

Perspectives on Efficient Regulation and Oversight

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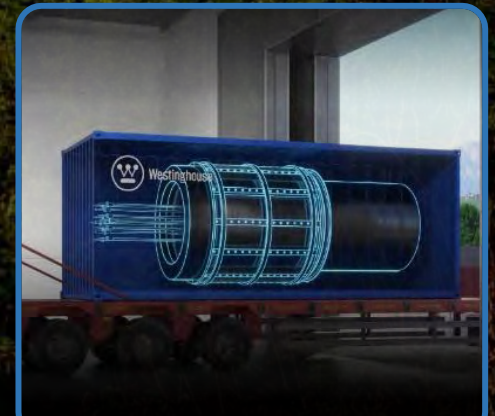
AP1000® PWR



Nuclear Fuel



AP300™ SMR



eVinci™ Microreactor

ADVANCE Act

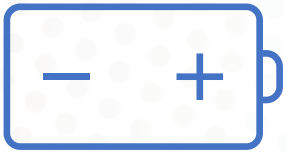
- Goal of accelerating deployment of clean, advanced nuclear
 - Meet U.S. climate goals and maintain U.S. nuclear leadership
- Efficiency in regulatory interactions key to meeting these goals
 - Section 501 requires efficiency be inherent in NRC's mission
- Cultural shift
 - Leadership and regulatory structure must drive efficiency
 - Guidance should direct staff toward enhanced efficiencies and risk-informed approaches

Efficient vendor interactions support the goals of the
ADVANCE Act


eVinci[®] Microreactor: Sections 207, 208, and 505



- ADVANCE act is a driver toward clear and efficient regulatory paths for licensing and deployment
 - Fleet deployments
 - Rely on generic safety evaluation applicable to the microreactor module
 - Review significant departures from the certified design
 - Deployment within 6-months at sites that meet standard criteria
 - Fuel load at manufacturing facilities and transportation
 - Near-term resolution of SECY-24-0008
 - Significantly reduced staffing levels for normal operation
 - Small on-site staff supplemented by remote monitoring
 - Reduced dedicated security staff



Fuel Facility Efficiencies: Sections 505, 506, and 507



SNM-1107
40-year License
(September 2022)



- Leverage conclusions from recent license renewal
 - Existing, unchanged programs maintain adequate protection
 - Environmental Impact Statement concluded small to moderate impact on groundwater and decommissioning waste and small impact on other areas
- Consider current state
 - Safety programs are routinely inspected
 - Environmental risk and uncertainty continue to decrease
- Inspection preparation and documentation enhancements
 - Reduce number and duration of inspections for sustained high performance
 - Remove redundancy and overlap in inspection procedures and data requests
 - Streamline documentation with templates and technology

Plant Licensing: Section 505



- New Plant Licensing Application Reviews
 - Focus on novel features or applications and scaling
 - Leverage reviews of proven design features previously approved; avoid re-reviewing established conclusions



- New Plant Construction
 - Provide efficient process for modifying Tier 1 information; eliminate use of Tier 2* information



- Improve review timelines
 - Topical reports; design certification; license amendments
- Continued international regulator cooperation
 - Training, foreign assignments, and workshops are vital to deployment of common plant design globally

Conclusions

- Efficiencies required by the ADVANCE Act support innovation and leadership for the nuclear industry in the United States
- Westinghouse provides fuel manufacturing, certified plant designs, and technology to support the existing nuclear fleet
 - AP1000[®] nuclear power plant
 - AP300[™] small modular reactor
 - eVinci[™] microreactor
 - EnCore[®] accident tolerant and high energy fuel
- Deployment of these advanced technologies requires a predictable and efficient licensing process required by the ADVANCE Act

Timely implementation of the ADVANCE act is vital to efficient deployment of nuclear technologies