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Enhanced Geothermal Systems (EGS) is 24/7 base load energy, unlike nuclear which must be shut down for scheduled refueling and maintenance. BUT, if we continue to fund nuclear, small modular nuclear reactors (SMNRs), there will be no public dollars left to fund renewables. Please see the attachment to read what the problems are with the nuclear currently being pursued by Amazon and Energy Northwest, previously Washington Public Power Supply System (WPPSS) aka "Whoops" because, in trying to build nuclear in the 1980s, Washington State suffered the largest bond failure in US history.

EGS offers the potential to provide limitless clean energy and power to over 65 million American homes. EGS technology will access the vast heat in the Earth's crust, potentially meeting global energy needs for 2,800 years at current consumption rates.

It also provides siting flexibility, extends the life of existing geothermal fields, and offers firm, flexible power that is not weather-dependent.

Currently, the U.S. Department of Energy is using FORGE (Frontier Observatory for Research in Geothermal Energy) to advance commercial viability. The state of Washington has three EGS areas currently being considered, but each has not been adequately funded. The Confederated Umatilla Nation has funded their own EGS investigation, with help from the state of Oregon--it's about time that Washington State stepped up and began fully funding this project; after all, the state is at least partially responsible for poisoning their lands and people.

## RESOLUTION IN OPPOSITION TO HB 2090 / SB 5821

**WHEREAS** with HB 2090 / SB 5821 the Republican prime sponsors seek to dictate the results of the biennial energy strategy study by the Washington State Department of Commerce (DOC), and have enlisted Amazon to fund portions, with taxpayers, possibly giving all of the power to Amazon ("Amazon will take all of it [the power] if the power prices are too high for local utilities to afford") — and **the residents of this state never realize any benefit from their tax investments** [1]. Providing "expedited review" (2) in agreement with Pres Trump's Executive Orders (3).

**WHEREAS** these bills direct DOC to "specifically consider at a minimum" the possibility of "expediting or curtailing state siting and permitting requirements" [2] which applies to the proposed project at Hanford, "the most contaminated site in the Western Hemisphere." [4] This conflicts with the position of the Confederated Yakama Nation, and the Umatilla Confederated Tribes Indian Reservation [5]. Amazon's investment, in 12 SMNRs, gives it "first access" to power produced at the site, to run its AI data centers in Eastern Oregon [6]. Oregon has a moratorium on nuclear until there is a federally licensed permanent disposal facility and statewide voter approval [7].

**WHEREAS** the US has less than 1% of the world's uranium reserves, near 99% of uranium imports come from Kazakhstan, Russia, and Australia, leading to resource wars [8]. Uranium mining, refining, shipping, and waste management are carbon intensive, contributing to environmental degradation, increased cancers [9].

The bills state the "feasibility of adding new fission nuclear power...is furthered substantially by recent advancements" including "spent fuel solutions" and "waste disposal policies and programs" [2]. There are no recent, viable advancements in "spent fuel solutions," and "waste disposal policies and programs" are problematic. Spent fuel is stored in temporary above-ground facilities at reactor sites, and remains radioactive for hundreds of thousands of years [10]. "Studies have shown that most SMNR reactor designs will actually increase the volume of nuclear waste, by factors of 2 to 30 for the reactors in our case study." [11].

**WHEREAS** it is 12 years to completion of nuclear, including SMNRs. New nuclear is useless in solving climate crises. The new nuclear reactors in the U.S. (Vogtle) were 7 years behind schedule and \$17 billion over budget. They had a capital cost of \$16/Watt, 16 times that of new solar and wind [12]. Accounting for capacity factors, that is 3 to 8 times the cost per kWh of new solar or wind, which take only 1-3 years from planning to operation. Rooftop solar, less than 1 year. We'd be waiting 15 years longer for something that is 3 to 8 times more expensive [13]. The Price Anderson Act limits liability for nuclear owners/operators, leaving the public liable [14]. President Trump's NRC race to a nuclear abbreviated schedule abandons its obligation to protect public health, safety, and the environment. [15].

**WHEREAS**, while many other countries, most of Europe, are nearing 100% renewable energy, the U.S. investment in nuclear power diverts capital and resources needed for more efficient climate renewable solutions [16, 17, 18, 19, 20]. Lithium-ion battery recycling patents grew at an annual rate of 56% from 2017-2022. Salt and air batteries are long lived and recyclable [21]. "Battery pack storage costs for wind, water, and solar are dropping so low that they eliminate the argument for using fossil fuels or nuclear moving forward" [13] "prices for stationary storage, down to \$70/kWh in 2025, a 45% decrease since 2024" [22].

**THEREFORE BE IT RESOLVED**, Washington State Democrats call for legislators to vote no on HB 2090 and SB 5821, allowing the DOC to complete its biennial energy strategy study without interference; and

**THEREFORE BE IT RESOLVED**, a federally licensed, permanent, and safe disposal facility for spent nuclear fuel and high-level radioactive waste must be in place before a site certificate for any nuclear, regardless of size, is granted and before public or private financing is approved. Residents taking risks, deserve a vote.

**THEREFORE BE IT FINALLY RESOLVED**, Washington State representatives of the people, acting on behalf of their constituents—not corporations—must invest public and private dollars on affordable renewables and storage: wind and solar, which are faster, cheaper, and more efficient.

1. Department of Commerce <https://www.commerce.wa.gov/programs/> & <https://www.commerce.wa.gov/energy-policy/state-energy-strategy/> & <https://www.geekwire.com/2025/a-first-look-at-the-amazon-backed-next-generation-nuclear-facility-planned-for-washington-state/#:~:text=Since%202020%2C%20X%2Denergy%20has,Columbia%20Generating%20Station%20nuclear%20plant.>
2. HB 2090 / SB 5821 <https://app.leg.wa.gov/billsummary/?BillNumber=5821&Chamber=Senate&Year=2025> & <https://app.leg.wa.gov/billsummary/?BillNumber=2090&Chamber=House&Year=2025>
3. ADVANCE ACT and Executive Orders <https://www.presidency.ucsb.edu/documents/executive-order-14300-ordering-the-reform-the-nuclear-regulatory-commission> & <https://www.npr.org/2025/12/17/nx-s1-5608371/trump-executive-order-new-nuclear-reactors-safety-concerns> & <https://www.ucs.org/about/news/advance-act-retreat-nuclear-power-safety#:~:text=%E2%80%9CMake%20no%20mistake:%20This%20is,%E2%80%A2>
4. "The Hanford Nuclear Site is the most contaminated site in the Western Hemisphere" [https://www.columbiariverkeeper.org/focus-areas/clean-up-hanford/#:~:text=The%20Hanford%20Nuclear%20Site%20is%20the%20most,%20High%2Dlevel%20Waste%20Reclassification%20\\*%20Tank%20Leaks](https://www.columbiariverkeeper.org/focus-areas/clean-up-hanford/#:~:text=The%20Hanford%20Nuclear%20Site%20is%20the%20most,%20High%2Dlevel%20Waste%20Reclassification%20*%20Tank%20Leaks) & <https://www.nuclear-risks.org/en/hibakushaworldwide/hanford.html>
5. Confederated Tribes and Bands of the Yakama Nation and Confederated Tribes of the Umatilla Indian Reservation written letters available on request, and <https://washingtonstatestandard.com/2024/03/27/wa-governor-urged-to-veto-25m-for-nuclear-powerproject/#:~:text='Dirty%20power',be%20part%20of%20the%20answer.%E2%80%9D>
6. Amazon is the "biggest investor" in Energy Northwest's, formerly WPPSS or "Whoops" <https://www.ucs.org/about/news/report-advanced-nuclear-reactors-no-better-current-fleet> "multiyear feasibility study" and project to build four small modular nuclear reactors (SMRs) in Hanford, outputting 320 megawatts of power (80 MW each). The project could grow to 12 SMRs putting out nearly as much as one full-scale traditional-size nuclear reactor at 960 MW. <https://www.cascadepbs.org/news/2024/11/amazon-offers-334m-nuclear-reactors-be-built-hanford/>
7. Oregon is Nuclear Free <https://oregoncapitalchronicle.com/2025/03/26/renewable-energy-not-nuclear-is-the-oregon-way/>
8. Uranium Dependency <https://medium.com/areas-producers/the-us-imported-99-of-the-uranium-it-used-in-its-nuclear-power-plants-in-2023-79d2311c6f1d>
9. Uranium Mining <https://farmonaut.com/mining/uranium-mining-in-navajo-nation-2025-outlook-impacts>
10. Nuclear Waste Truths <https://greenamerica.org/fight-dirty-energy/amazon-build-cleaner-cloud/10reasons-oppose-nuclear-energy> & <https://www.forbes.com/sites/christinero/2019/11/26/the-staggering-timescales-of-nuclear-waste-disposal/>
11. SMNR aka SMR study lead author Lindsay Krall, a former MacArthur Postdoctoral Fellow at Stanford University's [Center for International Security and Cooperation \(CISAC\)](https://www.cisac.org/) noted: "These findings stand in sharp contrast to the cost and waste reduction benefits that advocates have claimed for advanced nuclear technologies." <https://sustainability.stanford.edu/news/small-modular-reactors-produce-high-levels-nuclear-waste#:~:text=%E2%80%9COur%20results%20show%20that%20most,claimed%20for%20advanced%20nuclear%20technologies,%E2%80%9D> & <https://interestingengineering.com/innovation/small-nuclear-30-times-waste> & <https://blog.ucs.org/edwin-lyman/five-things-the-nuclear-bros-dont-want-you-to-know-about-small-modular-reactors/> & <https://www.ucs.org/about/news/report-advanced-nuclear-reactors-no-better-current-fleet>
12. Vogtle Report \$17 billion over cost and 7 years late <https://truthaboutvogtle.com/wpcontent/uploads/2025/02/Vogtle-Truth-Report-2025.pdf> & <https://apnews.com/article/nuclear-power-georgia-vogtle-reactors-8fbf41a3e04c656002a6ee8203988fad>
13. Dr. Mark Jacobson, Director of the Atmosphere/Energy Program, Professor of Civil and Environmental Engineering at Stanford University <https://web.stanford.edu/group/efmh/jacobson/> & <https://www.linkedin.com/feed/update/urn:li:activity:7411505944150544384/> & <https://web.stanford.edu/group/efmh/jacobson/Articles/CombiningRenew/100PercentPaperAbstracts.pdf> 14. The Price Anderson Act, liability on taxpayers <https://beyondnuclear.org/biden-approves-extension-of-price-anderson-act/> & <https://www.counterpunch.org/2025/06/06/trumps-nuclear-power-obsession/>
14. President Trump's Executive Orders remove nuclear safety <https://beyondnuclearinternational.org/2025/12/28/trump-regulators-ripped/>
15. Nuclear diverts investment from clean renewables, creating more carbon <https://www.nirs.org/climate/>
16. Other countries rapidly reaching 100% renewables <https://www.climatecouncil.org.au/11-countries-leading-the-charge-on-renewable-energy/>
17. Denmark's soaring renewables <https://nuclear-news.net/2025/05/25/2-b1-two-stories-denmarks-soaring-renewable-success-and-global-nuclear-construction-disaster/>
18. Britain's offshore wind <https://www.4coffshore.com/news/uk-smashes-wind-energy-record-with-22m-homes-powered-nid32153.html>
19. Australia abundance of renewable energy leads to free energy <https://www.theguardian.com/environment/2025/nov/04/australia-free-solar-power-scheme-how-when-household-bills>
20. Battery efficiency <https://www.sciencedirect.com/science/article/pii/S2949821X25002418> & <https://www.iea.org/reports/recycling-of-critical-minerals/executive-summary>
21. Battery cost <https://www.ess-news.com/2025/12/09/bnef-lithium-ion-battery-pack-prices-fall-to-108-kwh-stationary-storage-becomes-lowest-price-segment/> & <https://www.climatecouncil.org.au/resources/battery-boom-supercharging-australias-renewable-rollout/> & McKibben, Bill. *HERE COMES THE SUN*. 2025 (123-126).