Biden signs ADVANCE Act. Now what?

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Congress wants to "accelerate" new reactor build, putting public safety in jeopardy

By Dave Kraft/NEIS

On Wednesday July 10th President Joe Biden signed the "ADVANCE Act," which stands for "Accelerating Deployment of Versatile, Advanced Nuclear for Clean Energy."

The controversial bill aggressively promotes the narrow, short-term interests of the U.S. nuclear industry in ways that threaten the long-term national environmental, climate and national/international security interests.

Further, it functionally rewrites the mandate of the federal Nuclear Regulatory Commission (NRC) in ways that potentially cast it into the role of promoter instead of federal regulator of the controversial and moribund nuclear power industry.

To summarize, The ADVANCE Act:

- promotes development of currently experimental, commercially non-existent "small modular nuclear reactors" (SMNRs) and allegedly "advanced" reactors, using tax dollars;
- provides less regulatory oversight by ordering the NRC to "streamline" licensing of currently experimental SMNRs, putting the NRC in a position of becoming a quasi-promoter instead of regulator, in contradiction to its 1975 founding mandate;
- requires development of the infrastructure needed to produce more intensely enriched radioactive fuel called "HALEU" high-assay, low-enriched uranium required for the SMNRs to run on. Enrichment would be just below weapons-usable; currently the only source of HALEU is Russia;
- ignores the potential increased risk and harm from having more nuclear reactors large and small;
- produces more high-level radioactive waste without first having a disposal method in place for either current or future reactors;
- permits and encourages export of nuclear technology and materials internationally; and
- for the first time, allows foreign control/ownership of nuclear facilities within the U.S.

Congress cannot be absolved from its role in uncritically swallowing the gaslit promises of

nuclear power. The House previously passed its version of the legislation by a margin of 393-13 before sending it to the Senate. There, it stalled, but was procedurally resurrected by attaching the 93-page nuclear Christmas-wish list to a three-page, must pass fire safety bill – S.870, the Fire Grants and Safety Act. It passed in the Senate 88-2, with only Senators Ed Markey (MA) and Bernie Sanders (VT) recognizing the imminent threat it posed to energy, environmental, and international security interests.

Critics of nuclear power and opponents of the ADVANCE Act fail to see:

- how the Act fights climate disruption, when SMNRs are only experimental, may not work at all, and if they work will not be available in sufficient quantities for commercialization before the mid-2030s, according to the nuclear industry itself. It is the carbon we remove and keep out of the atmosphere between NOW and the mid-2030s that will determine if we can meet climate goals;
- how SMNRs will enhance currently threatened system reliability and power availability, when they will not be available assuming they even work before the mid-2030s;
- how exporting SMNR technology and ~19+% enriched (just below weapons useable) HALEU reactor fuel worldwide improves international security in a world dominated by wars in Ukraine, the Middle East, and potentially in southeast Asia; poorly controlled non-state actors; and well-known corrupt business entities. Equally baffling is how allowing foreign ownership of nuclear facilities in the U.S. proper makes our energy systems safer, more secure, and insulated from economic instability or foreign interference;
- how mandating the NRC to "expedite" SMNR licensing potentially at the expense of its original and official mandate to "adequately" protect public health and safety and the environment makes nuclear power and the nation safer. This regulatory approach has demonstrably failed with Boeing; failed with Norfolk Southern in East Palestine; failed with PIMSA in Sartortia; and doubly-failed at Fukushima. NRC is supposed to oversee and regulate an industry that in the past five years has repeatedly displayed corporate and legislative corruption at the highest levels resulting in FBI indictments, convictions and guilty pleas, millions of dollars in fines, and enormous cost overruns born by ratepayers; and
- why viable alternatives to nuclear expansion like renewable energy, energy efficiency, energy storage, and transmission improvements are not prioritized over nuclear expansion, since ALL are cheaper, quicker to implement, reduce carbon emissions, produce no radioactive wastes, have no meltdown potential, create no nuclear proliferation issues, and, most importantly ALREADY EXIST. Nothing more needs to be invented; just implemented.

For example, the Federal Energy Regulatory Commission (FERC) stated in December, 2023 that roughly 2,600 giga-watts (GW) of electric power projects await grid connection – over twice the

entire current electrical output of the US, and roughly 27 times the entire output of all current US reactors combined. The large majority of this backlog are renewable energy projects awaiting connection access to the aging transmission grid.

New EXISTING transmission technologies like reconductoring and improved grid resiliency solutions could double the capacity of the grid in much shorter time and with far greater certainty than chasing speculative nuclear promises, creating greater ease of access for renewables and storage.

By signing the ADVANCE Act, the President and an accomplice Congress have placed the nation's energy future, climate goals, and even international security at grave risk. Clearly, placing short term, ego-invested interests over the long-term best interests of the nation seem to be a problem extending beyond re-election. As Napoleon once observed, never ascribe anything to malice when there is the least suspicion of incompetence. Perhaps, but in the end, the results are the same.

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