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Regulatory considerations for the transportable eVinci microreactor

The proposed licensing path and deployment model for the eVinci microreactor utilizes various regulations and licenses. A deployment model will be presented which depicts the Westinghouse plan to successfully and safely deploy multiple eVinci microreactors in the future. The deployment model includes a nuclear test reactor to collect data and support the safety case, including code verification and validation (V&V). Westinghouse intends to pursue a Standard Design Certification (DC) with US NRC for the eVinci microreactor. Several steps of the deployment model may require additional licenses and are described below.

An overview of the regulatory body lessons learned from assessing eVinci microreactor deployment, regulatory challenges, and anticipated regulatory framework innovations needed to support the unique deployment model will be detailed in this submission. There are several paths available to acquire the requisite regulatory approvals to enact the deployment model. Westinghouse plans to use Title 10 of the Code of Federal Regulations (CFR) Part 52 for the licensing of the eVinci microreactor standard design. A DC under 10 CFR Part 52 Subpart B will support deployment and future license applications of standard eVinci microreactors within the United States. In addition to a DC, Westinghouse intends to explore the various licenses that could be used to support eVinci microreactor deployment including a special nuclear material (SNM) license under 10 CFR Part 70, certificate of compliance (CoC) for a transportation package under 10 CFR Part 71, as well as other potential licenses for each stage of the eVinci microreactor deployment model.

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Yes

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Considerations for SMRs