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IN THE UNITED STATES COURT OF APPEALS  
FOR THE DISTRICT OF COLUMBIA CIRCUIT

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CASE NO. 21-1134

GEORGE BERKA

VS.

NUCLEAR REGULATORY COMMISSION

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PLAINTIFF'S BRIEF

-APPENDIX-

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For Plaintiff – Appellant:

George Berka  
Plaintiff, Pro-Se  
57 Concord St.  
Waterbury, CT 06710  
Telephone: (203) 681-7035

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## I. ORIGINAL PETITION:

57 Concord St.  
Waterbury, CT 06710  
December 26<sup>th</sup>, 2018

U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

Good Morning,

The purpose of this communication is to submit a petition for rule making. The Petitioner, Mr. George Berka, hereby requests that,

(1), 10 C.F.R. Part 52.110(b) be amended to read as follows:

Upon docketing of the certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel, or when a final legally effective order to permanently cease operations has come into effect, the 10 C.F.R. Part 52 no longer authorizes operation of the reactor or emplacement or retention of fuel into the reactor vessel, except as follows:

(b)(1), 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, and remains intact, the licensee shall have the option to return the facility to a fully operational status, after having successfully passed a general safety inspection. The safety standards that had been in place at the time the facility had last operated will govern, and the plant will not have to be updated to the latest standards.

(b)(2), If the facility 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, the licensee shall still have the option to return the facility to a fully operational status, provided the following actions are accomplished: (a), The facility is repaired or re-built to the safety standards that had been in place at the time the facility had last operated. The facility will not have to be updated to the latest standards. (b), Furthermore, the facility will have to successfully pass a safety inspection appropriate to the degree of repairs or reconstruction that had been performed. At the very least, this inspection would be a general safety inspection, as above, if the plant had been largely intact and well maintained, but it may range all the way up to the typical testing required for a new build, if significant reconstruction or repairs had to be performed.

The Petitioner also requests the Nuclear Regulatory Commission to, (2), 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. The facility will 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.

The Petitioner makes the above request of the Nuclear Regulatory Commission in accordance with the National Environmental Policy Act, U.S. Code Title 42, Chapter 55, Paragraph 4321. In general, when a nuclear power plant closes, it is typically replaced with natural gas fired electrical generation, which produces much higher air pollution and carbon dioxide emissions than the nuclear source that it replaced. This situation runs counter to the spirit and intent of Paragraph 4321, which aims to: *"declare a national policy which will encourage productive and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment and biosphere, and stimulate the health and welfare of man."* Given the fact that the carbon dioxide emissions of this new natural gas plant are about 60% of those of an equivalent coal plant, (up from the mere 5% or so that the nuclear plant used to generate), replacing shuttered nuclear plants with natural gas fired plants is definitely a step backwards from a climate standpoint. Also, in light of the now well – understood link between carbon emissions and global warming, the importance of Paragraph 4321 takes on a whole new meaning; lowering carbon dioxide levels in the atmosphere, (not raising them), is a necessary step to *"prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man"*. Keeping the ultra – clean, and virtually carbon – free, nuclear generating stations on-line is one way to help accomplish this step.

In addition to Paragraph 4321 above, the Petitioner also cites the Clean Air Act, U.S. Code Title 42, Chapter 85, Subchapter I, Part A, Paragraph 7401. Sections (a)(2) and (c) of this paragraph also apply; *"the growth in the amount and complexity of air pollution brought about by urbanization, industrial development, and the increasing use of motor vehicles, has resulted in mounting dangers to the public health and welfare, including injury to agricultural crops and livestock, damage to and the deterioration of property, and hazards to air and ground transportation."* This does apply to the rising levels carbon dioxide in the atmosphere, which are likely to endanger public health and welfare, injure agricultural crops and livestock, and damage property, through rising air temperatures, which will likely cause melting ice sheets, rising ocean levels and coastal flooding, along with more severe wild fires, hurricanes, and droughts. We have witnessed many of these events first hand in recent years and months.

Next, Section (c) also applies; i.e. *"A primary goal of this chapter is to encourage or otherwise promote reasonable Federal, State, and local governmental actions, consistent with the provisions of this chapter, for pollution prevention."* Promoting the continued operation of nuclear generating stations would certainly constitute an action that would help prevent pollution.

In summary, if 10 C.F.R. Part 52.110(b) were amended as requested above, it may potentially enable previously– shuttered nuclear generating stations to be returned to service, without imposing unreasonable cost burdens on their operators. If this were to occur, potentially 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. This may eventually reduce global temperatures, which may help mitigate some of the most adverse effects of global warming discussed above, thereby promoting human well – being, in accordance with Chapters 55 and 85 of Title 42.

The above - proposed change would allow recently shuttered plants, such as Kewaunee, Vermont Yankee, San Onofre, Crystal River, and others, to be permitted to simply re-start, should their owners decide to pursue this approach. It would also reduce the risk of losing additional nuclear plants in the future. The Petitioner believes that this approach would be safe, with no additional risk to the public, since the plants had operated satisfactorily prior to shut-down, were well maintained, and had good overall safety records. This approach would also spare the plant owners the enormous cost of upgrading the plants to the latest standards. Otherwise, re-starting the plants would probably be cost prohibitive.

Existing nuclear power plants are perhaps one of the best tools that our country currently has to help deal with the threat of climate change. They are here and ready to run now. Relatively little time and money (compared to a new build) needs to be invested to get them back on line. When compared to renewables, they have great capacity in a relatively compact footprint, and essentially constant output. They provide clean, carbon-free energy at over a 90% capacity factor. These are their important attributes that we should recognize, and strive to do everything we can, as a nation, to save them and keep them on-line. The carbon-free generating capacity that we lost as a result of the closures of Kewaunee, Vermont Yankee, San Onofre, and Crystal River negated a considerable amount of the climate progress that we made in recent years by adding renewables to the grid.

It would not be unreasonable to say that this is somewhat of a priority situation, given the rate at which climate change is beginning to accelerate. It is also the "low hanging fruit", when compared to other options. Allowing these plants to re-start would restore a significant amount of clean, carbon-free capacity to the grid, today, and for literally "pennies on the dollar", compared to building new nuclear, or trying to replace the same capacity with wind or solar sources. Replacing lost nuclear capacity with natural gas or coal fired generation should be considered poor practice from a climate standpoint. This simple change should be considered a "win-win" for everyone, with no real negatives or downsides. It could potentially open the door for over 4,000 megawatts of clean, carbon-free electricity to be restored to the grid, without compromising public safety.

Following are a few basic calculations to support the Petitioner's position. The Petitioner will compare the cost and time frame of his proposal to the cost and time frame of replacing a similar electrical generating capacity with renewables, or new nuclear builds. The analysis shows that permitting recently – shuttered nuclear plants to re-start is several orders of magnitude more cost effective than building renewable or new nuclear capacity, and can also be accomplished in a fraction of the time.

Assume that the total generating capacity of the San Onofre, Kewaunee, and Vermont Yankee nuclear plants was 3300 megawatts, and that their average capacity factor was 90 percent. When compared to the 392 megawatt Ivanpah solar plant, with its 12% capacity factor, it would take (63) Ivanpah plants to replace this capacity, at a cost of \$139 billion.

$3300 \text{ mW}(0.90) = 2970 \text{ mW}$  (nuclear plants)

$392 \text{ mW}(0.12) = 47 \text{ mW}$  (Ivanpah)

$2970 / 47 = 63$  Ivanpahs required. Cost of the Ivanpah plant was \$2.2 billion.

$63(\$2.2 \text{ billion}) = \$139 \text{ billion}$  ← Cost of 63 Ivanpahs

Replacing this capacity with new nuclear builds: Assume \$8 billion for a new 1 gW plant

$3.3 \text{ gW} * (\$8 \text{ bil} / \text{gW}) = \$26.4 \text{ billion}$

Time Frame:

It is reasonable to assume that it would take at least (10) years to build the (3) new nuclear plants to replace the lost capacity. Building (63) new Ivanpah solar plants would take at least that long, if not longer.

Safety Inspection Alternative:

Now, let us assume that permitting Kewaunee, San Onofre and Vermont Yankee plants to re-start would only require safety inspections. If each plant received a 10,000 man-hour safety inspection, at a cost of \$250 per hour, that would only amount to \$2.5 million per plant, or \$7.5 million for the (3) plants, assuming that nothing else was needed for the re-start. When compared to a new nuclear build, cost of a re-start is:

$\$26.4\text{k million} / \$7.5 \text{ million} = 3520$  ← It would be 3,520 times as expensive to rebuild the (3) plants than to simply restart the existing plants.

When compared to 63 Ivanpahs,

$\$139\text{k million} / \$7.5 \text{ million} = 18,533$  ← It would be 18,533 times as expensive to replace the lost capacity with 63 Ivanpah solar plants than to simply restart the (3) existing nuclear plants.

Time Frame:

The inspections required for a re-start could probably be accomplished in under (6) months, versus the (10) years required for a new build.

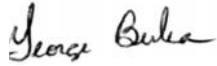
$10/0.5 = 20$  ← It would take twenty times as long to rebuild the lost capacity than to simply restart the existing nuclear plants.

Finally, there does not appear to be any good or legitimate reason for this policy, which prohibits previously shuttered nuclear power plants from ever restarting again, once they surrender their operating license. This policy runs counter to the original principles upon which the Atomic Energy Commission, the predecessor to the Nuclear Regulatory Commission, was founded. These principles were to not only regulate the safety of nuclear power, but also to encourage its use, and to not impose excessive requirements that would inhibit the growth of the industry. This is also why this policy should be changed – to be better aligned with the original intent and spirit of the Atomic Energy Commission.

If you are tempted to simply dismiss this petition, please consider soliciting input on it first from either the Environment and Public Works Committee, the Department of Energy, or other branches of government tasked with addressing climate change. You may find that there may be

widespread support for the ideas in this petition, since many people are now starting to recognize the valuable contribution that nuclear power makes in the clean electricity arena.

Thank you,



-George Berka

## II. RELEVANT NOTICES:

The relevant notices are as follows:

### 1. Acknowledgement of Receipt:



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

February 21, 2019

George Berka  
57 Concord Street  
Waterbury, CT 06710

Dear Mr. Berka:

This letter is in response to the petition for rulemaking (PRM), dated December 26, 2018, that you filed electronically with the U.S Nuclear Regulatory Commission (NRC). Your PRM is available in the NRC's Agencywide Documents Access and Management System under Accession No. ML19050A507.

You request that the NRC revise its regulations regarding the criteria to return a retired nuclear power reactor to operations. The NRC docketed your petition pursuant to § 2.803 of Title 10 of the *Code of Federal Regulations*, "Petition for rulemaking-NRC action," on February 19, 2019, and assigned it Docket No. PRM-50-117. Please reference this docket number on any correspondence you may have concerning the petition.



You can monitor your petition on the Federal rulemaking Web site, <http://www.regulations.gov>, by searching on Docket ID NRC-2019-0063. In addition, the Federal rulemaking Web site allows you to receive alerts when changes or additions occur in a docket folder. To subscribe: (1) navigate to the docket folder NRC-2019-0063; (2) click the "E-mail Alert" link; and (3) enter your e-mail address and select how frequently you would like to receive e-mails (daily, weekly, or monthly). The NRC also tracks all petition actions on its Web site at <https://www.nrc.gov/about-nrc/regulatory/rulemaking/rules-petitions.html> and <http://www.nrc.gov/reading-rm/doc-collections/rulemaking-ruleforum/petitions-by-year.html>.

You may direct any questions you may have concerning the petition process or the status of your petition to me at 301-415-3280 (e-mail: [Cindy.Bladey@nrc.gov](mailto:Cindy.Bladey@nrc.gov)) or to Jill Shepherd-Vladimir at 301-415-1230 (e-mail: [Jill.Shepherd-Vladimir@nrc.gov](mailto:Jill.Shepherd-Vladimir@nrc.gov)).

Sincerely,

/RA/

Cindy Bladey, Chief  
Regulatory Analysis and Rulemaking Support  
Branch  
Division of Rulemaking  
Office of Nuclear Material Safety and Safeguards

G. Berka

-2-

SUBJECT: PRM-50-117 – PETITION FOR RULEMAKING, G. BERKA

DATE: FEBRUARY 21, 2019

**DISTRIBUTION:**

RASB R/F  
IBerrios, NMSS

CBladey, NMSS  
MSegarnick, OGC

HChang, NMSS

JShepherd-Vladimir, NMSS

**ADAMS Accession No. ML19035A702**

\*Concurrence by e-mail

OFFICE	NMSS/DRM/RASB/RT	NMSS/DRM/RASB/RT	NMSS/DRM/RASB/BC
NAME	HChang	JShepherd-Vladimir	CBladey
DATE	2/21/19	2/21/19*	2/21/19

**OFFICIAL RECORD COPY**



2. Request for Public Comment:

[7590-01-P]

**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; notice of docketing and request for comment.

**SUMMARY:** The U.S. Nuclear Regulatory Commission (NRC) received a petition for rulemaking from Mr. George Berka (the petitioner), dated December 26, 2018, requesting that the NRC amend its regulations to establish criteria to return retired nuclear power reactors to operations. The petition was docketed by the NRC on February 19, 2019 and has been assigned Docket No. PRM-50-117. The NRC is examining the merits of the issues raised in PRM-50-117 to determine whether the issues should be considered in rulemaking. The NRC is requesting public comment on this petition at this time.

**DATES:** Submit comments by **[INSERT DATE 75 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER*]**. Comments received after this date will be considered if it is practical to do so, but the NRC is able to assure consideration only for comments received on or before this date.

**ADDRESSES:** You may submit comments by any of the following methods:

- **Federal Rulemaking Web Site:** Go to <https://www.regulations.gov> and search for Docket ID NRC-2019-0063. Address questions about NRC dockets to Carol Gallagher; telephone: 301-415-3463; e-mail: [Carol.Gallagher@nrc.gov](mailto:Carol.Gallagher@nrc.gov). For technical questions contact the individual listed in the FOR FURTHER INFORMATION CONTACT section of this document.
- **E-mail comments to:** [Rulemaking.Comments@nrc.gov](mailto:Rulemaking.Comments@nrc.gov). If you do not receive an automatic e-mail reply confirming receipt, then contact us at 301-415-1677.
- **Fax comments to:** Secretary, U.S. Nuclear Regulatory Commission at 301-415-1101.
- **Mail comments to:** Secretary, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, ATTN: Rulemakings and Adjudications Staff.
- **Hand deliver comments to:** 11555 Rockville Pike, Rockville, Maryland 20852, between 7:30 a.m. and 4:15 p.m. (Eastern Time) Federal workdays; telephone: 301-415-1677.

For additional direction on obtaining information and submitting comments, see "Obtaining Information and Submitting Comments" in the SUPPLEMENTARY INFORMATION section of this document.

**FOR FURTHER INFORMATION CONTACT:** Ilka Berrios, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; telephone: 301-415-2404, e-mail: [Ilka.Berrios@nrc.gov](mailto:Ilka.Berrios@nrc.gov).

**SUPPLEMENTARY INFORMATION:****I. Obtaining Information and Submitting Comments****A. Obtaining Information**

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:

- **Federal Rulemaking Web Site:** Go to <https://www.regulations.gov> and search for Docket ID NRC-2019-0063.
- **NRC's Agencywide Documents Access and Management System (ADAMS):** You may obtain publicly-available documents online in the ADAMS Public Documents collection at <https://www.nrc.gov/reading-rm/adams.html>. To begin the search, select "[Begin Web-based ADAMS Search](#)." For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1-800-397-4209, 301-415-4737, or by e-mail to [pdr.resource@nrc.gov](mailto:pdr.resource@nrc.gov). The ADAMS accession number for each document referenced (if it is available in ADAMS) is provided the first time that it is mentioned in this document.
- **NRC's PDR:** You may examine and purchase copies of public documents at the NRC's PDR, Room O1-F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

**B. Submitting Comments**

Please include Docket ID NRC-2019-0063 in your comment submission.

The NRC cautions you not to include identifying or contact information that you do not want to be publicly disclosed in your comment submission. The NRC will post all

comment submissions at <https://www.regulations.gov> as well as enter the comment submissions into ADAMS. The NRC does not routinely edit comment submissions to remove identifying or contact information.

If you are requesting or aggregating comments from other persons for submission to the NRC, then you should inform those persons not to include identifying or contact information that they do not want to be publicly disclosed in their comment submission. Your request should state that the NRC does not routinely edit comment submissions to remove such information before making the comment submissions available to the public or entering the comment into ADAMS.

## **II. The Petitioner and Petition**

The petition for rulemaking (PRM) was filed by George Berka, a private citizen. The petitioner is requesting that the NRC revise part 52 of title 10 of the *Code of Federal Regulations* (10 CFR) to establish criteria that would allow retired nuclear power reactors return to operation after the licensee 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. In sum, the petitioner requests "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 requests that the facility "only have to meet the safety the standards that had been in place at the time the facility had last operated, and not the latest license standards." The petition may be found in ADAMS under Accession No. ML19050A507.



### III. Discussion of the Petition

The petitioner requests that the NRC revise its regulations in 10 CFR part 52 to establish criteria to allow a retired nuclear power reactor to return to operations without meeting the latest safety standards, but rather those standards in place at the time the facility had last operated. The petitioner requests 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 date of retirement,” the facility “remains intact,” and the facility passes a “general safety inspection.” Alternatively, 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 in 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 states 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 states 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 provides 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 references 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 climate change statements regarding reducing carbon dioxide emissions.

#### **IV. Conclusion**

The NRC has determined that the petition meets the threshold sufficiency requirements for docketing a petition for rulemaking under 10 CFR 2.803. The NRC is examining the merits of the issues raised in PRM-50-117 to determine whether these issues should be considered in rulemaking.

Dated at Rockville, Maryland, this 23<sup>rd</sup> day of July, 2019.

For the Nuclear Regulatory Commission.

A handwritten signature in black ink, appearing to read "Richard J. Laufer".

Richard J. Laufer,  
Acting Secretary of the Commission.



### 3. Notice of Public Meeting:

February 12, 2020

Title: Potential Regulatory Frameworks for Power Reactors

Date(s) and Time(s): February 25, 2020, 02:00 PM to 05:00 PM

Location: NRC Three White Flint North, 1C03  
11601 Landsdown Street  
Rockville, MD

Category: This is a Category 3 meeting. Public participation is actively sought for this meeting to fully engage the public in a discussion of regulatory issues.

Purpose: The purpose of this meeting is to discuss the potential creation of a regulatory framework for the resumption of operation for decommissioning power reactors, deferred status for operating reactors, and reinstatement of terminated combined licenses. Input from this meeting may be used by the NRC to inform its determination regarding a petition for rulemaking (PRM-50-117; Docket ID: NRC-2019-0063).

The NRC staff is interested in public input on these topics, but emphasizes that this will be a high level, conceptual discussion and not a detailed technical discussion of potential regulatory frameworks. NRC welcomes this opportunity for informal and frank engagement with you on these topics but will not be providing a written response to any insights offered at the meeting. NRC is not requesting written comment at this time.

Contact:	Nicole Fields 630-829-9570 <a href="mailto:nicole.fields@nrc.gov">nicole.fields@nrc.gov</a>	Glenna Lappert 301-415-2552 <a href="mailto:glenna.lappert@nrc.gov">glenna.lappert@nrc.gov</a>
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Participants:	<u>NRC</u>	<u>External</u>
	Office of Nuclear Material Safety and Safeguards	Stakeholders
	Office of Nuclear Reactor Regulation	

Webinar:	<u>URL</u>	<u>Meeting Number</u>
	<a href="https://usnrc.webex.com/usnrc/onstage/g.php?MTID=e08687680a44d4539d968f05adc66b5a3">https://usnrc.webex.com/usnrc/onstage/g.php?MTID=e08687680a44d4539d968f05adc66b5a3</a>	

Comments: Please e-mail one of the meeting contacts if you intend to attend this meeting in person. This will pre-register you for a visitor security badge. Please provide the name and company or organization for each in-person attendee no later than February 24th. Arrive 30 minutes before the meeting starts to allow time for security registration.

**PUBLIC MEETING AGENDA****Potential Regulatory Frameworks for Power Reactors****February 25, 2020, 02:00 PM to 05:00 PM****NRC Three White Flint North, 1C03  
11601 Landsdown Street  
Rockville, MD**

<b><i>Time</i></b>	<b><i>Topic</i></b>	<b><i>Speaker</i></b>
2:00	Introductions and Opening Remarks	NRC
2:15	Resumption of operation for decommissioning power reactors	NRC/Stakeholders
3:20	Deferred status for operating reactors	NRC/Stakeholders
4:10	Reinstatement of terminated combined licenses	NRC/Stakeholders
4:50	Closing Remarks	NRC
5:00	Meeting Adjourns	

The time of the meeting is local to the jurisdiction where the meeting is being held.

The NRC provides reasonable accommodation to individuals with disabilities where appropriate. If reasonable accommodation is needed to participate in this meeting, or if a meeting notice, transcript, or other information from this meeting is needed in another format (e.g., Braille, large print), please notify the NRC meeting contact. Determinations on requests for reasonable accommodation will be made on a case-by-case basis.

ADAMS Accession Number: ML20043F003

Name	NFields	IBerrios
Office	NMSS/REFS/MRPB	NMSS/REFS/RRPB
Date	02/12/2020	02/12/2020

OFFICIAL RECORD COPY

Link to meeting details: <https://www.nrc.gov/pmns/mtg?do=details&Code=20200099>

Commission's Policy Statement on "Enhancing Public Participation in NRC Meetings"  
67 Federal Register 36920, May 28, 2002  
The policy statement may be found on the NRC website  
<http://www.nrc.gov/reading-rm/doc-collections/commission/policy/67fr36920.html>

## III. NRC'S ORDER &amp; MEMORANDUM OF DECISION:

[7590-01-P]

**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:

- **Federal Rulemaking Web Site:** Go to <https://www.regulations.gov> and search for Docket ID NRC-2019-0063. Address questions about NRC dockets to Dawn Forder; telephone: 301-415-3407; email: [Dawn.Forder@nrc.gov](mailto:Dawn.Forder@nrc.gov). For technical questions, contact the individuals listed in the FOR FURTHER INFORMATION CONTACT section of this document.

- **NRC's Agencywide Documents Access and Management System**

**(ADAMS):** You may obtain publicly-available documents online in the ADAMS Public Documents collection at <https://www.nrc.gov/reading-rm/adams.html>. To begin the search, select "[Begin Web-based ADAMS Search](#)." For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1-800-397-4209, at 301-415-4737, or by email to [pdr.resource@nrc.gov](mailto:pdr.resource@nrc.gov). For the convenience of the reader, instructions about obtaining materials referenced in this document are provided in the

“Availability of Documents” section.

- **Attention:** The [Public Document Room \(PDR\)](#), where you may examine and order copies of public documents is currently closed. You may submit your request to the PDR via e-mail at [pdr.resource@nrc.gov](mailto:pdr.resource@nrc.gov) or call 1-800-397-4209 between 8:00 a.m. and 4:00 p.m. (EST), Monday through Friday, except Federal holidays.

**FOR FURTHER INFORMATION CONTACT:** Nicole Fields, Office of Nuclear Material

Safety and Safeguards, telephone: 630-829-9570; email: [Nicole.Fields@nrc.gov](mailto:Nicole.Fields@nrc.gov); U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

## **SUPPLEMENTARY INFORMATION:**

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- 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.

DOCUMENT	ADAMS ACCESSION NO. / FEDERAL REGISTER CITATION
PRM-50-117 - Petition of George Berka to Revise the Criteria to Return Retired Nuclear Power Reactors to Operations, December 26, 2018	ML19050A507
<i>Federal Register</i> Notice, “Criteria to Return Retired Nuclear Power Reactors to Operations,” July 26, 2019	84 FR 36036
NRC Response to Public Comments for PRM-50-117	ML20205L311
Public Meeting Notice: Potential Regulatory Frameworks for Power Reactors, February 25, 2020	ML20043F003

Public Meeting Materials: Potential Regulatory Frameworks for Power Reactors, February 25, 2020	ML20049A021
Public Meeting Transcript: Category 3 Public Meeting Transcript RE: Potential Regulatory Frameworks for Power Reactors, February 25, 2020	ML20072H393
Public Meeting Summary: Category 3 Public Meeting Summary RE: Potential Regulatory Frameworks for Power Reactors, March 25, 2020	ML20072H288
NRC Letter to Mr. David A. Kraft of Nuclear Energy Information Service, August 4, 2016	ML16218A266
Letter from Mr. David A. Kraft of Nuclear Energy Information Service, June 16, 2016	ML16175A449
NRC Letter to RGA Labs, Inc., October 21, 2014	ML14288A407
Regulatory Analysis for Regulatory Basis for Regulatory Improvements for Power Reactors Transitioning to Decommissioning, January 2018	ML17332A075

## 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.

Dated May 3, 2021.

**/RA/**

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