



April 4, 2023

The Honorable Luz M. Rivas, Chair
Assembly Natural Resources Committee
1020 N Street. Room 164
Sacramento, CA 95814

RE: AB 65 (Mathis) – Oppose

Dear Chair Rivas:

The undersigned respectfully must oppose AB 65 by Assemblymember Mathis. This bill would override California’s longstanding Nuclear Safeguards Act (1976), which bars new nuclear power plants in California until and unless there is a permanent solution for the disposal of the extraordinarily dangerous and long-lived radioactive waste that atomic reactors produce.

California’s moratorium on new nuclear power plants, enshrined in the Nuclear Safeguards Act, is founded on the recognition that there was no solution for the highly toxic and long-lived waste produced by nuclear reactors, and so should not construct more reactors producing more waste until and unless there is a permanent solution. In 2023, this situation is fundamentally unchanged: a permanent geologic repository has yet to materialize. Indeed, in the aftermath of the Yucca Mountain fiasco and with the repository selection process at a deadlock, our nation is no closer to developing a permanent repository than we were decades ago.

The bill would overturn the Nuclear Safeguards Act and allow construction and operation of so-called “small modular reactors” (SMRs). They are not, in fact, small. Under the bill, each could be more than a quarter the size of each Diablo Canyon reactor, and one would be allowed to build multiple SMRs as the same site (hence, the “modular” presumption).

SMRs do nothing to address the waste problem and in fact would further exacerbate this burden: research from Stanford University has found that SMRs actually produce *more* waste per energy unit than conventional reactors.¹ The nuclear waste problem is unsolved; it would be exceedingly reckless to allow the production of more nuclear waste in our State while we remain unable to responsibly handle the waste from the previous generation of reactors.

¹ <https://news.stanford.edu/2022/05/30/small-modular-reactors-produce-high-levels-nuclear-waste/>

The development of SMRs in California would entail heightened risks for our State beyond the expansion of our nuclear waste burden. Most of the prominent SMR designs propose reductions in safety and security standards that may put their risk profile on par with, if not greater than, conventional reactors. These include: smaller and weaker containment domes; a smaller on-site operator staff; a smaller security staff; a greatly reduced, or even eliminated, emergency planning zone around the reactor; and an increased risk of weapons proliferation. Edwin Lyman of the Union of Concerned Scientists analyzes many of these risks in his report *Smaller Isn't Always Beautiful*, and we incorporate his report into this letter by reference.²

One type of SMR put forward by its proponents is sodium-cooled. However, such reactors have been plagued by accidents and radiation releases. A sodium-cooled reactor, the Sodium Reactor Experiment (SRE), suffered a partial nuclear meltdown in 1959 in the Los Angeles area. Contamination from that accident still hasn't been cleaned up, 64 years later. And it was tiny compared to the SMRs proposed in this bill.

Finally, the development of SMRs in California would not be of material benefit in our State's efforts to address climate change, and would in fact get in the way of true solutions--renewables. These pipe-dream reactors would take many years to license and construct, yet we need reductions in carbon emissions now. As Amory Lovins has written in *Forbes*, pursuing nuclear power may hinder our overall climate change efforts.³ Furthermore, when one takes the full lifecycle of nuclear fuel into consideration, nuclear power (SMRs included) are not "zero emissions" but in fact emit carbon at rates greater than renewable energy.⁴ Funds and political commitment need to go into renewables, efficiency, and storage, and not get diverted by nuclear fantasies.

Please do not allow this bill to move forward. Oppose AB 65.

Signed,

Daniel Hirsch



President
Committee to Bridge the Gap

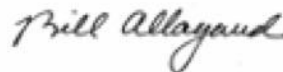
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² <https://www.ucsusa.org/sites/default/files/2019-10/small-isnt-always-beautiful.pdf>

³ <https://www.forbes.com/sites/amorylovins/2019/11/18/does-nuclear-power-slow-or-speed-climate-change/>

⁴ https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3445371



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