

League of Conservation Voters * Natural Resources Defense Council * Sierra Club

December 1, 2020

Dear Senator,

On behalf of our millions of members and supporters, we urge you to oppose S. 4897, the American Nuclear Infrastructure Act of 2020 (ANIA). Rather than delivering clean, safe and affordable energy to the nation, the ANIA attempts to prop up an overly subsidized industry with well-known environmental, public safety, and national security risks. Instead of continuing down this misguided path, Congress should help develop cleaner, safer solutions to supply the nation's power demand.

S. 4897 proposes to prop up an uncompetitive industry through deeply problematic measures that set up a superfluous domestic uranium reserve even though there is no danger of a uranium shortage (and does so in order to artificially sustain the polluting domestic uranium industry that is long overdue for reform) and promote unstable advanced nuclear fuels without sufficient safeguards. These attempts to subsidize an industry that has enjoyed decades of government largesse should be balanced against truly clean technologies that do not carry the same environmental and national security liabilities and that the last two decades have conclusively demonstrated can reduce carbon faster and at a vastly cheaper cost. Thus, the bill signals deeply misplaced priorities and would be objectionable on that premise alone. Additionally, we object to the following features:

The ANIA puts the nuclear industry first in line in front of safer, environmentally friendly, and economically competitive solutions to climate change. Federal support for nuclear should only be considered as part of a broader suite of policies that also support renewables and efficiency. The ANIA instead singles out nuclear for federal subsidies without a full consideration of the potential negative impacts of such support on alternatives. It includes many provisions that simply do not exist for other forms of clean energy, and yet the ANIA fails to consider whether similar programs for those other forms of clean energy would achieve better climate results. If there is to be any additional federal support for nuclear, it must be considered as part of a comprehensive package to address our constrained world.

Section 301 of ANIA creates a severely problematic federal "emissions avoidance" program for nuclear reactors. Beyond the fact that an emission avoidance program should not single out a specific energy source, this program ignores the reality of the aging U.S. nuclear fleet. Instead, the program continues to fund the impossible notion that nuclear reactors can operate forever. Nuclear reactors are already being pushed to operate twice their planned lifetime, to 80 years. The cost and risks of pushing reactors so far without increased safety standards brings unnecessary risk to the health and safety of communities and the environment. Moreover, nuclear plants do not provide any unique resilience, reliability, or fuel diversity benefits; their sole beneficial attribute is the generation of low-carbon electricity. In fact, nuclear reactors themselves are not resilient to climate change. Already, reactors have had to shut down due to increased temperatures and decreased water supplies. The real problem that therefore needs to be addressed is that when nuclear plants retire abruptly, the outcome can be increased generation and emissions from fossil fuel plants.

Section 301 fails to face these realities. The Section provides no criteria to define what “economic factors” the Secretary should at a minimum consider when determining which reactors should receive credits. We find this especially concerning given the reality exposed in Ohio of reactors publicly claiming economic distress while privately funding their bail-out bill. We question the wisdom of proceeding without definitive and transparent criteria to judge by. Moreover, preventing closures of nuclear reactors should focus primarily on providing the time needed to scale up clean energy alternatives, e.g., energy efficient and renewable energy. Rather than an economic recovery plan as Section 301 currently requires, a community and electricity source transition plan should be required in law as a component of any public funds supporting nuclear electricity generation.

The ANIA decreases funding for the Nuclear Regulatory Commission (NRC) by removing the NRC’s ability to recover regulatory costs. Any decrease in regulatory costs for nuclear reactors only further places in harm’s way the NRC’s ability to meet its safety objectives over the long term. Indeed, more discussion and analysis should be done both by the agency and Congress to ensure the NRC has the financial and technical resources to fully meet any safety challenge that could be presented by an aging domestic reactor fleet. Yet Section 201 of the ANIA rewards fast development of new, potentially riskier nuclear technology with the avoidance of fees meant to fund the assurance that such technology will not endanger the public or the environment. Section 203 of the ANIA also further limits the NRC’s ability to recover costs. The NRC’s primary purpose is advancing nuclear safety and security. Yet with these Sections of the ANIA, the agency is not only losing its ability to do so, but also confusing its role as a regulator of the nuclear industry by instead being placed in the role of a nuclear promoter.

Section 402 establishes an unnecessary uranium reserve. A U.S. uranium reserve is a wasteful solution in search of a problem because the ostensible purpose of the proposal – to assure against domestic uranium supply disruptions – is a non-issue. Much of America’s uranium supply comes from countries that are strong allies with whom we have stable trade relationships, including Canada and Australia, and the International Atomic Energy Agency has a global “uranium bank” to ensure a stable supply of uranium worldwide.

Moreover, the Department of Energy (DOE) already has a reserve of excess uranium inventory, and it has been the source of years of discussion and occasional controversy. The Uranium Producers of America has complained repeatedly of DOE’s entry into the market. Press reports in the last few years describe the domestic producers calling for DOE to “cease transfers of excess uranium from federal inventory until the uranium market recovers from its current oversupplied state,” and further complaining that “DOE’s inventory sales had a negative impact on the uranium market and the domestic uranium industry.”¹ Added to DOE’s already existing stores, the best way to assure a reserve exists into the future is to leave natural uranium, unmined, in its place in nature. The existing in situ reserves cost nothing to maintain until such time as needed.

Rather than spend time and money trying to artificially sustain uranium mining and milling industries, the inadequate regulatory system should be fixed. The conventional and in situ leach uranium mining and milling industries have caused devastating harm to Western communities

¹ <https://www.world-nuclear-news.org/UF-US-agencies-look-at-excess-uranium-inventory-1003177.html>.

and groundwater for decades and, in great measure, remained free from any protective, sensible regulation. The Trump Administration scuttled the EPA's progress in finally providing a sound structure for uranium mining regulation that would have both been protective of the environment and provided straightforward regulatory certainty for the industry. 83 Fed. Reg. 54,543 (Oct. 30, 2018); *Health and Environmental Protection Standards for Uranium and Thorium Mill Tailings, Proposed Rule*, 80 Fed. Reg. 4,156-187 (Jan. 26, 2015); 82 Fed. Reg. 7,400-430. The uranium industry should not be further propped up until EPA revives and finalized its uranium rule. With the current lack of regulation, the proposed uranium reserve would do nothing to serve America, and in the process would further degrade precious groundwater resources and negatively impact tribal lands and lives.

Any undermining of the National Environmental Policy Act (NEPA). We deeply appreciate the committee's decision to eliminate the ANIA's attacks on NEPA. We mention NEPA to emphasize how serious such measures would have been. NEPA is the primary instrument for considering vital public input about a project's impact to the community and environment. The initial version of the ANIA included sections that played into the current effort to delegitimize and weaken NEPA. Dismantling environmental regulations for new nuclear reactor designs will not facilitate commercial development of this technology; rather, this engineering and materials science work must stand up on its merits for safety, reliability and economic competitiveness. As with any new technology, robust environmental analysis as required by law must inform and guide decisions relating to major federal actions. We want to be clear – any future attempt to undermine NEPA for the nuclear industry is a poison pill.

Promotion of unstable advanced fuel. Today all U.S. nuclear reactors providing electricity to the grid use low-enriched uranium as fuel. Section 401 of the ANIA encourages uranium enriched in the isotope uranium-235 above these normal energy-use levels yet below typical enrichment levels in nuclear weapons (i.e., 5% - 20% uranium-235). At these higher levels of enrichment, the fuel becomes a nuclear proliferation risk, a terrorism risk, and the source of Japan's worst nuclear disaster before Fukushima, the 1999 Tokaimura Criticality Accident.

Nuclear power is unique in that there are substantial overlaps between civilian energy technology and military applications of this technology to nuclear weapons. The risk of nuclear weapons proliferation can be managed but not eliminated. Preventing the proliferation of nuclear weapons must remain a cornerstone of U.S. national security policy and a consideration of utmost importance for the future of nuclear power. We applaud the ANIA's brief consideration of non-proliferation in Section 401. However, advanced nuclear fuels should reduce or at least not increase proliferation risks compared with current technology, and overall high-assay low-enriched uranium fails to meet this standard. We are therefore also concerned about Section 103 and its suggestion that the NRC could or would approve export of high-assay low enriched uranium and plutonium. The terrorism and proliferation concerns of these fuels must be fully taken into account; tacking on such a Section risks making a thoughtless and dangerous mistake in the regulation of these fuels.

And on a last note, the authorization in Section 503 to support Superfund and additional cleanup actions on tribal lands is a welcome nod in the right direction. But there have been no hearings on this matter of great complexity, and how any such process will work to correct the years of botched cleanups and disregard for tribal health concerns has not been explored. We would be

more than happy to work the Committee on legislation to improve and address the dreadful legacy harms of uranium mining, but such a provision seems an afterthought in all of this.

We agree that Congress should address nuclear power. But instead of further subsidizing the industry, it should focus its efforts on prioritizing a safe, consent based nuclear waste solution, applying nuclear weapons proliferation tests to new reactor designs, considering severe accidents in the full impacts of the nuclear fuel cycle associated with advanced reactors, updating safety standards, and requiring greater clarity of the economic competitiveness for advanced reactor designs earlier in the research and development process. The ANIA fails to accomplish any of these and instead continues to subsidize high risk industries to the exclusion of safer ones. We once again urge you to oppose the American Nuclear Infrastructure Act of 2020.

Sincerely,

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