

## SCHEDULING NOTE

**Title:** HEARING ON CONSTRUCTION PERMIT FOR SHINE MEDICAL ISOTOPE PRODUCTION FACILITY: SECTION 189A OF THE ATOMIC ENERGY ACT PROCEEDING (Public Meeting)

**Scheduled:** December 15, 2015  
9:00 am

**Purpose:** To receive testimony and exhibits regarding the application of SHINE Medical Technologies, Inc. for a medical radioisotope irradiation and processing facility construction permit. The testimony will focus on unique features of the facility or novel issues that arose as part of the review process and other significant technical or policy issues associated with aspects of the staff's review that are important for the Commission to make its final decision. The Commission will determine whether the staff's review has been adequate to support the findings in 10 C.F.R. §§ 50.35(a) and 51.105(a).

**Duration:** 1 day

**Location:** Commissioners' Conference Room, 1st Floor OWFN

NOTE: Chairman to provide opening remarks, admit exhibits, and swear in witnesses.  
**20 mins.**

**Participants:** **Presentation**

*(Note: Presenters seated at the table are listed, other staff available to answer questions will be seated in the well and reserved rows.)*

**Overview (SHINE Medical Technologies, Inc.)** **30 mins.\***

**At the table:**

**Greg Piefer**, Chief Executive Officer, SHINE  
**Jim Costedio**, Manager, Licensing, SHINE  
**Bill Hennessy**, Manager, Engineering, SHINE  
**Eric Van Abel**, Supervisor, Engineering, SHINE

**Topic:** Overview

**Commission Q & A** (round of questions; 6 minutes each) **24 mins.\*\***

**Overview (NRC Staff)**

**30 mins.\***

**At the table:**

**William Dean**, Director, Office of Nuclear Reactor Regulation (NRR)

**Mirela Gavrilas**, Deputy Director, Division of Policy and Rulemaking, NRR

**Jane Marshall**, Deputy Director, Division of License Renewal, NRR

**Marissa Bailey**, Director, Division of Fuel Cycle Safety, Safeguards and Environmental Review, Office of Nuclear Material Safety and Safeguards (NMSS)

**Topic:** Overview of SHINE construction permit application and contents, summary of key safety and environmental information associated with the SHINE construction permit application, and summary of regulatory findings. The staff will also discuss its review methodology and how it applied the Commission's regulations.

**Commission Q & A** (round of questions; 6 minutes each)

**24 mins.\*\***

***BREAK***

***5 mins.***

NOTE: For the remaining panels, the applicant is expected to discuss the contents of the construction permit application while the staff is expected to discuss its review process and regulatory conclusions. Each panel should include a discussion of any permit conditions associated with the subject matter of the panel.

**Safety - Panel 1 (11:15 am)**

**Applicant**

**5 mins.\***

**At the table:**

**Bill Hennessy**, Manager, Engineering, SHINE

**Eric Van Abel**, Supervisor, Engineering, SHINE

**Catherine Kolb**, Supervisor, Engineering, SHINE

**Staff**

**10 mins.\***

**At the table:**

**Alexander Adams, Jr.**, Chief, Research and Test Reactors Licensing Branch, NRR

**Steven Lynch**, Project Manager, Research and Test Reactors Licensing Branch, NRR

**Mary Adams**, Senior Environmental Engineer, Enrichment and Conversion Branch, Office of Nuclear Materials Safety and Safeguards (NMSS)

**Topic:** Sections of the application and the following chapters from the Safety Evaluation Report:

Chapter 1, "The Facility," and Chapter 4, "Irradiation Unit and Radioisotope Production Facility Description," including discussion of the unique licensing considerations for SHINE's subcritical utilization facilities and production facility.

Note that the panel will not have specific topics to discuss for the following chapters. If the Commission wishes to ask questions on these chapters, this panel would be the appropriate time.

- Chapter 2, "Site Characteristics"
- Chapter 3, "Design of Structures, Systems, and Components"
- Chapter 5, "Cooling Systems"
- Chapter 6, "Engineered Safety Features," including proposed permit conditions
- Chapter 7, "Instrumentation and Control Systems"

**Commission Q & A** (round of questions; 6 minutes each)

**24 mins.\*\***

***BREAK (Lunch Break-Approx. 12:00-1:30 pm)***

**Safety - Panel 2 (1:30 pm)**

**Applicant**

**5 mins.\***

**At the table:**

**Bill Hennessy**, Manager, Engineering, SHINE

**Eric Van Abel**, Supervisor, Engineering, SHINE

**Catherine Kolb**, Supervisor, Engineering, SHINE

**Staff**

**10 mins.\***

**At the table:**

**Steven Lynch**, Project Manager, Research and Test Reactors Licensing Branch, NRR

**Joseph Staudenmeier**, Senior Reactor Systems Engineer, Reactor Systems Code Development Branch, Office of Nuclear Regulatory Research

**Kevin Morrissey**, Project Manager, Fuel Manufacturing Branch, NMSS

**Topic:** Sections of the application and the following chapters from the Safety Evaluation Report:

Chapter 13, "Accident Analyses," including discussion of novel application of 10 CFR Part 50 and 70 accident analysis methodologies for radiological and chemical exposure accidents.

Note that the panel will not have specific topics to discuss for the following chapters. If the Commission wishes to ask questions on these chapters, this panel would be the appropriate time.

- Chapter 8, "Electrical Power Systems"
- Chapter 9, "Auxiliary Systems"
- Chapter 11, "Radiation Protection Program and Waste Management," including proposed permit condition
- Chapter 12, "Conduct of Operations"\*\*\*
- Chapter 14, "Technical Specifications"
- Chapter 15, "Financial Qualification"

**Commission Q & A** (round of questions; 6 minutes each) **24 mins.\*\***

**Environmental - Panel (2:10 pm)**

**Applicant** **10 mins.\***

**At the table:**

**Katrina Pitas**, Vice President, Business Development, SHINE

**Bill Hennessy**, Manager, Engineering, SHINE

**Catherine Kolb**, Supervisor, Engineering, SHINE

**Tim Krause**, Environmental Specialist, Sargent and Lundy

**Staff** **25 mins.\***

**At the table:**

**Jane Marshall**, Deputy Director, Division of License Renewal, NRR

**David Wrona**, Chief, Environmental Review and Guidance Update Branch, NRR

**Michelle Moser**, Project Manager and Biologist, NRR

**Topic:** Final Environmental Impact Statement

- Provide a summary of the process for developing the Final Environmental Impact Statement (EIS) including:
  - The decision to prepare an EIS
  - The scoping process
  - Consultations with other Federal, State, and local agencies and Tribes/DOE as a cooperating agency
  - The staff's independent review and analysis
  - Issuance of the Draft EIS, public meetings on the Draft EIS, and solicitation of stakeholder comments on the Draft EIS
  - The environmental impacts from the proposed action on the following resource areas: land use, visual resources, air quality and noise, water resources, ecological resources, historic and cultural resources, socioeconomics, human health, transportation, waste management, and environmental justice
- Discuss the analysis of alternatives including:
  - Range of reasonable alternatives
  - Alternative sites
  - Alternative technology
  - No-action alternative
- Summarize conclusions and recommendation including a summary of the benefits and costs of the proposed action

**Commission Q & A** (round of questions; 6 minutes each) **24 mins.\*\***

**BREAK** **5 mins.**

<b>Closing (3:15)</b>	<b>54 mins.</b>
<b>Closing Statement by Applicant</b> <b>Greg Piefer, Chief Executive Officer</b>	15 mins.*
<b>Closing Statement by Staff</b> <b>William Dean, Director, NRR</b>	15 mins.*
<b>Commission Q &amp; A and Closing Statements</b>	24 mins.**

\*For presentation only and does not include time for Commission Q & A's.

\*\*All Commissioners will have an opportunity to ask questions after each panel.

Commissioners will start the Q&A with their total time allotted to allocate as they see fit among the panels.

\*\*\* Chapter 12, "Conduct of Operations," of the staff's SER includes evaluations of SHINE's quality assurance program description and preliminary emergency plan.