

Reforming Nuclear Regulatory Commission fees and publicly funding advanced reactor licensing to overcome a barrier to nuclear innovation.

Issue: The Nuclear Regulatory Commission (NRC) charges hourly fees to license applicants trying to build new nuclear reactors. Current NRC rules are based on conventional reactors so advanced nuclear technology innovators and NRC must jointly engage in licensing innovation. However, under the current fee model, innovators must pay the costs. This needs to change. Licensing innovation is a public good that ought to be paid for with public funding. NRC staff time is currently charged at almost \$300/hour and applicant costs can reach tens of millions of dollars for a new reactor application discouraging development of pioneering advanced reactors to meet national clean energy goals.

NIA's report "[Unlocking Advanced Nuclear Innovation: The Role of Fee Reform and Public Investment](#)" describes how the current fee model creates commercial and regulatory barriers:

- **Limitations on NRC's resources, flexibility, and efficiency.** The current fee model constrains NRC's ability to conduct broad rulemakings, licensing reviews, and proactive research to support risk-informed, performance-based regulation for innovative technologies. As NRC looks to handle future applications for novel reactor applications, the fee model impedes the agency's ability to apply the right resources to the right projects at the right time.
- **Discourages nuclear innovators early in the process.** Application fees are incurred early in a project lifecycle and disincentivize industry from developing nuclear energy at the pace need to mitigate climate change. Removing fees eliminates this barrier and accelerates adoption rates, reduces emissions faster, and brings economic benefits to local communities.

Proposed Solutions:

1. Near-term. Appropriations for Department of Energy (DOE) fee share program.

The Nuclear Energy Innovation Capabilities Act created a program for the Department of Energy to provide financial support for licensing fees. However, the program has yet to be implemented and has not received appropriations. Congress can ease financial burdens on first movers by funding the program up to \$10-20 million annually for the next several years.

2. Mid-term. Reduce or eliminate fees for advanced reactor license applications and instead provide public funding by defining license application reviews as off fee under the Nuclear Energy Innovation and Modernization Act.

DOE funding is a good first step but it entails transaction costs and does not improve NRC efficiency. Reducing or excluding fees on new license applications brings greater benefits to the public, NRC, and industry. Funding from the public treasury for tens of millions of dollars in regulatory costs by the mid-2020s would catalyze billions of dollars in private sector investment. This is a modest public expenditure that would yield enormous innovation benefits.

Additional resources:

- [Editorial in Morning Consult](#) by NIA ED and former NRC commissioners
- A [recording of the report release webinar](#) featuring advanced reactor companies
- Copy of [report executive summary](#)