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United States and Canada Cooperation on SMR Design Reviews - Successes in Collaboration

Since 2019, the U.S. Nuclear Regulatory Commission (USNRC) and the Canadian Nuclear Safety Commission (CNSC) have been collaboratively performing safety reviews of advanced reactor and small modular reactor designs that are expected to be deployed in both countries. This collaborative effort aims to gain efficiencies by making joint observations or identifying and addressing where differing regulations regulatory approaches may result in different outcomes. CNSC and USNRC leverage each other's regulatory reviews and make joint findings that can support licensing in both countries. The effort focuses on strategic technical areas, both generic and design specific.

Since initiation, both regulators issued 9 work plans for collaborative projects, collaborated on 5 reactor designs, and issued 8 joint reports. In response to lessons learned, we established processes to enable more efficient execution and optimize results including identifying criteria to strategically select licensing projects, creating a strategic plan to prioritize next projects, developing criteria to determine when additional regulators should be invited to join, and developing administrative protocols and templates for preparation, approval, legal review, and publication of joint reports.

The feedback from reactor designers has been positive noting that the engagements are constructive, and that gaps are being identified early. The collaborative effort is returning value for regulators and designers in the form of complex technical issue resolved, and resources saved.

Country OR International Organization

United States and Canada

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yes

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