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

October 24, 2019

SUBJECT: SUMMARY OF SEPTEMBER 26, 2019, CATEGORY 2 PUBLIC MEETING ON SECTION 106 OF THE NUCLEAR ENERGY INNOVATION AND MODERNIZATION ACT

On September 26, 2019, a Category 2 public meeting was held between the U.S. Nuclear Regulatory Commission (NRC) staff and members of the public at the Engineering Innovation Laboratory, 775 MK Simpson Blvd.102, Idaho Falls, Idaho. The purpose of this meeting was to obtain feedback from current holders of licenses for research reactors and other members of the public on the potential impact of changes made to Section 104c of the Atomic Energy Act of 1954, as amended (AEA), by Section 106, "Encouraging Private Investment in Research and Test Reactors," of the Nuclear Energy Innovation and Modernization Act (NEIMA), which was signed into law on January 14, 2019. The purpose of collecting this feedback was to inform the NRC staff's consideration of the need for rulemaking to conform the regulations in Part 50, "Domestic Licensing of Production and Utilization Facilities," of Title 10 of the *Code of Federal Regulations* (10 CFR) with the new statutory requirements in Section 104c of the AEA.

In its presentation, the NRC staff explained the changes made to Section 104c of the AEA by NEIMA. The NRC staff explained that NEIMA changed the framework by which the NRC determines whether a utilization facility is licensed under Section 103 or Section 104c of the AEA. The new law amended Section 104c of the AEA to include cost recovery requirements to determine whether a utilization facility is licensed for research and development purposes or industrial or commercial purposes. Before NEIMA, the AEA did not limit how these utilization facilities recovered money from commercial activities.

The current requirement in 10 CFR 50.22, "Class 103 licenses; for commercial and industrial facilities," considers the amount of money a production or utilization facility spends on commercial activities. Under the current 10 CFR 50.22, a production or utilization facility is licensed for industrial or commercial purposes under Section 103 of the AEA if the facility is to be used so that more than 50 percent of the annual cost of owning and operating the facility is devoted to the production of materials, products, or energy for sale or commercial distribution, or to the sale of services, other than research and development or education or training. If 50 percent or less of the annual cost of owning and operating the facility is devoted to commercial activities, then the facility is licensed under Section 104c of the AEA as a facility for research and development.

Section 106 of NEIMA changed Section 104c of the AEA to focus on how the facility's costs are recovered. Specifically, NEIMA added, "The Commission is authorized to issue licenses under this section for utilization facilities useful in the conduct of research and development activities of the types specified in section 31 [of the AEA] in which the licensee sells research and testing services and energy to others, subject to the condition that the licensee shall recover not more than 75 percent of the annual costs to the licensee of owning and operating the facility through sales of nonenergy services, energy, or both, other than research and development or education and training, of which not more than 50 percent may be through sales of energy."

The NRC staff explained that, to implement this revised licensing authority, the NRC will apply the new cost recovery requirements in Section 104c of the AEA to research reactors that are currently in the license renewal process and any applicable new or renewed license applicants. The changes made to Section 104c of the AEA by NEIMA did not address the applicability of the new cost recovery requirements to current utilization facility licensees that are not in the license renewal process and will not undergo license renewal in the future. The NRC could apply the new cost recovery requirements to these licensees or continue to apply the current requirements in 10 CFR 50.22 to these licensees.

The NRC staff presentation also provided 4 examples of how the requirements in 10 CFR 50.22 and Section 104c of the AEA would apply to facilities with different mixes of expenses and incomes from commercial activities and research and development activities. The NRC staff presentation concluded with a discussion of several potential impacts of the new cost recovery criteria in Section 104c of the AEA on existing research reactor licensees. The NRC staff made the presentation publicly available in advance of the meeting at Agencywide Documents Access and Management System (ADAMS) Accession No. ML19263A651.

Members of the public provided feedback throughout the NRC staff's presentation and during a dedicated feedback session afterwards. The feedback focused on two main topics: 1) applicability of the new cost recovery criteria to existing research reactor licensees and 2) practical aspects of demonstrating compliance with the cost recovery criteria.

Regarding applicability of the new cost recovery criteria to existing licensees, there was not a consensus among the meeting attendees. Most of the feedback expressed the opinion that the new cost recovery criteria should only be applied to future licenses and not to existing licenses issued under 10 CFR 50.22. Some attendees stated that the new cost recovery criteria could negatively impact their research activities by limiting their ability to generate commercial income to cover the costs of the research programs. Other attendees stated that the new cost recovery criteria should be applied equally to all current and future research reactor licensees to avoid a double standard for different holders of the same types of licenses. Some attendees were indifferent because they conduct minimal commercial activities. Several attendees represented research reactors that are in the license renewal process and will therefore have the new cost recovery criteria applied to their renewed licenses, and they expressed frustration that they will be subject to the new cost recovery criteria and the existing regulations in 10 CFR 50.22 just because of the timing of their license renewal and the new law.

Regarding the practical aspects of demonstrating compliance with the new cost recovery criteria, most attendees favored the NRC issuing additional guidance. Several attendees requested that the NRC publish more detailed guidance about how a licensee should calculate the annual cost of owning and operating the facility, especially when it is a small part of a large university organization. Other licensees expressed a need for explicit guidance about what constitutes a "commercial activity" and what constitutes a "research and development activity."

Intermixed in this feedback was a consistent message from the meeting attendees that the NRC should be mindful of the requirement in Section 104c of the AEA that the NRC apply the minimum necessary regulation to research reactor licensees to protect the health and safety of the public and permit the conduct of widespread and diverse research and development.

The meeting notice and agenda, dated May 23, 2019, are available at ADAMS Accession No. ML19254D050. A list of meeting attendees is provided as an enclosure to this summary.

Please direct any inquiries to William B. Kennedy at 301-415-2313 or William.Kennedy@nrc.gov.

SUBJECT: SUMMARY OF SEPTEMBER 26, 2019, CATEGORY 2 PUBLIC MEETING ON SECTION 106 OF THE NUCLEAR ENERGY INNOVATION AND MODERNIZATION ACT
DATE: OCTOBER 24, 2019

DISTRIBUTION:

PUBLIC

RTR r/f	RidsNrrDanuUnpl	AAdams, NRR
RidsOgcMailCenter	RidsNrrDanuUnpo	GCasto, NRR
RidsOcaMailCenter	RidsOpaMailCenter	NParker, NRR

ADAMS Accession Nos.: ML19296C500 Pkg
ML19254D050 Mtg. Notice
ML19296C585, Mtg. Summary
ML19263A651 Slides *concurred via email NRC-001

OFFICE	**NRR/DANU/UNPL/PM**	**NRR/DANU/UNPL/LA**	**NRR/DANU/UNPL/BC**
NAME	WKennedy	NParker*	GCasto*
DATE	10/22/19	10/23/19	10/23/19

OFFICIAL RECORD COPY

LIST OF ATTENDEES

SEPTEMBER 26, 2019, CATEGORY 2 PUBLIC MEETING ON SECTION 106 OF NEIMA

10:30 A.M. - 12:30 P.M.

Name	Organization
In-Person Attendees:	
Louise Lund	U.S. Nuclear Regulatory Commission
Greg Casto	U.S. Nuclear Regulatory Commission
Alexander Adams, Jr.	U.S. Nuclear Regulatory Commission
Patrick Boyle	U.S. Nuclear Regulatory Commission
William Kennedy	U.S. Nuclear Regulatory Commission
Luke Gilde	University of Maryland
Amber Johnson	University of Maryland
C. Corey Hines	Washington State University
Hillary Bennett	Washington State University
Meagan Nydegger	National Institute of Standards and Technology
Scott Miller	Texas A&M University
Paul M. Whaley	University of Texas
Jeff Geuther	Pennsylvania State University
Robert Seymour	Kansas State University
David M. Slaughter	Aerotest Operations
Bruce Meffert	University of Missouri – Columbia
Christopher Farwell	United States Geological Survey
Marshall Wade	Massachusetts Institute of Technology
Sarah Don	Massachusetts Institute of Technology
Ashoak Nagarajan	Idaho State University
Eric Crapo	Fluor Idaho
Jay Kunze	Idaho State University
Les Foyto	University of Missouri – Columbia
Andrew Smolinski	Idaho National Laboratory
Michael Ruddell	Idaho National Laboratory
Leo Bobek	University of Massachusetts – Lowell
Thomas Regan	University of Massachusetts – Lowell
Jere Jenkins	Idaho National Laboratory
Andrew Kauffman	Ohio State University
Clive Townsend	Purdue University
Jonathan Wallick	University of California – Irvine
Melinda Krahenbuhl	Reed College
Rick Gunderson	Idaho National Laboratory
Edward Lau	Massachusetts Institute of Technology
Jordan Hill	Atomic Alchemy
Thomas Eiden	Atomic Alchemy
John Peterson	Atomic Alchemy
Ram Sharma	International Atomic Energy Agency
Telephone Conference Participants:	
Cynthia Montgomery	U.S. Nuclear Regulatory Commission
Duane Hardesty	U.S. Nuclear Regulatory Commission

Enclosure

Michael Balazik	U.S. Nuclear Regulatory Commission
Gary Becker	NuScale
Andy Bell	Oak Ridge National Laboratory
Janet Bergman	Curtiss-Wright
Ken Brooks	University of Missouri
Mike Cannon	Member of the Public
Dan Cronin	University of Florida
John Foster	Massachusetts Institute of Technology
Chris Monetta	Member of the Public
Phil Oliver	Atomic Alchemy
Pete Robertson	University of Missouri
Siaka Yusuf	Dow Chemical
Joe LaPrad	SHINE Medical Technologies