of significant adverse environment impacts since some of the most critical element of the Project has not yet been gathered; that is, data, and evaluated. Subsurface conditions, geological data (stratigraphy, composition, faults, cores, drilling, etc.), the groundwater divide between the northern and southern aquifers, mass wasting ("Mass wasting is the movement of rock and soil down slope under the influence of gravity. Rock falls, slumps, and debris flows are all examples of mass wasting. Often lubricated by rainfall or agitated by seismic activity, these events may occur very rapidly and move as a flow.") The fault map of this area needs much more data and study. There are also mines in the area.

Page 4. If DoE determined in June 2021 that the information submitted by the applicant for Clean Water Act Section 401 Water Quality Certification was "insufficient to determine if the activities and impacts associated with construction and operation of the project could be conducted in a manner that would not violate applicable water quality laws" then why is a SEPA being done at this time? If there is no data, there can be no evaluation. The information necessary to get a permit should be done early in the process not after a project has approval to proceed.

Also, Mt. Hood in Hood River, OR is seismically active. We have Mt. Adams west of the project area whose glaciers are melting at a very fast rate and water will be an issue sooner rather than later in the NSA.

Page 6. First, I don't freaking care about market conditions so the applicant can make more money using the resources of the NSA while significantly and adversely affecting those resources!! The environment comes first. If the project would significantly and adversely affect the environment then the project should not be approved. First, do no harm.

Water rights are a sensitive issue but will have to be addressed in this era of climate change. Water rights granted in the past may not be supported by the hard reality of climate change today and will probably have to be updated.

Page 7, Tunnels. The proposed tunnels are very problematic in unconsolidated alluvial fill sediments in this geologic landscape. The Missoula floods came through here and that geology is unstable.

The proposed transmission lines are also very problematic in the National Scenic Area and would affect the scenic part of the NSA Act. The Gorge Commission should certainly put in comments opposing any more transmission lines across the Columbia River which affect the scenic and aesthetic value of the Gorge.

This brings into the discussion the fact that in the race to change our energy production from one technology which uses coal and oil and into other technologies using natural gas and solar and wind, we are not being mindful of where we will go in the future. Natural gas, solar, and wind are not free of environmental effects and impacts. There is no free lunch in energy production. We should be looking to minimize future environmental effects and impacts and not produce more of them. People will be inconvenienced. There will be less energy. We humans will have to learn more about conservation of energy so that less energy has to be produced.

Building codes will have to change so that we need less air conditioning and heating. Not every street and highway and parking lot has to be lighted up like the Fourth of July in order to be safe and secure. There are actions that we can take to decrease energy use while we make the transition to less environmentally impactful technologies.

At some point, transmission lines may become a moot point as residential housing becomes independent of the the electrical grid. Energy producers need to change their business model so they can prosper in the future. Fuel cells, better storage batteries are are and improving. If they don't have customers, they will not survive as businesses.

Page 9. Any project that further impacts fish in our waters is a non-starter and requires the NO ACTION ALTERNATIVE. Mitigation is not an option.

Page 10, proposed project facilities. 2.3.1 states that "The final arrangement of proposed project features would be based on required studies of topography, geology, hydrology, seismic hazard consideration, and functional requirements." This made my head hurt. Seriously, These "required studies" should have already been done and should be part of this DEIS so that all the facts and data could be taken into consideration. The public, which owns the natural resources that the Applicant wants to use to make money, needs to know all the facts in order to make a reasoned decision.p\

7100 acre-feet is 309,915,000 cubic feet, which is the volume needed for the reservoir fill. This does not include the top off waters that would be needed over time as evaporation and leakage occur. This is a lot of water. Frankly, 2,318,325,194.81 gallons of water is a BILLION GALLONS too much. Water is a precious commodity. More precious than oil or gold. Water is Life and this proposed Project sucks up way too much Life.

P. 13, tunnels and powerhouse. Once again we see a term that implies that there will be more construction and activity once the project has initial approval. "The location, number of circuits, voltage, and configuration of the proposed project's interconnection with the regional electric utility network would be finalized by the Applicant during the final design stage in conjunction with the BPA planning group." Transmission lines are not aesthetic (this is the NSA, after all!), they take up a large part of the environment, and we should be questioning why we are putting in more transmission lines when we should be going for less transmission lines that affect our environment.

Page 15. What does 70,000 tons of concrete produced by the upper reservoir plant per year translate to in terms of CO2 emissions? Same for the 130,000 tons produced by the lower reservoir concrete batch plant.

Page 16. Can the waters provided by KPUD be used by the citizens of Klickitat county if their water issues become dire?? There are already water issues in Hood River, Mosier, White

Salmon-Bingen, Skamania County wells and streams, etc., and, as climate change persists there will be more water issues in the Gorge. Klickitat should think about the future water needs of its citizens.

Page 17, FERC hydropower license. I'm sorry, but for Klickitat PUD to be obligated for 50 years to this project is not reasonable. As climate change increases and water needs become more crucial to communities, there should, at the very minimum, be a contract clause that says communities come first if the water situation for the Gorge becomes a survival problem. Though KPUD would make money from any deal, we can't drink money or water our food plants with money. Water is Life.

Page 18. I was struck by the following statement: "Other renewable/decarbonized energy storage technologies were suggested in scoping comments, such as the following: Stacked blocks, liquid air, underground compressed air, flow batter storage, and solar and lithium-ion batter storage. None of these alternative energies meet the criteria to attain the proposal's objectives." So what if they don't meet the criteria to attain the proposal's objective? This just means that this entire proposal should get the NO ACTION alternative.

Page 20, ESA (FERC). "FERC, in consultation with US Fish and Wildlife Service (USFS) and National Oceanic and Atmospheric Administration Fisheries, would evaluate the effects on listed and proposed species and critical habitats and require compensatory mitigation for unavoidable impacts." There is NO COMPENSATORY mitigation for destroying fish habitat and the environment just because somebody wants to build a energy project!! If fish and the habitats would be affected by this Project then this project should get the NO ACTION alternative.

Any blasting with dynamite is not a good idea in this unconsolidated alluvial geology area! As WADOT and ODOT have found when blasting along our roadsides, one gets more than one expects when unforeseen consequences of blasting rocks and unconsolidated materials occur.

Page 21. Eagles should not be killed or their habitat affected just to make this project happen. That philosophy, that it's okay to kill a few species along the way to energy production is so 18th and 19th century thinking.

"Construction and operation of the proposed project would affect wetlands and streams, which are waters of the United States." There are many streams, wetlands, and groundwaters in this area and they would be adversely and significantly affected by the Project. A section 404 Clean Water Act Permit should NOT be granted for this project and the NO ACTION alternative should be chosen.

Page 22. "The proposed project would result in both the temporary and permanent placement of fill material into wetlands and streams (waters of the state) that may not be regulated as waters of the United States under Section 404 of the Clean Water Act." Not just NO, but HELL, NO!! Seriously. We need our wetlands and waters more than ever in the face of increasing climate change manifestations and this proposal would result in both temporary and permanent destruction of streams and wetlands?!?! The NO ACTION alternative should be chosen for this project.

Page 24. "Significant and unavoidable adverse impact" is totally avoidable under the NO ACTION ALTERNATIVE!

Page 26, Soils and Geology. The geology of this area is unconsolidated alluvial material with underground faults, surface waters, and ground water which makes this area susceptible to

landslides and earth movement (mass wasting). Blasting with dynamite and ground disturbance would increase the dangers of earth movement. The key findings of the geology and soils analysis says it all: removing vegetation would increase the potential for erosion; could moderately increase geologic and seismic hazards, including the potential for landslides; during project operations a local or regional earthquake could cause liquefaction in the victim of the lower reservoir due to the project being within the moderate shaking zone for the Cascade Zone earthquake." Why anyone would think that this Project was a good idea after reading this, is a mystery.

This next statement is mind boggling: "Mitigation is not required to reduce any significant impacts, but additional geotechnical studies, sediment and erosion control plans, implementation of BMPs, and design updates are proposed to reduce potential impacts." I'm almost speechless. This paragraph is so egregiously dangerous and unethical as to be almost incomprehensible to thinking and reasoning humans. Who would ever want to cause significant impacts to our environment on purpose just to build a money making project? THE NO ACTION ALTERNATIVE IS LOOKING BETTER AND BETTER.

Page 30. The geology of this area—unconsolidated sediments, volcanic rocks and deposits, landslide deposits, unconsolidated silt and find sand deposits, an alluvial fan deposit within the proposed footprint of the lower reservoir, basaltic talus, silt, sand, gravel—makes this area wholly unsuited for this proposed Project. Slope stability is questionable. Erosion and accretion are related to slope instability and mass movement—two things that would definitely significantly impact any operation. The known geology alone makes the NO ACTION alternative the only possible option.

Page 31, faulting. Thrust faults, strike-slip faults, and dip slip faults. Oh, my. If the "age of the folding and faulting in this region is not well understood" why are we doing a SEPA now instead of waiting until geotechnical data has been gathered why are even talking about this project?? Even IF, and that's a big if, these faults "are not considered to be capable of producing earthquakes", that does not mean that fault movement cannot happen. Faults don't necessarily produce earthquakes. The faulting in the project area alone should make this project a no go. The NO ACTION alternative should be chosen.

Page 37. Wind erosion in the Gorge is a real thing. "Due to the relative windy conditions of this region, there is likely a high potential for wind erosion in the study area. The soils types in the study area have a low to high range of wind erodibility factors. Soils with the highest wind erodibility factors are in the southern portion of the study area in the area of the proposed lower reservoir." The winds in the Gorge are getting more powerful and more frequent and will most likely increase in strength as climate change persists. Erosion, both wind and water, dangerous. The NO ACTION alternative is looking better and better.

Page 39 and 40, geologic and seismic hazards. Geologic hazards "are large-scale, complex natural events that occur on land and are capable of causing immense damage, loss of property, and sometime loss of life." Seismic hazards "are a specific type of geologic hazard that result from ground shaking caused by earthquakes." WDNR identified two situations when're landslides commonly occur in the general vicinity of the proposed project: weak sedimentary layers cause overlying basalt to slide along the weak, tilted sedimentary interbeds, and weathered, tilted, and clay-rich volcaniclastic rocks fail either on their own or beneath overlying younger lava flows, transporting both downslope. This geology needs to be investigated further and coring and drilling should be done. "Large areas of bedrock instability are present in association with areas of faulting,

...and sedimentary interbeds have caused extensive mass wasting and slope instability along sections of the Washington shore of the Columbia River...In addition to past landslides and areas of potential deep bed instability, others areas of instability in the study area include the extensive talus deposits that form an apron at the base of the basalt cliffs and the consolidated debris flow deposits in the area proposed for the lower reservoir."

"Earthquakes are associated with hazards of liquefaction and landslides." Six earthquakes were reported within 5 miles of the proposed project between 1969 and 2021. There are fault zones within 12 and 16 miles east of the project area. "The U.S. Geologic Survey Shakeup indicates that the proposed project would be within the zone of moderate shaking intensity from the Cascade Subduction Zone-generated earthquake."

Page 40. Liquefaction is a real threat in the project area. "The 2002 geotechnical investigation indicated that primary specific seismic risks in the lower portion of the proposed project area are associated with soil liquefaction and lateral spreading. Sediments present within the saturated zone beneath some portions of the study area exhibit conditions that are conducive to liquefaction during earthquakes. This liquefaction potential also may contribute to increased chance of lateral spreading of soils during a seismic event."

I'm going to say this again: the NO ACTION ALTERNATIVE is the only option for this proposed project.

I am stupefied that anyone in their right mind would think that using explosives, drilling tunnels, and removing vegetation that will cause erosion and mass wasting is a good idea in order to build a operation that is environmentally unstable and dangerous. Slope instability, increased water and wind erosion or accretion potential, and increased potential for landslides after construction disturbance are not minor issues.

Page 41. "Excavation of rock for the construction of underground project features would not affect the overall geology and have only negligible effects on geologic formations of the area." Of course the "overall" geology might not be affected but the localized geology and landscape would be significantly and adversely affected. On page S-5 the sketch shows that the vertical shaft from the upper reservoir (which is at 2950 feet of elevation) seems to be drilled down to below the 590 feet of elevation of the the lower reservoir, and the elevation of the powerhouse that is in the conveyance tunnel is at 115 feet of elevation. I must have missed the widths of the tunnels in the DEIS but am assuming that the widths have to be significant since there would have to a lot of supporting, stabilizing material around the tunnel walls so they do not collapse. This would entail a lot of stress on the unconsolidated alluvial geologic sedimentary layers in the project area.

To use the word "negligible" in this context is misleading, and, frankly, offensive to anyone who understands geology and geologic hazards.

Page 42. There is a lot of destruction of the habitat, vegetations, and soils by the proposed project.

"Based on the Applicant's Preliminary Supporting Design Report (HDR 2020a), construction of the proposed project could encounter multiple areas of instability in both the above and below ground portions of the study area. Most of those instances are associated with uncertain conditions in the underlying basalt formation layers, especially those locations where faults cross the study area in

locations where unconsolidated deposits occur...However, because of the uncertainty related to the geologic conditions, there would be some impacts on slope stability from construction. Additional geotechnical studies and design updates proposed by the Applicant could further reduce these impacts, which are not expected to be significant."

I'm not sure if the perpetrators of this DEIS think we are stupid or that we will not read the DEIS. "Additional geotechnical studies and design updates" will NOT reduce the impacts of construction and explosives and earth movement and tunneling!! The NO ACTION ALTERNATIVE, however, will most definitely reduce the impacts. Besides, all these geotechnical studies and designs should already be in the DEIS and NEPA documents so that a thorough evaluation can be done by the public and interested entities.

Any effects on SR 14 are unacceptable, specifically stormwater and sediments. SR 14 is the only highway through the area on the WA side of the Columbia River. We have all experienced the closures on this highway and I-8f4 on the OR side of the river. We are constrained by the available infrastructure. Public safety and welfare are considerations and should not be impacted by any project.

Page 43. "The proposed project is not expected to result in any significant adverse impacts on geology and soil resources within the study area. Many of the potential impacts have the potential to be reduced with the implementation of standard BMPs and design considerations proposed by the Applicant."

Unless the Applicant plans on rolling back the Missoula Floods and all the unconsolidated materials resulting from said flood and defaulting the area and draining all the streams and waters, there will be significant and adverse impacts and cumulative effects on the geology and soils and habitats and waters within the study area!!! Words matter and trying to downplay the reality of the significant and severe cumulative impacts o this project on the environment and all the environs in the proposed project area is very offensive and does not serve the public, nor the Applicant, well. The Applicant should know sooner, rather than later, that their Project is not going to happen so that they don't spend more money, time, and effort on a project that will not be built.

Page 42. Finally, "No mitigation measures would be required because there would be no significant adverse impacts. Specific permit conditions and mitigation actions would be confirmed by regulatory agencies during permitting for the proposed project."

Well, let us just shunt off the important stuff to the "regulatory agencies" why don't we. The WA State Environmental Policy Act should require complete and comprehensive data and analyses so that the environmental checklist will provide the best, most timely, complete and comprehensive data so that the citizens of WA state and relevant agencies can make informed decisions on how the natural resources of their state will be used, or not, if the NO ACTION alternative is chosen. In this case, the NO ACTION ALTERNATIVE is the only option. No data, no construction.

Page 48. Water is Life. For fish and humans. WRIA 30, Swale Creek Watershed: salmonid spewing, rearing, and migration, domestic and agricultural water supply, stock watering, wildlife habitat, harvesting, commerce and navigation, boating, and in NSA values, aesthetics. Why would we risk this watershed so the Applicant can do significant and adverse impacts to the environment to build a project that nobody needs in the Gorge?

Question: Where will the electricity produced by this proposed project be sold?

Page 51. The old aluminum CGA smelter clean up is still in play and nothing should be done until that site is totally cleaned up and rehabbed. We do not need to add more new environmental problems on top of old environmental problems.

Page 53, note 7. "Surface waters in the proposed aerial transmission line right-of-way were assessed using desktop methods and were not verified or delineated in the field." This is inadequate and does not give us the best available information upon which to make informed decisions.

Page 57. Transmission lines are environmentally significant and do cause adverse impacts. Until we see a BPA proposal of how they would add transmission lines to the existing overhead transmission line, they really don't know whether any wok on the ground or in the waters would be involved.

Protective buffers around our waters and wetlands are critically important and "Many of the surface waterbodies and wetlands present in the study area are considered critical areas under the Growth Management Act." (RCW 36.70) There is a significant footage of wetlands, 540,798 square feet, within the study area.

Page 58, groundwater. More information and data is needed on this topic before statements such as "groundwater conditions in the northern portion of the study area are separate and distinct from those of the southern portions" are made. "A conceptual model" is not real data obtained with drilling and coring and chemical analyses of the waters in the area.

Page 59. "Generally interpreted" is not a technical term when dealing with groundwater and its environs. "Inferred" is also not a technical term and has no data value.

"The sparse existing subsurface information in the area of the proposed upper reservoir indicates that no substantial groundwater is present to a depth of of 40 feet." Well, I'm not sure which dictionary is being used here, but to me sparse means very little information!!

Water can migrate up, down, sideways and in any directions it wants to!! So saying that something is "relatively impermeable" is not meaningful when talking about water migration.

Page 60, Wells. It is very important to know if the wells in the area would be affected by any activity done by the Applicant. Nobody wants wells to go dry or to be polluted by unknown toxins. "Groundwater at depths of less that 150 feet in the Swale Valley has been documented to contain concentrations of nitrates exceeding the state drinking water standard of 10 milligrams per liter. There is also a strong correlation of elevated nitrate concentrations with chloride concentrations that suggest an association to septic systems."

If explosives are used it is guaranteed that there will be earth movement and we don't know whether the groundwaters flows will also be affected. The NO ACTION ALTERNATIVE is looking better and better.

Further, "The unconsolidated deposits, consisting of naturally deposited sands, gravel, and silts and

manmade fill, appear to be 30 to 50 feet thick in the area surrounding the proposed lower reservoir location..." Sands, gravel and silts are not stable bedrock.

In conclusion, the Precautionary Principle: First, do no harm, definitely applies to this project. The SEPA makes very clear that this project, if allowed to proceed, would endanger the waters of both WA state and the United States, it would significantly and adversely impact the environment—the wildlife, the habitat, the waters, etc.—in the proposed site area. This project might work in a mine or a quarry but it is totally unfeasible in the proposed area. This is the National Scenic Area and aesthetics and natural resources are protected by the federal NSA Act. The fact that there would be severe and unique significant adverse impacts to Tribal cultural resources, Tribal communities, and tribal members, and their First Foods and Spirit Foods and way of Life is not acceptable.

The NO ACTION ALTERNATIVE IS THE ONLY OPTION for this proposal due to the excessive nature of the cumulative significant adverse impacts as delineated in this SEPA. No further data gathering will make this project acceptable in the face of the dangerous and significant impacts and effects on the environment that would occur if this project was allowed to proceed.

We humans should not be creating more environmental problems as we try to work our way through climate change and its many impacts and effects. We should strive to do better. We should also start thinking about conserving more energy so that we do not have to be creating more energy projects, especially projects that do not benefit us or our environment. Our convenience is not a reason to destroy our environment. This is our only home. There is no Planet B!

I recommend that the Department of Ecology issue the NO ACTION ALTERNATIVE option for this proposal.

Sincerely,

e-signature/Mary Repar

08 August 2022

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The lack of a full sweep of hydrologic data, seismic and seismic mapping data, deep coring throughout and outside the project area (since no project exists within its own boundaries!), test

drilling (specifically to see if and where there is bedrock to anchor the project tunnels), stratigraphic data and analyses, etc.

Page ii is a show stopper and as far as I am concerned makes this entire project totally unfeasible and a danger to the Columbia River Gorge National Scenic Area, the Columbia River and its environs, and to the humans and wildlife that inhabits this area. "In some cases, implementation of mitigation measures would reduce but not completely eliminate the s**ignificant adverse impacts (my bold)** and, in some cases, mitigation has not yet been identified. **There are identified in the Draft EIS as significant and unavoidable adverse environmental impacts to Traditional Cultural Properties, archaeological sites, culturally important plants, and other Tribal resources (my bold)**…However, to date, there is no information available about mitigation proposed by or supported by the Tribes that would reduce the level of impact to less than significant…"

When I read this I didn't know whether to laugh or cry. That paragraph on its own tells us why this project is totally unfeasible. Enough cultural and environmental damage has been done to the NSA (and other lands) through development and expansion in the last seven centuries. We should be doing better not worse in the 22nd century!

The old aluminum smelter, a cleanup site, has already made the project area dangerous, i.e., existing toxins, etc., and the environmental damage done by smelter operations is not totally known. Adding another environmentally dangerous project on top of an existing environmentally dangerous project is extremely dangerous, short-sighted, and illogical and unreasonable.

Page v, Potentially required permits, licenses, and approvals. There is NO POTENTIALLY REQUIRED. These would ALL be required before the first shovel hits any dirt. And, all these permits require data to be gathered, assessed, and cumulative impacts to be analyzed. Let's see—explosives, endangered species, historic preservation, clean air and water, possible killing of eagles, stormwater, earth movement, etc., and other impacts that are not well defined because data that would impact this environment has not even been gathered! This is not right. Data comes first, analysis second, and then maybe we can talk about proceeding to the next step.

Page S2. The CGA smelter that operated from 1969 to 2003 is on the WA DoE's Hazardous Sites List, added in 1990. Why it was not closed in 1990 is an open question since it's hazardous! According to the DEIS, investigation of contamination on the site and development of cleanup actions are proceeding through a separate process. No, this separate process is critical to the decision making process because the data gathered during this separate process is what will determine if the Project goes forward at all. If the investigation shows that the contamination is dangerous and ongoing then the Project is dead in the water and it should be stopped.

"Need" in this case is more a want and not all wants make sense. Definitely, this project on this contaminated site does not make sense because it includes extreme adverse effects to the environment and to all the inhabitants of the NSA.

State SEPA rules and regulations should be as strong or stronger than National Environmental Policy Act (NEPA). Why there are separate tracks for these two acts for this project is questionable.

page S4. Cumulative impacts to Tribal first foods and spirit foods, tribal lands, treaty resources, tribal cultural resources, to geology, air and water quality, fish, wildlife, cultural resources, transportation, tribal religious resources and the waters of the United States (which belong to all Americans), impacts to tribal cultural and other resources that won't be possible to mitigate, and whether off site mitigation will be sufficient to replace lost or adversely impacted habitats, habitat and terrestrial species impacts, additional water demands on fish and other aquatic resources (and the waters that support them and the overall habitat conditions necessary for their health and well-being, impacts and reduced function of stormwater retention, impacts on hydrology/water flows, stream reach functions, and impacts on wetland habitats, etc. **My head hurt when I read the list of impacts. Any one of these if adversely affected would bring into question the feasibility of the Project. All of them together make the Project unfeasible in its entirety.**

Page S5, Shaft and tunnels. The elevation difference between 2950 feet at the upper reservoir and the lower reservoir elevation of 590 feet, is 2360 feet. It appears that the vertical shaft from the upper reservoir to the power and water conveyance tunnel is somewhere in the 2000 foot range. In reading the DEIS, and granted I had to do a swift read through because the comments are due August 9th, it appears that most of the geology cores were down to only 40 feet. Since the area is a unconsolidated alluvial fill, probably from the Missoula floods, I think that a more in-depth and full geological examination of all the faults and strata in the area must be done.

Page S6, water replacement. The 360 acre-feet if water each year to replace water lost through evaporation (and possibly leakage) is at best a guesstimate. Our summers are getting hotter and more humid and the water loss could be higher. Are the residents of Klickitat county and the rest of us in the NSA willing to lose more water out of the Columbia and other sources so a LLC can make money selling energy to California or Oregon or other states? I'm voting NO.

Pages S7, S8, S9, S10, and S-11, Summary of Impacts and Proposed Mitigation. The number of adverse and significant impacts on these pages is jaw dropping. These pages were very difficult to read because the summary descriptions are horrible and dangerous and should not be allowed, but it is the Impact Findings that are so egregious as to warrant lawsuits before the first shovel of dirt is dug. Seriously. The Summary of Proposed Mitigations make all the adverse and significant effects all better because, you know, we can mitigate anything because we really want to build this dangerous and environmentally unsound project, because, well, we can't think of better and safer and more environmentally sound projects and, heaven forbid, that we are inconvenienced in our daily lives by bothersome pesky environmental issues.

Mitigation is a myth with which we humans delude ourselves so we can do things that, although they would cause adverse and significant impacts and have severe effects on our environment, we still want to do them and will do anything to get them done. Mitigation is a myth. Off -site mitigation is a balm to our consciences (maybe!) and has, to my knowledge, never been shown to

be scientifically equal to the no action alternative. Off-site mitigation should not exist as an alternative.

Cumulative impacts, direct and indirect, matter. If habitat functions and quality for some species would be affected during Project operation then we need to know what functions, quantify the quality, and specify species.

I'm not sure if we citizens are viewed as being stupid or that we don't know how to read and cogitate, but when I read the following item, it made me quite angry: "Plants, mammals, reptiles, and invertebrates could experience mortality and birds could experience disturbance during the 5-year construction period, but species viability would not be adversely affected." First, there has to be data collected over any period in order to assess whether species would or would not be adversely affected. Second, there is no data to back up the not adversely affected comment. And third, birds and invertebrates and other species are part of our environment and what we do impacts them and their survival. We should not be killing other species because we want our lights to shine longer at night or because we want air conditioning in the Summer. Every living thing on this planet has a niche and no one niche is any more important than the other. Just because we humans don't understand all the processes of the Earth doesn't mean that we should disregard them or their effects and impacts.

All of the impacts and effects can be avoided if the NO ACTION alternative is chosen.

Page 1. This SEPA does not provide a comprehensive evaluation of significant adverse environment impacts since some of the most critical element of the Project has not yet been gathered; that is, data, and evaluated. Subsurface conditions, geological data (stratigraphy, composition, faults, cores, drilling, etc.), the groundwater divide between the northern and southern aquifers, mass wasting ("**Mass wasting is the movement of rock and soil down slope under the influence of gravity. Rock falls, slumps, and debris flows are all examples of mass wasting. Often lubricated by rainfall or agitated by seismic activity, these events may occur very rapidly and move as a flow.")** The fault map of this area needs much more data and study. There are also mines in the area.

Page 4. If DoE determined in June 2021 that the information submitted by the applicant for Clean Water Act Section 401 Water Quality Certification was "insufficient to determine if the activities and impacts associated with construction and operation of the project could be conducted in a manner that would not violate applicable water quality laws" then why is a SEPA being done at this time? If there is no data, there can be no evaluation. The information necessary to get a permit should be done early in the process not after a project has approval to proceed.

Also, Mt. Hood in Hood River, OR is seismically active. We have Mt. Adams west of the project area whose glaciers are melting at a very fast rate and water will be an issue sooner rather than later in the NSA.

Page 6. First, I don't freaking care about market conditions so the applicant can make more money using the resources of the NSA while significantly and adversely affecting those

resources!! The environment comes first. If the project would significantly and adversely affect the environment then the project should not be approved. First, do no harm.

Water rights are a sensitive issue but will have to be addressed in this era of climate change. Water rights granted in the past may not be supported by the hard reality of climate change today and will probably have to be updated.

Page 7, Tunnels. The proposed tunnels are very problematic in unconsolidated alluvial fill sediments in this geologic landscape. The Missoula floods came through here and that geology is unstable.

The proposed transmission lines are also very problematic in the National Scenic Area and would affect the scenic part of the NSA Act. The Gorge Commission should certainly put in comments opposing any more transmission lines across the Columbia River which affect the scenic and aesthetic value of the Gorge.

This brings into the discussion the fact that in the race to change our energy production from one technology which uses coal and oil and into other technologies using natural gas and solar and wind, we are not being mindful of where we will go in the future. Natural gas, solar, and wind are not free of environmental effects and impacts. There is no free lunch in energy production. We should be looking to minimize future environmental effects and impacts and not produce more of them. People will be inconvenienced. There will be less energy. We humans will have to learn more about conservation of energy so that less energy has to be produced.

Building codes will have to change so that we need less air conditioning and heating. Not every street and highway and parking lot has to be lighted up like the Fourth of July in order to be safe and secure. There are actions that we can take to decrease energy use while we make the transition to less environmentally impactful technologies.

At some point, transmission lines may become a moot point as residential housing becomes independent of the the electrical grid. Energy producers need to change their business model so they can prosper in the future. Fuel cells, better storage batteries are are and improving. If they don't have customers, they will not survive as businesses.

Page 9. Any project that further impacts fish in our waters is a non-starter and requires the NO ACTION ALTERNATIVE. Mitigation is not an option.

Page 10, proposed project facilities. 2.3.1 states that "The final arrangement of proposed project features would be based on required studies of topography, geology, hydrology, seismic hazard consideration, and functional requirements." This made my head hurt. Seriously, These "required studies" should have already been done and should be part of this DEIS so that all the facts and data could be taken into consideration. The public, which owns the natural resources that the Applicant wants to use to make money, needs to know all the facts in order to make a reasoned decision.p\

7**100 acre-feet is 309,915,000 cubic feet, which is the volume needed for the reservoir fill. This does not include the top off waters that would be needed over time as evaporation and leakage occur. This is a lot of water. Frankly, 2,318,325,194.81 gallons of water is a BILLION GALLONS too much.** Water is a precious commodity. More precious than oil or gold. Water is Life and this proposed Project sucks up way too much Life.

P. 13, tunnels and powerhouse. Once again we see a term that implies that there will be more construction and activity once the project has initial approval. "The location, number of circuits, voltage, and configuration of the proposed project's interconnection with the regional electric utility network would be finalized by the Applicant during the final design stage in conjunction with the BPA planning group." Transmission lines are not aesthetic (this is the NSA, after all!), they take up a large part of the environment, and we should be questioning why we are putting in more transmission lines when we should be going for less transmission lines that affect our environment.

Page 15. What does 70,000 tons of concrete produced by the upper reservoir plant per year translate to in terms of CO2 emissions? Same for the 130,000 tons produced by the lower reservoir concrete batch plant.

Page 16. Can the waters provided by KPUD be used by the citizens of Klickitat county if their water issues become dire?? There are already water issues in Hood River, Mosier, White Salmon-Bingen, Skamania County wells and streams, etc., and, as climate change persists there will be more water issues in the Gorge. Klickitat should think about the future water needs of its citizens.

Page 17, FERC hydropower license. I'm sorry, but for Klickitat PUD to be obligated for 50 years to this project is not reasonable. As climate change increases and water needs become more crucial to communities, there should, at the very minimum, be a contract clause that says communities come first if the water situation for the Gorge becomes a survival problem. Though KPUD would make money from any deal, we can't drink money or water our food plants with money. Water is Life.

Page 18. I was struck by the following statement: "Other renewable/decarbonized energy storage technologies were suggested in scoping comments, such as the following: Stacked blocks, liquid air, underground compressed air, flow batter storage, and solar and lithium-ion batter storage. None of these alternative energies meet the criteria to attain the proposal's objectives." So what if they don't meet the criteria to attain the proposal's objective? **This just means that this entire proposal should get the NO ACTION alternative.**

Page 20, ESA (FERC). "FERC, in consultation with US Fish and Wildlife Service (USFS) and National Oceanic and Atmospheric Administration Fisheries, would evaluate the effects on listed and proposed species and critical habitats and require compensatory mitigation for unavoidable impacts." **There is NO COMPENSATORY mitigation for destroying fish habitat and the environment just because somebody wants to build a energy project!! If fish and the habitats would be affected by this Project then this project should get the NO ACTION alternative.**

Any blasting with dynamite is not a good idea in this unconsolidated alluvial geology area! As WADOT and ODOT have found when blasting along our roadsides, one gets more than one expects when unforeseen consequences of blasting rocks and unconsolidated materials occur.

Page 21. Eagles should not be killed or their habitat affected just to make this project happen. That philosophy, that it's okay to kill a few species along the way to energy production is so 18th and 19th century thinking.

"Construction and operation of the proposed project would affect wetlands and streams, which are waters of the United States." There are many streams, wetlands, and groundwaters in this area and they would be adversely and significantly affected by the Project. A section 404 Clean Water Act Permit should NOT be granted for this project and the **NO ACTION alternative should be chosen.**

Page 22. "The proposed project would result in both the temporary and permanent placement of fill material into wetlands and streams (waters of the state) that may not be regulated as waters of the United States under Section 404 of the Clean Water Act." Not just NO, but HELL, NO!! Seriously. We need our wetlands and waters more than ever in the face of increasing climate change manifestations and this proposal would result in both temporary and permanent destruction of streams and wetlands?!?! **The NO ACTION alternative should be chosen for this project.**

Page 24. "Significant and unavoidable adverse impact" is totally avoidable under the **NO ACTION ALTERNATIVE!**

Page 26, Soils and Geology. The geology of this area is unconsolidated alluvial material with underground faults, surface waters, and ground water which makes this area susceptible to landslides and earth movement (mass wasting). Blasting with dynamite and ground disturbance would increase the dangers of earth movement. The key findings of the geology and soils analysis says it all: removing vegetation would increase the potential for erosion; could moderately increase geologic and seismic hazards, including the potential for landslides; during project operations a local or regional earthquake could cause liquefaction in the victim of the lower reservoir due to the project being within the moderate shaking zone for the Cascade Zone earthquake." Why anyone would think that this Project was a good idea after reading this, is a mystery.

This next statement is mind boggling: "Mitigation is not required to reduce any significant impacts, but additional geotechnical studies, sediment and erosion control plans, implementation of BMPs, and design updates are proposed to reduce potential impacts." I'm almost speechless. This paragraph is so egregiously dangerous and unethical as to be almost incomprehensible to thinking and reasoning humans. Who would ever want to cause significant impacts to our environment on purpose just to build a money making project? **THE NO ACTION ALTERNATIVE IS LOOKING BETTER AND BETTER.**

Page 30. The geology of this area—unconsolidated sediments, volcanic rocks and deposits, landslide deposits, unconsolidated silt and find sand deposits, an alluvial fan deposit within the proposed footprint of the lower reservoir, basaltic talus, silt, sand, gravel—makes this area wholly unsuited for this proposed Project. Slope stability is questionable. Erosion and accretion are related to slope instability and mass movement—two things that would definitely significantly impact any operation. **The known geology alone makes the NO ACTION alternative the only possible option.**

Page 31, faulting. Thrust faults, strike-slip faults, and dip slip faults. Oh, my. If the "age of the folding and faulting in this region is not well understood" why are we doing a SEPA now instead of waiting until geotechnical data has been gathered why are even talking about this project?? Even IF, and that's a big if, these faults "are not considered to be capable of producing earthquakes", that does not mean that fault movement cannot happen. Faults don't necessarily produce earthquakes. The faulting in the project area alone should make this project a no go. The **NO ACTION alternative should be chosen.**

Page 37. Wind erosion in the Gorge is a real thing. "Due to the relative windy conditions of this region, there is likely a **high potential for wind erosion in the study area. The soils types in the study area have a low to high range of wind erodibility factors. Soils with the highest wind erodibility factors are in the southern portion of the study area in the area of the proposed lower reservoir."** The winds in the Gorge are getting more powerful and more frequent and will most likely increase in strength as climate change persists. Erosion, both wind and water, dangerous. The **NO ACTION alternative is looking better and better.**

Page 39 and 40, geologic and seismic hazards. Geologic hazards "are large-scale, complex natural events that occur on land and are capable of causing immense damage, loss of property, and sometime loss of life." Seismic hazards "are a specific type of geologic hazard that result from ground shaking caused by earthquakes." WDNR identified two situations when're landslides commonly occur in the general vicinity of the proposed project: weak sedimentary layers cause overlying basalt to slide along the weak, tilted sedimentary interbeds, and weathered, tilted, and clay-rich volcaniclastic rocks fail either on their own or beneath overlying younger lava flows, transporting both downslope. This geology needs to be investigated further and coring and drilling should be done. "Large areas of bedrock instability are present in association with areas of faulting, …and sedimentary interbeds have caused extensive mass wasting and slope instability along sections of the Washington shore of the Columbia River…In addition to past landslides and areas of potential deep bed instability, others areas of instability in the study area include the extensive talus deposits that form an apron at the base of the basalt cliffs and the consolidated debris flow deposits in the area proposed for the lower reservoir."

"Earthquakes are associated with hazards of liquefaction and landslides." Six earthquakes were reported within 5 miles of the proposed project between 1969 and 2021. There are fault zones within 12 and 16 miles east of the project area. **"The U.S. Geologic Survey Shakeup indicates that the proposed project would be within the zone of moderate shaking intensity from the Cascade Subduction Zone-generated earthquake."**

Page 40. Liquefaction is a real threat in the project area. **"The 2002 geotechnical investigation indicated that primary specific seismic risks in the lower portion of the proposed project area are associated with soil liquefaction and lateral spreading. Sediments present within the saturated zone beneath some portions of the study area exhibit conditions that are conducive to liquefaction during earthquakes. This liquefaction potential also may contribute to increased chance of lateral spreading of soils during a seismic event."**

I'm going to say this again: **the NO ACTION ALTERNATIVE is the only option for this proposed project.**

I am stupefied that anyone in their right mind would think that using explosives, drilling tunnels, and removing vegetation that will cause erosion and mass wasting is a good idea in order to build a operation that is environmentally unstable and dangerous. Slope instability, increased water and wind erosion or accretion potential, and increased potential for landslides after construction disturbance are not minor issues.

Page 41. "Excavation of rock for the construction of underground project features would not affect the overall geology and have only negligible effects on geologic formations of the area." **Of course the "overall" geology might not be affected but the localized geology and landscape would be significantly and adversely affected.** On page S-5 the sketch shows that the vertical shaft from the upper reservoir (which is at 2950 feet of elevation) seems to be drilled down to below the 590 feet of elevation of the the lower reservoir, and the elevation of the powerhouse that is in the conveyance tunnel is at 115 feet of elevation. I must have missed the widths of the tunnels in the DEIS but am assuming that the widths have to be significant since there would have to a lot of supporting, stabilizing material around the tunnel walls so they do not collapse. This would entail a lot of stress on the unconsolidated alluvial geologic sedimentary layers in the project area.

To use the word "negligible" in this context is misleading, and, frankly, offensive to anyone who understands geology and geologic hazards.

Page 42. There is a lot of destruction of the habitat, vegetations, and soils by the proposed project.

"Based on the Applicant's Preliminary Supporting Design Report (HDR 2020a), construction of the proposed project could encounter multiple areas of instability in both the above and below ground portions of the study area. Most of those instances are associated with uncertain conditions in the underlying basalt formation layers, especially those locations where faults cross the study area in locations where unconsolidated deposits occur…However, because of the uncertainty related to the geologic conditions, there would be some impacts on slope stability from construction. Additional geotechnical studies and design updates proposed by the Applicant could further reduce these impacts, which are not expected to be significant."

I'm not sure if the perpetrators of this DEIS think we are stupid or that we will not read the DEIS. "Additional geotechnical studies and design updates" **will NOT reduce the impacts of construction and explosives and earth movement and tunneling!! The NO ACTION**

ALTERNATIVE, however, will most definitely reduce the impacts. Besides, all these geotechnical studies and designs should already be in the DEIS and NEPA documents so that a thorough evaluation can be done by the public and interested entities.

Any effects on SR 14 are unacceptable, specifically stormwater and sediments. SR 14 is the only highway through the area on the WA side of the Columbia River. We have all experienced the closures on this highway and I-8f4 on the OR side of the river. We are constrained by the available infrastructure. Public safety and welfare are considerations and should not be impacted by any project.

Page 43. "The proposed project is not expected to result in any significant adverse impacts on geology and soil resources within the study area. Many of the potential impacts have the potential to be reduced with the implementation of standard BMPs and design considerations proposed by the Applicant."

Unless the Applicant plans on rolling back the Missoula Floods and all the unconsolidated materials resulting from said flood and defaulting the area and draining all the streams and waters, there will be significant and adverse impacts and cumulative effects on the geology and soils and habitats and waters within the study area!!! Words matter and trying to downplay the reality of the significant and severe cumulative impacts o this project on the environment and all the environs in the proposed project area is very offensive and does not serve the public, nor the Applicant, well. The Applicant should know sooner, rather than later, that their Project is not going to happen so that they don't spend more money, time, and effort on a project that will not be built.

Page 42. Finally, "No mitigation measures would be required because there would be no significant adverse impacts. Specific permit conditions and mitigation actions would be confirmed by regulatory agencies during permitting for the proposed project."

Well, let us just shunt off the important stuff to the "regulatory agencies" why don't we. The WA State Environmental Policy Act should require complete and comprehensive data and analyses so that the environmental checklist will provide the best, most timely, complete and comprehensive data so that the citizens of WA state and relevant agencies can make informed decisions on how the natural resources of their state will be used, or not, if the NO ACTION alternative is chosen. In this case, the **NO ACTION ALTERNATIVE is the only option.** No data, no construction.

Page 48. Water is Life. For fish and humans. WRIA 30, Swale Creek Watershed: salmonid spewing, rearing, and migration, domestic and agricultural water supply, stock watering, wildlife habitat, harvesting, commerce and navigation, boating, and in NSA values, aesthetics. Why would we risk this watershed so the Applicant can do significant and adverse impacts to the environment to build a project that nobody needs in the Gorge?

Question: Where will the electricity produced by this proposed project be sold?

Page 51. The old aluminum CGA smelter clean up is still in play and nothing should be done until that site is totally cleaned up and rehabbed. We do not need to add more new environmental problems on top of old environmental problems.

Page 53, note 7. "Surface waters in the proposed aerial transmission line right-of-way were assessed using desktop methods and were not verified or delineated in the field." This is inadequate and does not give us the best available information upon which to make informed decisions.

Page 57. **Transmission lines are environmentally significant and do cause adverse impacts. Until we see a BPA proposal of how they would add transmission lines to the existing overhead transmission line, they really don't know whether any wok on the ground or in the waters would be involved.**

Protective buffers around our waters and wetlands are critically important and "Many of the surface waterbodies and wetlands present in the study area are considered critical areas under the Growth Management Act." (RCW 36.70) There is a significant footage of wetlands, 540,798 square feet, within the study area.

Page 58, groundwater. More information and data is needed on this topic before statements such as "groundwater conditions in the northern portion of the study area are separate and distinct from those of the southern portions" are made. "A conceptual model" is not real data obtained with drilling and coring and chemical analyses of the waters in the area.

Page 59. "Generally interpreted" is not a technical term when dealing with groundwater and its environs. "Inferred" is also not a technical term and has no data value.

"The sparse existing subsurface information in the area of the proposed upper reservoir indicates that no substantial groundwater is present to a depth of of 40 feet." Well, I'm not sure which dictionary is being used here, but to me sparse means very little information!!

Water can migrate up, down, sideways and in any directions it wants to!! So saying that something is "relatively impermeable" is not meaningful when talking about water migration.

Page 60, Wells. It is very important to know if the wells in the area would be affected by any activity done by the Applicant. Nobody wants wells to go dry or to be polluted by unknown toxins. "Groundwater at depths of less that 150 feet in the Swale Valley has been documented to contain concentrations of nitrates exceeding the state drinking water standard of 10 milligrams per liter. There is also a strong correlation of elevated nitrate concentrations with chloride concentrations that suggest an association to septic systems."

If explosives are used it is guaranteed that there will be earth movement and we don't know whether the groundwaters flows will also be affected. The **NO ACTION ALTERNATIVE is looking better and better.**

Further, “The unconsolidated deposits, consisting of naturally deposited sands, gravel, and silts and manmade fill, appear to be 30 to 50 feet thick in the area surrounding the proposed lower reservoir location…” Sands, gravel and silts are not stable bedrock.

In conclusion, the Precautionary Principle: First, do no harm, definitely applies to this project. The SEPA makes very clear that this project, if allowed to proceed, would endanger the waters of both WA state and the United States, it would significantly and adversely impact the environment—the wildlife, the habitat, the waters, etc.—in the proposed site area. This project might work in a mine or a quarry but it is totally unfeasible in the proposed area. This is the National Scenic Area and aesthetics and natural resources are protected by the federal NSA Act. **The fact that there would be severe and unique significant adverse impacts to Tribal cultural resources, Tribal communities, and tribal members, and their First Foods and Spirit Foods and way of Life is not acceptable.**

The **NO ACTION ALTERNATIVE IS THE ONLY OPTION for this proposal due to the excessive nature of the cumulative significant adverse impacts as delineated in this SEPA. No further data gathering will make this project acceptable in the face of the dangerous and significant impacts and effects on the environment that would occur if this project was allowed to proceed.**

We humans should not be creating more environmental problems as we try to work our way through climate change and its many impacts and effects. We should strive to do better. We should also start thinking about conserving more energy so that we do not have to be creating more energy projects, especially projects that do not benefit us or our environment. Our convenience is not a reason to destroy our environment. This is our only home. There is no Planet B!

I recommend that the Department of Ecology issue the **NO ACTION ALTERNATIVE** option for this proposal.

Sincerely,

e-signature/Mary Repar