

Potential Regulatory Frameworks for Power Reactors

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Overview



- Resumption of operation for decommissioning power reactors
 - Current Regulatory Framework
 - Topics of Interest and Discussion
- Deferred status for operating reactors
 - Current Regulatory Framework
 - Topics of Interest and Discussion
- Reinstatement of terminated combined licenses (COLs)
 - Current Regulatory Framework
 - Topics of Interest and Discussion

Decommissioning Reactors (Current Regulatory Framework)



- All plants currently decommissioning were licensed under 10 CFR Part 50 and are in a variety of decommissioning states; these plants were not shut down with resumption of operations as a possibility
- Under 10 CFR 50.82 and 52.110, once a power reactor licensee has submitted both certifications to the NRC (permanent cessation of operations and permanent removal of fuel from the reactor vessel) and NRC docket the letters, the license no longer authorizes operation

Decommissioning Reactors (Current Regulatory Framework)



- Once a power reactor is no longer authorized to operate, the licensee would have to demonstrate that it meets all the requirements in 10 CFR Parts 50 or 52 and request that the NRC re-authorize operation
 - No existing regulations explicitly prohibit the NRC from reauthorizing operation
 - No licensee has ever attempted this process
- Some licensees have submitted (and then withdrawn in advance) an intent to cease operations; at the time, they had not yet submitted the certification of permanent removal of fuel from the reactor vessel

Related Petition for Rulemaking (PRM)-50-117



- Submitted December 26, 2018 (Available under Docket ID: NRC-2019-0063 on www.regulations.gov)
- Docketed February 19, 2019
- Requests that the NRC:
 - "Generally allow the owner and / or operator of a nuclear power plant a fair, reasonable, and unobstructed opportunity to return a retired facility to full operational status, even if the operating license for the facility had previously been surrendered."

Potential Regulatory Framework for Decommissioning Reactors



- Could change regulations for power reactors in a decommissioning status (after both certifications) to explicitly allow resumption of operations
- Topics for consideration and comment:
 - Interest in a regulatory framework that would enable a licensee to resume operations after the docketing of both certifications under 10 CFR 50.82 or 10 CFR 52.110
 - Licensing and physical configurations of a decommissioning power reactor that would be a viable candidate to resume operations (e.g., a reactor in SAFSTOR, a reactor that still employs certain personnel, a reactor that has maintained specific equipment)
 - Actions that may be necessary for a licensee to resume operation
 - Structure for the re-licensing transition process from decommissioning to operating (e.g., similar to current license amendment process, similar to initial licensing process)

Feedback from the Public



Operating Reactors (Current Regulatory Framework)



- Plants can choose not to operate without submitting both certifications under 50.82 or 52.110, and then could continue operations in the future
 - Equivalent to an extended refueling outage
 - Licensees pay full operating reactor fees
 - Licensees are subject to all operating reactor requirements
 - Licensees are subject to operating reactor inspections
 - Licensees maintain all equipment, personnel, etc.

Potential Regulatory Framework for Operating Reactors



- Could change regulations for current operating power reactors to make an intermediate “deferred” status, after which reactors could either resume operation or enter decommissioning
- Topics for consideration and comment:
 - Interest in a regulatory framework for a “deferred” status, i.e., an interim non-operating status for a power reactor that has not yet decided to decommission and would enable a possible future resumption of operation
 - Operating power reactor requirements, if any, that may not be necessary for a power reactor licensee in a “deferred” status, until that licensee either returns to an operating status or enters decommissioning
 - Factors, if any, that make an extended shutdown without docketing of both certifications under 10 CFR 50.82 or 10 CFR 52.110 cost-prohibitive under the current framework (e.g., fees, personnel costs, equipment maintenance costs)

Feedback from the Public



Reinstatement of Terminated COL U.S.NRC

United States Nuclear Regulatory Commission
Protecting People and the Environment

(Current Regulatory Framework)

- "Commission Policy Statement on Deferred Plants," effective date November 13, 1987, addresses the reactivation of plants that maintain a valid construction permit (CP) but are to be deferred or placed in a terminated status
- "Current NRC Staff Views on Applying the Deferred Plant Policy Statement to Part 52 Plants," (ML18065B257) addresses applying the 1987 Policy Statement to COLs
- CPs for Bellefonte Units 1 and 2 were reinstated on March 9, 2009, by order of the Director of NRR (74 FR 10971) after the CPs had been previously withdrawn on September 14, 2006
- There are no specific regulations that address reinstatement of COLs

Potential Regulatory Framework for Reinstatement of COL



- Could develop specific regulations for how to reinstate a combined license after it has been terminated
- Topics for consideration and comment:
 - Factors that staff should consider, aside from rulemaking cost, in evaluating whether a rulemaking is needed to create a framework for reinstating a COL
 - Innovative approaches that could accomplish this objective without rulemaking

Feedback from the Public

