

Comments of Philip H. Carver, Ph.D.
(in Natural Resource and Utility Economics
Johns Hopkins U. 1978)

Testimony for Public Hearing on Feb. 27, 2025 before the
House Committee On Climate, Energy, and Environment

This testimony relates to:

[HB 2038](#)

Requires the State Department of Energy to study nuclear energy, including nuclear waste disposal from nuclear energy.
and

[HB 2410](#)

Allows the Energy Facility Siting Council to issue a site certificate for a small modular reactor energy facility demonstration project in Umatilla County.

I oppose both bills. The studies called for in these bills will provide little insight and are duplicative of the integrated resource planning process (aka least-cost planning) conducted by the Oregon Public Utility Commission for both PacifiCorp and Portland General Electric (PGE). These bills attempt to override the normal process for the PUC to acknowledge resource plans by PacifiCorp (DBA as Pacific Power). At a minimum these studies waste staff time and money.

I have 37 years experience working for the Oregon Dept. of Energy and the Public Utility Commission, including providing testimony in least-cost planning (aka integrated resource planning - IRP) dockets, including PacifiCorp's Docket LC1 in 1990 and in many other LC dockets between then and 2008.

Current dockets relating to least-cost planning (including LC docket 82) show no inclination by the Commission to acknowledge nuclear power plants of any type in its proceedings.

As an example in LC 82 The Oregon Public Utility Commission Staff (Staff Report) states the following:

*Staff, assuming a similar 36-month timeline for issuance of the separate operating license (OL) **for the Natrium facility from the NRC, contemplates substantial risk in selecting this resource** in the preferred portfolio for inclusion in the year 2030. **Staff finds comments from the Sierra Club, NewSun, and RNW** regarding fueling cost and risk, permitting timeline risks, and the lack of adequate alternatives should permitting issues arise, **to be compelling**. The Company's timelines for the availability of non-emitting peaking resources and nuclear resources have both been modelled for portfolio consideration in the year 2030 or beyond, intentionally outside of the action plan window and the current Clean Energy Plan (CEP) compliance window. As the Company states that it anticipates that non-emitting peaking resources will improve in performance and cost-effectiveness, Staff believes that the Company should also prepare for the possibility that both non-emitting peaking resources and nuclear resources may potentially fail to materially improve in those regards before the year 2030. In short, Staff finds that the overly optimistic timeline for both the Natrium nuclear technology and any potential non-emitting peaking technology - given both what is known and unknown - requires planning more reflective of implementation risks. ...*

we (the Staff) agree with RNW's observation that the 2021 IRP selection of Natrium in 2028, which was due in part to overly optimistic assumptions, impacted both the action plan and the scope of the subsequent RFP (UM 2193). Staff finds that PacifiCorp appears to be repeating the same process in LC 82 with these long lead time resources. An additional implication of this approach in LC 82 is that it puts Oregon's decarbonization efforts at risk.

<https://edocs.puc.state.or.us/efdocs/HAU/lc82hau326636023.pdf>

Oregon Public Utility Commission Staff Redacted Least Cost planning (aka Integrated Resource Planning) LC 82 Round 2 Comments Aug. 1, 2024

The Commission in its orders following these Staff comments and subsequent Staff comments substantially concur with the recommendations in the Staff Report (see Order of August 28, 2024 – <https://apps.puc.state.or.us/orders/2024ords/24-297.pdf>) and Order of Dec. 31, 2024 (<https://apps.puc.state.or.us/orders/2024ords/24-466.pdf>)

For example in its Aug. 28, 2024 Order the Commission notes:

Natrium

*Staff and stakeholders continue to raise concerns that potential delays to the Natrium project will have major implications for the preferred portfolio. In the 2023 IRP Update, PacifiCorp did not provide any updates on the status of the project. **Staff re-emphasizes the importance of having the Company's IRP reflect real events related to the progress of the Natrium project** [emphasis added] and that the assumptions are updated to reflect any changing real-world conditions. For example, the recently filed Construction Permit Application with the Nuclear Regulatory Commission indicates review of the application will be completed in January of 2025. Does this align with the proposed timeline for Natrium to meet a 2030 COD? Are there any outcomes from this audit that could affect the projected timeline? This is the type of information Staff expects PacifiCorp to communicate about this project in the 2025 IRP.*

The concept of a new nuclear plant by PacifiCorp has not been acknowledged because it is beyond 2030, the date that is the focus of the Commission proceedings in LC 82. Still, based on its Orders in 2024, it is extremely unlikely that the Commission will acknowledge such a plant in the next two decades. Investing or contracting for the power for such an untested nuclear facility would be prohibitively risky, violating a clear principle of least-cost (integrated resource) planning. At the same time,

costs for renewable resources, particularly solar photo-voltaic cells, continue to plummet.

The House Committee On Climate, Energy, and Environment should not refer either of these bills to the floor of the House. If passed, they would interfere with the well established integrated resource planning process at the Oregon Public Utility Commission. The studies proposed in these bills would be wasteful of agency staff time and funds. It is clear that the PUC has no intention of acknowledging a nuclear power plant anytime soon and the Legislature should waste no further time on this issue.