

The NRC's public meeting to discuss operator licensing requirements with the Armed Forces Radiobiology Research Institute (AFRRI) will begin shortly.

**Please ensure you have connected to MS Teams audio either through your computer or by phone.**

# Discussion between NRC and Armed Forces Radiobiology Research Institute (AFRRI) on operator licensing

August 31, 2021

Non-Power Production and Utilization Facilities Licensing and Oversight Branches  
Division of Advanced Reactors and Non-Power Production and Utilization Facilities  
Office of Nuclear Reactor Regulation  
ADAMS Accession No.

# Today's Meeting

- The purpose of this public meeting<sup>1</sup> is to hold a discussion with the Armed Forces Radiobiology Research Institute (AFRRI) on operator licensing in order to understand how AFRRI intends to train and license operators in support of facility staffing.

<sup>1</sup> <https://www.nrc.gov/public-involve/public-meetings.html>

# Today's Agenda

- AFRRRI Prepared Remarks
- NRC Presentation
- Open Discussion between NRC and AFRRRI
- Opportunity for members of the public to ask questions of the NRC

# Prepared Remarks by the Armed Forces Radiobiology Research Institute

Andrew Cook

Chief, Reactor Division, Radiation Sciences Department  
Armed Forces Radiobiology Research Institute  
Uniformed Services University of the Health Sciences

# NRC Presentation Agenda

- Legislative authority
- Regulatory framework
- Regulatory process
- Discussion

# Current Legislative Authority

- Atomic Energy Act, Sec. 107, Operators' Licenses  
The Commission shall—
  - a. prescribe uniform conditions for licensing individuals as operators of any of the various classes of production and utilization facilities licensed in this Act;
  - b. determine the qualifications of such individuals;
  - c. issue licenses to such individuals in such form as the Commission may prescribe; and
  - d. suspend such licenses for violations of any provision of this Act or any rule or regulation issued thereunder whenever the Commission deems such action desirable

# Current Regulatory Framework

(Slide 1 of 6)

- § 55.13 General exemptions.  
The regulations in this part do not require a license for an individual who –
  - (a) Under the direction and in the presence of a licensed operator or senior operator, manipulates the controls of –
    - (1) A research or training reactor as part of the individual's training as a student, or
    - (2) A facility as a part of the individual's training in a facility licensee's training program as approved by the Commission to qualify for an operator license under this part.

# Current Regulatory Framework

(Slide 2 of 6)

- § 55.31 How to apply. (*in relevant part*)
  - (a) The applicant shall:
    - (1) Complete NRC Form 398, "Personal Qualification Statement--Licensee,"
    - (3) Submit a written request from an authorized representative of the facility licensee by which the applicant will be employed that the written examination and operating test be administered to the applicant;
    - (4) Provide evidence that the applicant has successfully completed the facility licensee's requirements to be licensed as an operator or senior operator and of the facility licensee's need for an operator or a senior operator to perform assigned duties. [...];

# Current Regulatory Framework

(Slide 3 of 6)

- § 55.31 How to apply. (continued, *in relevant part*)  
(5) Provide evidence that the applicant, as a trainee, has successfully manipulated the controls of either the facility for which a license is sought or a plant-referenced simulator that meets the requirements of § 55.46(c). At a minimum, five significant control manipulations must be performed that affect reactivity or power level.

# Current Regulatory Framework

(Slide 4 of 6)

- § 55.45 Operating tests. (*in relevant part*)
  - (a) Content. [...] The operating test, to the extent applicable, requires the applicant to demonstrate an understanding of and the ability to perform the actions necessary to accomplish a representative sample from among the following 13 items.
    - (1) Perform pre-startup procedures for the facility, including operating of those controls associated with plant equipment that could affect reactivity.
    - (2) Manipulate the console controls as required to operate the facility between shutdown and designated power levels.
    - (5) Observe and safely control the operating behavior characteristics of the facility.
    - (6) Perform control manipulations required to obtain desired operating results during normal, abnormal, and emergency situations.

# Current Regulatory Framework

(Slide 5 of 6)

- § 55.45 Operating tests.
  - (b) Implementation--Administration. The operating test will be administered in a plant walkthrough and in either--
    - (1) A simulation facility that the Commission has approved for use after application has been made by the facility licensee under § 55.46(b);
    - (2) A plant-referenced simulator (§ 55.46(c)); or
    - (3) The plant, if approved for use in the administration of the operating test by the Commission under § 55.46(b).

# Current Regulatory Framework

(Slide 6 of 6)

- § 55.11 Specific exemptions.  
The Commission may, upon application by an interested person, or upon its own initiative, grant such exemptions from the requirements of the regulations in this part as it determines are authorized by law and will not endanger life or property and are otherwise in the public interest.

# Regulatory Process

(Slide 1 of 2)

- If compliance with regulations in Part 55 is not possible due to facility conditions, an exemption must be requested and approved prior to use/need.
- The request must clearly state the regulatory requirement(s) and reason for requesting the exemption.
- The request must also include why the request is authorized by law, will not endanger life or property, and otherwise in the public interest.
- The request must also include any requested or anticipated duration or timeframe for implementation and a date or event by which it is believed that full compliance will be restored.

# Regulatory Process

(Slide 2 of 2)

- Following the NRC determination on any potential exemption request, the process to conduct operator licensing examinations and issue operator licenses would follow the process outlined in NUREG-1478, “Operator Licensing Examiner Standards for Research and Test Reactors.”

# NRC/AFRRI Open Discussion

# Opportunity for Public Questions

# Closing/Adjournment of Public Meeting