NUCLEAR REGULATORY COMMISSION

10 CFR Parts 50 and 52

[Docket No. PRM-50-117; NRC-2019-0063]

Criteria to Return Retired Nuclear Power Reactors to Operations

AGENCY: Nuclear Regulatory Commission.

ACTION: Petition for rulemaking; denial.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) is denying a petition for rulemaking (PRM), dated December 26, 2018, submitted by George Berka (petitioner). The petition was docketed by the NRC on February 19, 2019, and was assigned Docket No. PRM-50-117. The petitioner requested that the NRC allow the owner or operator of a nuclear power reactor an opportunity to return a retired facility to full operational status, even if the operating license for the facility had previously been surrendered. The NRC is denying the petition because the issue does not involve a significant safety or security concern and the existing regulatory framework may be used to address the issue raised by the petitioner. In addition, the nuclear industry has not expressed a strong interest in returning retired plants to operational status and proceeding with rulemaking to develop a new regulatory framework that may not be used is not a prudent use of resources.

DATES: The docket for the petition for rulemaking PRM-50-117 is closed on [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: Please refer to Docket ID NRC-2019-0063 when contacting the NRC about the availability of information for this action. You may obtain publicly-available information related to this action by any of the following methods:
For further information contact: Nicole Fields, Office of Nuclear Material Safety and Safeguards, telephone: 630-829-9570; email: Nicole.Fields@nrc.gov; U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

Supplementary information:

Table of Contents:

I. The Petition
II. Public Comments on the Petition
III. Public Meeting on the Petition and Other Topics
IV. Reasons for Denial
V. Availability of Documents
VI. Conclusion

I. The Petition
Section 2.802 of title 10 of the *Code of Federal Regulations* (10 CFR), “Petition for rulemaking—requirements for filing,” provides an opportunity for any interested person to petition the Commission to issue, amend, or rescind any regulation. On December 26, 2018, the NRC received a petition for rulemaking (PRM) from George Berka (petitioner). The petitioner requested that the NRC revise 10 CFR part 52, “Licenses, Certifications, and Approvals for Nuclear Power Plants,” to establish criteria that would allow retired nuclear power reactors return to operation after their licenses no longer authorize operation. This circumstance could occur either after the NRC has docketed a licensee’s certifications that it has permanently ceased operations and permanently removed fuel from the reactor vessel or when a final legally effective order to permanently cease operations has come into effect.

The petitioner requested “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.” The petitioner requested that facilities “only have to meet the safety standards that had been in place at the time the facility had last operated, and not the latest standards.” Specifically, the petitioner requested that a nuclear power reactor be allowed to return to operational status, if “the facility had been in an operational condition at the time of retirement, had last operated no more than twenty-one (21) calendar years prior to the retirement date,” the facility “remains intact,” and the facility passes a “general safety inspection.” Alternatively, the petitioner proposes, if the nuclear power reactor “had not been in an operational condition at the time of retirement, had last operated more than twenty-one (21) calendar years prior to the retirement date, is not intact, and/or has had significant decommissioning and/or dismantling activities commence,” then the nuclear power reactor must be repaired or rebuilt “to the safety standards that had been in place at the time the facility had last operated,” and pass a safety inspection “appropriate to the degree of repairs or
reconstruction that had been performed," which would be, “[a]t the very least…a general safety inspection.”

The petitioner stated that this proposal would be “‘pennies on the dollar,’ compared to building new nuclear, or trying to replace the same capacity with wind or solar sources.” The petitioner also stated that through this proposal, “several gigawatts of ultra-clean, and very low-carbon, electrical generating capacity could be restored to the electrical grid, which would help to reduce carbon dioxide levels in the atmosphere.” The petitioner provided a calculation comparing the cost and time of the proposal to the cost and time required for replacing similar electrical generating capacity with renewables or new nuclear builds. The petitioner referenced the Clean Air Act, 42 U.S.C. 7401 et seq., and the National Environmental Policy Act, 42 U.S.C. 4321 et seq., to support the petitioner’s statements regarding reducing carbon dioxide emissions.

II. Public Comments on the Petition

On July 26, 2019, the NRC published a notice of docketing of PRM-50-117 in the Federal Register in conjunction with a request for public comment on the PRM. The comment period closed on October 9, 2019; the NRC received 33 comment submissions on the PRM. A comment submission is a communication or document submitted to the NRC by an individual or entity, with one or more individual comments addressing a subject or issue. All of the comment submissions received on this petition are available at https://www.regulations.gov under Docket ID NRC-2019-0063.

Given the number of comment submissions and the similarities among a number of the comments, the NRC addressed those comments in a separate document, “NRC Response to Public Comments for PRM-50-117,” as listed in the “Availability of Documents” section of this document. This comment response document includes a table of comment submissions and ADAMS Accession Nos. for the comment submissions, a summary of each “bin” of similar comments, and the NRC’s response to
the comments. A brief summary of the most common comments received and the
general NRC response is included here.

Of the 33 comment submissions received, 30 supported the PRM and 3 opposed it. The comment submissions supporting the petition provided reasons related to clean energy, environmental considerations, and climate change; the economic considerations and cost-effectiveness of restarting a decommissioning nuclear power plant; and plant closures that occurred solely due to economic factors. The NRC considers these comments to concern issues outside of NRC regulatory authority.

Several comment submissions supporting the petition also stated that there is no practical process for returning decommissioning power plants to operations. The NRC agrees that there is no explicit process for returning a decommissioning power plant to operations but notes that power reactor licensees have expressed minimal interest in pursuing such an option. Furthermore, the NRC may consider requests from licensees to resume operations under the existing regulatory framework.

Comment submissions opposing the petition stated that plants should be required to meet the latest safety standards before resuming operations, rather than the safety standards in place at the time the facility last operated, as proposed by the petitioner. If the NRC receives a request from the licensee for a decommissioning reactor to resume operations, the NRC would review the request consistent with applicable regulatory requirements. This review would include consideration of relevant safety standards to assure adequate protection of public health and safety.

The comments received do not present additional information supporting the petitioner’s proposal that the NRC amend its regulations. After considering the public comments, however, the NRC identified the need to further engage the public to understand the degree to which the nuclear industry would use a new regulatory process for reauthorizing operation of decommissioning power reactors.

III. Public Meeting on the Petition and Other Topics
On February 25, 2020, the NRC held a public meeting to collect public input on potential regulatory frameworks for power reactors, including the resumption of operation for decommissioning power reactors, deferred status for operating reactors, and reinstatement of terminated combined licenses. These topics are broader than but fully encompass the issue raised by the petitioner, and allow the NRC to evaluate it in a more holistic context.

The public meeting had a total of 41 individuals in attendance. Seven participants asked questions or provided feedback; one of these participants represented a nuclear power plant licensee, one of these participants was the petitioner for this PRM, and five of these participants represented four public interest organizations. The meeting was transcribed, and the full detailed transcript as well as other documents related to the public meeting are listed in the “Availability of Documents” section of this document.

The key insight from the public meeting, as it relates to this PRM, is that there was little support from the participants for the NRC undertaking a rulemaking creating a new regulatory process for the resumption of operations for decommissioning power reactors. Additionally, the nuclear industry representatives expressed minimal interest in using such a process.

IV. Reasons for Denial

The NRC is denying the petition because the issue raised by the petitioner does not involve a significant safety or security concern and the existing regulatory framework may be used to address the issue raised by the petitioner. In addition, the nuclear industry has not expressed a strong interest in returning retired plants to operational status and proceeding with rulemaking to develop a new regulatory framework that may
not be used is not a prudent use of resources. The following factors were considered by
the NRC in making this determination.

Current Regulatory Processes

Under the current requirements in §§ 50.82, “Termination of license,” and 52.110,
“Termination of license,” once a power reactor licensee has submitted written
certifications to the NRC for both the permanent cessation of operations and the
permanent removal of fuel from the reactor vessel, and the NRC has docketed those
certifications, the 10 CFR part 50 or part 52 license no longer authorizes operation of the
reactor. No nuclear power plant licensee to date has requested reauthorization of
operation after filing both of these certifications. There have been instances in which a
licensee submitted to the NRC—and then subsequently withdrew—a certification of an
intent to cease operations under § 50.82(a)(1)(i). In those cases, the licensee had not
submitted the certification of permanent removal of fuel from the reactor vessel.

While current regulations do not specify a particular mechanism for reauthorizing
operation of a nuclear power plant after both certifications are submitted, there is no
statute or regulation prohibiting such action. Thus, the NRC may address such requests
under the existing regulatory framework. The NRC previously stated this position in an
August 2016 letter responding to similar questions raised by Mr. David Kraft, Director,
Nuclear Energy Information Service (see NRC response to Question 4). In addition, the
NRC previously discussed this topic in a 2014 letter responding to Mr. Robert Abboud of
RGA Labs, Inc., a member of the public, concerning relicensing Kewaunee Power
Station. These letters are listed in the “Availability of Documents” section of this
document.

Safety and Security

This petition does not raise a safety or security concern, nor does it offer any
improvements to safety or security. The current regulations and processes provide
reasonable assurance of adequate protection of public health and safety for both operating and decommissioning power reactors. The lack of a safety or security concern would contribute to the low priority of this petition, were it to be considered in rulemaking.

Resources

Based on the complexity of the issue raised by the petitioner, a rulemaking on this issue would entail a significant expenditure of NRC resources. Any such rulemaking effort would likely address a wide variety of technical and regulatory topics including, but not limited to, decommissioning status, aging management, quality assurance, equipment maintenance, personnel, license expiration, hearing process, and appropriate licensing basis.

As discussed in the “Public Meeting on the Petition and Other Topics” section of this document, power reactor licensees expressed minimal interest in a rulemaking establishing a new process for reauthorization of operation for decommissioning power reactors. Given this minimal interest from the nuclear industry, the NRC expects few, if any, requests for reauthorization. Thus, the benefits of any such rulemaking would not be expected to outweigh the costs.

V. Availability of Documents

The documents identified in the following table are available to interested persons through one or more of the following methods, as indicated.

<table>
<thead>
<tr>
<th>DOCUMENT</th>
<th>ADAMS ACCESSION NO. / FEDERAL REGISTER CITATION</th>
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</thead>
<tbody>
<tr>
<td>PRM-50-117 - Petition of George Berka to Revise the Criteria to Return Retired Nuclear Power Reactors to Operations, December 26, 2018</td>
<td>ML19050A507</td>
</tr>
<tr>
<td>Federal Register Notice, “Criteria to Return Retired Nuclear Power Reactors to Operations,” July 26, 2019</td>
<td>84 FR 36036</td>
</tr>
<tr>
<td>NRC Response to Public Comments for PRM-50-117</td>
<td>ML20205L311</td>
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VI. Conclusion

For the reasons cited in this document, the NRC is denying PRM-50-117. The NRC’s existing regulatory framework may be used to address the issue raised by the petitioner, who does not raise a significant safety or security concern, and current requirements continue to provide for the adequate protection of public health and safety and to promote the common defense and security. In addition, the nuclear industry has not expressed a strong interest in returning retired plants to operational status and proceeding with rulemaking to develop a new regulatory framework that may not be used is not a prudent use of resources.


For the Nuclear Regulatory Commission.
Annette L. Vietti-Cook,
Secretary of the Commission.

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