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Testimony opposing Senate Bill 216

Chair Sollman and members of the Senate Committee on Energy and Environment:

As I have noted previously, Southern Oregon Climate Action Now is a grassroots climate organization of some 2,000 Southern Oregonians. We are concerned about the climate crisis and seek federal, state and local action to address it. We are rural and coastal Southern Oregonians who live on the frontlines of the warming, reducing snowpack, heatwaves, drought, rising sea level and the increasing wildfire risk that these trends conspire to impose on us. Because of our concern, we pay close attention to efforts nationally, statewide, and locally that impact our collective efforts to address the climate crisis. As our logo above indicates, the focus of SOCAN is to empower action through science.

I'd like to note again, as I did in my SB215 comments, that the entire effort represented by the stunning array of pro-nuclear bills this session, including those promoting small modular nuclear reactors, is derived from the plans outlined in substantial detail in the Heritage Foundation's Project 2025 (Dans and Groves 2023). It seems clear that this array of bills represents a concerted effort to bring Project 2025 to Oregon.

The second point I offer is that this array of pro-nuclear bills, now numbering a dozen or so, provides a clear vision of what the proponents of nuclear generation seek to achieve: reversal of the ballot measure passed in 1980 (Oregon 1980) that precludes nuclear power plant construction in Oregon and promotion of Small Scale Modular Nuclear Reactors (SMRs), at least in Data Centers. While SB215 acknowledges the 1980 ballot measure success by including "...providing that this Act shall be referred to the people for their approval or rejection." (OLIS 2025a), SB216 addressing does not include that recognition. Taken as a whole, it is clear that proponents are not particularly committed to the democratic approach of referring the issue to the electorate but are simply throwing out a diversity of bills to achieve their goals that offer slightly different tactics simply to find out if any will achieve legislative approval and thus move them towards their Project 2025 goal. SB216 rejects the democratic principle that reversing a ballot measure decision, however old, should be referred to the people of Oregon.

In terms of the general question of what has stimulated the proponents of nuclear power to reemerge with this effort, I refer you to Journet (2023), which offers an analysis of the nuclear conundrum developed as Southern Oregon Climate Action Now established its position statement opposing nuclear power. This pdf has been submitted as testimony on this and other pro-nuclear bills to make it readily available to those seeking to learn more.

It has been known for a decade at least (Mulvey & Shulman 2015) that for several decades fossil fuel corporations and their apologists have waged campaigns of misinformation and disinformation designed to promote their product and deny its role in causing global warming. Meanwhile, natural gas companies have continued to claim their product is an improvement over coal and oil even though for many years we, and they, have known that complete lifecycle analysis including extraction, processing and transmission when fugitive emissions of methane occur, result in gas potentially releasing 33% more greenhouse gases than a similar lifecycle assessment of coal emissions (Kraska 2024). And now we have an ongoing campaign of disinformation, otherwise known as lies, from the Nuclear Energy Institute (NEI undated) where the claim is: "Nuclear is carbon-free. It is the largest source of carbon-free electricity in the United States and protects our air quality by generating electricity without other harmful pollutants like nitrogen oxide, sulfur dioxide, particulate matter or mercury." Regrettably for the nuclear industry, this is just another lie. Again, when we undertake a full lifecycle assessment of greenhouse gas emissions from nuclear energy, incorporating power plant construction, decommissioning and demolition and the extraction, processing and transport of the nuclear fuel, we find greenhouse gas emissions make it certainly no better than solar or wind (Jacobson 2024). Indeed, Jacobson (2024) also pointed out that the length of time required for completing an operational nuclear power plant, combined with the cost, make nuclear completely non-competitive as a climate solution. If we seek to reduce greenhouse gas emissions, replacing fossil fuel generation with the nuclear option is an extremely expensive and, again, non-competitive way to do it. Proponents of the nuclear option might think, with the best of intentions, that they are promoting a viable and meaningful route for reducing greenhouse gas emissions and addressing the climate crisis, but they are mistaken.

Given that the clear goal of this array of bills is to incorporate Small Modular Reactors in Data Centers as stated in HB2410 (OLIS 2025b) it is necessary briefly to discuss this issue. According to NuScale (2022) "NuScale is changing the power that changes the world by creating an energy source that is smarter, cleaner, safer, and cost competitive. "Regrettably, reality bites! Smith and Lacey (2023) argued: "Despite its small size, NuScale has outsize cost and safety problems." They concluded that the: "NuScale project distracts from the need to push clean energy sources."

In relation to a failed project in Utah involving SMRs, Schlissel (2023) pointed out that "NuScale and the Utah Associated Municipal Power Systems (UAMPS) announced costs of a 462megawatt small modular reactor (SMR) have risen dramatically." They indicated "As recently as mid-2021, the target price for power was pegged at \$58 per megawatt-hour (MWh); it's risen to \$89/MWh, a 53% increase." Apparently cost over-runs were the order of the day for NuScale. In relation to that same project, Ramana (2024) concluded: "In a rational world, no utility or government would invest another dime on these theoretical reactor concepts." In relation to the NuScale SMR project in Idaho that was supposed to supply the Utah Associated Municipal Power Systems and the value of this technology, WNN (2023) noted "Despite significant efforts by both parties to advance the CFPP, it appears unlikely that the project will have enough subscription to continue toward deployment. Therefore, UAMPS and NuScale have mutually determined that ending the project is the most prudent decision for both parties...." This conclusion was echoed by Bright (2023) noting: "NuScale and the Utah Associated Municipal Power Systems (UAMPS), a group of local electric utilities that had agreed to purchase power from the project, mutually decided to terminate what was known as the Carbon Free Power Project (CFPP), according to a news release." Since NuScale is the only developer with a SMR design that has been approved by the Nuclear Regulatory Commission, it would seem foolhardy for Oregon to contemplate moving forward with this effort – at taxpayer expense. A key question would be: who would and should pay for any cost over-runs in Oregon?

Given the abject failure of NuScale to demonstrate a commercially viable technology, one has to wonder why there is such a profound push on the part of some legislators to promote the technology and the company. Given the substantial evidence negating the value of Small Modular Reactors specifically, and the nuclear option generally, it is equally surprising to see such commitment among these legislators to pushing forward with nuclear power in Oregon at taxpayer expense

For the above reasons Southern Oregon Climate Action Now strongly urges rejection of SB216 and the entire slate of pro-nuclear bills.

Respectfully Submitted

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Sources Cited:

Bright Z. 2023 NuScale cancels first-of-a-kind nuclear project as costs surge E & E News by Politico. <u>https://www.eenews.net/articles/nuscale-cancels-first-of-a-kind-nuclear-project-as-costs-surge/</u>

Dans P & Groves S. 2023 (Editors) Mandate for Leadership: The Conservative Promise 2025. <u>https://static.project2025.org/2025 MandateForLeadership FULL.pdf</u>

Jacobson M. 2024. Seven Reasons Why New Nuclear Energy is an Opportunity Cost That Damages Efforts to Address Climate Change and Air Pollution. Stanford University, submitted to the U.S. House of Representatives Subcommittee on National Security, Illicit Finance, and International Financial Institutions, House Financial Services Committee. <u>https://web.stanford.edu/group/efmh/jacobson/Articles/I/24-01-MZJ-HRTestimony.pdf</u>

Journet A. 2023 The Nuclear Conundrum. Southern Oregon Climate Action Now. https://socan.eco/wp-content/uploads/2023/01/The-Nuclear-Conundrum-2023.pdf

Kraska K. 2024 Greenwashed Gas: A Fossil Fuel Industry Coverup. Earthdya.org <u>https://www.earthday.org/greenwashed-gas-a-fossil-fuel-industry-</u> <u>coverup/#:~:text=Since%201950%2C%20the%20proportion%20of,liquified%20natural%20gas%</u> <u>20(LNG)</u>.

Mulvey K & Shulman S. 2015 The Climate Deception Dossiers: Internal Fossil Fuel Industry Memos Reveal Decades of Corporate Disinformation. Union of Concerned Scientists. <u>https://www.ucsusa.org/sites/default/files/attach/2015/07/The-Climate-Deception-Dossiers.pdf</u>

NuScale 222 NUSCALE Small Modular Reactor. NuScale Power for All Humankind <u>https://www.nuscalepower.com/-/media/nuscale/pdf/fact-sheets/smr-fact-sheet.pdf</u>

OLIS 2025a 2025 Regular Session SB215. Oregon Legislative Information System. <u>https://olis.oregonlegislature.gov/liz/2025R1/Measures/Overview/SB215#</u>

OLIS 2025b 2025 Regular Session HB2410 Oregon Legislative Information System. <u>https://olis.oregonlegislature.gov/liz/2025R1/Measures/Overview/HB2410</u>

Oregon 1980 Measure No 7, voter's pamphlet, State of Oregon General Election November 4, 1980 <u>https://digitalcollections.library.oregon.gov/nodes/view/24554</u>

Ramana M. 2024 The collapse of NuScale's project should spell the end for small modular nuclear reactors. Utility Dive <u>https://www.utilitydive.com/news/nuscale-uamps-project-small-modular-reactor-ramanasmr-/705717/</u>

Schlissel D. 2023 Eye-popping new cost estimates released for NuScale small modular reactor. Institute for Energy Economics and Financial Analysis <u>https://ieefa.org/resources/eye-popping-new-cost-estimates-released-nuscale-small-modular-reactor</u> Smith G and Lacey A. 2023 Small size, big problems: NuScale's troublesome small modular nuclear reactor plan. Environmental Working Group. <u>https://www.ewg.org/news-</u> insights/news/2023/07/small-size-big-problems-nuscales-troublesome-small-modular-nuclear

WNN 2023 Idaho SMR project terminated. World Nuclear News <u>https://www.world-nuclear-news.org/Articles/Idaho-SMR-project-terminated</u>