

From: Debra Higbee

To: House Committee on Climate, Energy, and Environment

Topic: Opposition to House Bill 4046

Dear Chair Lively, Vice-Chairs Gamba and Levy, and Members of the Committee,

I am writing in opposition to House Bill 4046 that directs the State Department of Energy to conduct a study on nuclear energy, “including advanced nuclear reactors.” I am in opposition because I believe HB 4046 would not lead to a neutral evaluation of nuclear power. Part of the problem is that some important topics are missing from the bill: 1) The human cost of nuclear energy; 2) Climate change – how it effects nuclear reactors; 3) Input from affected communities, and; 4) The present erosion of Federal safeguards.

### **The human cost of nuclear energy**

A study bill on nuclear energy should include the study of the history of accidents, risk, secrecy, tragic events, and true human costs. A book that covers this is *The Greenpeace Book of the Nuclear Age: The Hidden History. The Human Cost*.<sup>1</sup> It explores nuclear energy to include the episodes of human error, where people make a sequence of logical decisions for the right reasons to find they have created a disaster. Small modular nuclear reactors (SMNRs) and other types of small reactors are not exempt from nuclear accidents. This book is the most comprehensive account of both civil and military nuclear accidents produced before 1997. It does not document all nuclear accidents, and was written before the Fukushima accident, but includes the most significant ones before 1997. If the legislature is going to study nuclear energy, it is important be informed of the historical downsides and the human costs of nuclear energy.

### **Climate Change – how it effects nuclear reactors**

The nuclear industry would like us to believe that their “advanced” and SMNRs are fail-safe, which is not possible especially when climate change and human error are factored in. Climate change increases the frequency, unpredictability, and overlap of hazards, which are the hardest conditions for any complex system like an advanced reactor, to deal with.

Nuclear reactors need large amounts of cold water for cooling. However, global warming brings heat waves that raise river, lake, or ocean temperatures. Droughts reduce water availability. Cooling systems become less effective or must shut down to avoid overheating. Heat stresses electrical components, sensors, and backup generators. Passive cooling used by some SMNRs helps, but it still depends on physics—heat must go *somewhere*.

Climate change is a threat multiplier, such as the threat of wildfires and smoke. Smoke, ash, and heat affect plant operations. Smoke can clog air intakes for cooling and generators. Fires can cut

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<sup>1</sup> John May, *The Greenpeace Book of the Nuclear Age: The Hidden History; The Human Cost* (New York, Pantheon Books), 1989.

off outside power and communications. Climate change brings extreme weather, which destabilizes regional power grids. Nuclear plants depend on the grid even when shut down. Advanced technology does not eliminate human error, and climate change introduces many problems that make nuclear energy an expensive, dangerous, unreliable energy source compared to alternative energy sources like wind and solar and energy efficiency.

### **Affected Communities**

In study bill HB 4046, affected communities are excluded, such as front-line, environmental justice communities living nearby uranium mining, power plants or radioactive waste storage sites. Other excluded communities are those advocating for public health, clean water, air and land. A study of nuclear energy that excludes meaningful community input will call to question the comprehensiveness of the study and its conclusions.

### **Federal safeguards are eroding**

At the federal level, nuclear safety standards are being weakened, and the changes are drastic.<sup>2</sup> Departmental orders have been weakened that dictate requirements for almost every aspect of the reactors' operations — including safety systems, environmental protections, site security and accident investigations. This has been done with industry involvement. In addition, the Department of Energy is planning to ship spent fuel by rail across the country.<sup>3</sup> They are also planning to exempt certain nuclear projects from the requirements of the national environmental review process.<sup>4</sup> These developments alone should be reason enough to vote against HB 4046.

Oregon has a longstanding moratorium on new nuclear reactors; and the reasons behind this have not changed. We still do not have a national, long-term storage site for long-lasting radioactive waste. Therefore, for this and the reasons discussed above, please vote no on HB 4046.

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<sup>2</sup> The Trump administration has secretly rewritten nuclear safety rules <https://www.npr.org/2026/01/28/nx-s1-5677187/nuclear-safety-rules-rewritten-trump>

<sup>3</sup> DOE prepares to send nuclear waste cross-country <https://www.cenews.net/articles/doe-prepares-to-send-nuclear-waste-cross-country/>

<sup>4</sup> The Trump administration exempts new nuclear reactors from environmental review <https://www.kosu.org/news/2026-02-02/the-trump-administration-exempts-new-nuclear-reactors-from-environmental-review>