

A photograph of the National Regulatory Commission (NRC) building, a tall, modern structure with a central glass tower and two side wings. An American flag flies on a tall pole in front of the building. The scene is set against a clear blue sky with some green trees in the foreground.

TRTR Conference –
October 19, 2021

Welcome to NRC Day

Agenda

- 10:00 – 10:15 Welcome, *Josh Borromeo*
10:15 – 10:45 UNPL Licensing Branch Status, *Josh Borromeo*
10:45 – 11:00 Proprietary Info Submissions, *Ed Helvenston*
11:00 – 11:25 Regulatory Audits/Request for Confirmatory Information, *Duane Hardesty*
11:25 – 11:40 Mo-99 Facilities, *Steve Lynch*
11:40 – 11:50 BREAK
11:50 – 12:30 Advanced Reactor Licensing, *Adrian Muniz and Ed Helvenston*
12:30 – 12:50 Endorsing NEI 21-06, *Duane Hardesty*
1:00 - 1:20 PM, American Nuclear Society, *Craig Piercy, CEO & Executive Director*
1:20 - 1:40 PM, ENERCON Federal Services, Inc. (MS Teams Session)

Afternoon Session Starts at 2:00pm with Travis Tate, Branch Chief of UNPO



TRTR Conference –
October 19, 2021

Non-Power Production and Utilization Facility Licensing Branch – Status

Josh Borromeo, Chief UNPL

Meet the UNPL Branch Chief



Josh Borromeo,
Chief UNPL

B.S. Mechanical Engineering, The Pennsylvania State University

Westinghouse Electric Company, Engineer - Loss-of-Coolant Accident Analysis

Nuclear Regulatory Commission

- Reactor Systems Engineer
- Technical Assistant
- Acting Branch Chief in NRR and NMSS
- Chief of UNPL since April 2021

UNPL Branch Staff

Mike Balazik
Patrick Boyle
Molly-Kate Gavello
Duane Hardesty
Ed Helvenston
Cindy Montgomery
Paulette Torres
Linh Tran
Geoffrey Wertz
Xiaosong Yin
Jackson Goedjen (Co-Op)

Currently 10 full-time staff and one co-op

Departures in the past year:

- One project manager on rotation
- One project manager changed branches within DANU
- One technical reviewer rotated out of DANU

Leveraging technical staff of the agency to support reviews and build technical bench strength

DANU Management Team

Develop and implement risk-informed and performance-based approaches to licensing and oversight of advanced reactors and non-power production and utilization facilities (NPUF), including research reactors, testing facilities, and medical radioisotope facilities.

Division Management

Mo Shams, Director
Jeremy Bowen, Deputy Director
Shaun Anderson, Acting Deputy Director

Branch Chiefs

Josh Borromeo, NPUF Licensing Branch
Travis Tate, NPUF Oversight Branch
Duke Kennedy, Advanced Reactor Licensing Branch
John Segala, Advanced Reactor Policy Branch
Mike Orenak, Advanced Reactor Technical Branch 1
Chris Van Wert, Advanced Reactor Technical Branch 2

DANU is actively engaging its staff to become familiar with NPUF technology and licensing

COVID-19 Public Health Emergency

NRC staff scheduled to return to office on November 8, 2021

- Majority of staff will telework some of the time
- Federal workers are required to be vaccinated per President Biden's September 9, 2021, Executive Order
- Majority of large conference rooms upgraded to accommodate virtual interactions
- Can accommodate in-person meetings
- Currently, PPE required when in the office



Some of the completed actions this past year

- 10 CFR 50.59 Guidance for NPUFs (NEI 21-06), currently in Regulatory Guide process
- Digital Instrumentation and Control (DI&C) Amendment for Purdue
- Massachusetts Institute of Technology Amendment for Emergency Battery Replacement
- University of Missouri Research Reactor TS 6.2, "Review and Audit," and 6.4, "Procedure" Amendment
- U.S. Geological Survey Special Nuclear Material Possession Limit Increase Amendment
- SHINE Commercial Grade Dedication Exemption Request



Some of the projects planned for next year

- Complete the Regulatory Guide for NEI 21-06
- Make headway on development of 10 CFR 50.59 Guidance for DI&C
- Complete the DI&C license amendment currently in house
- Close out the review of license renewal applications
- Review NIST restart request to support the decision authorize the restart of NBSR
- Complete the technical review of the SHINE facility operating license
- Review applications and pre-submittal documentation for new NPUFs



Observations of the NPUF Community

- Primary focus is on safe operation of your facilities
- Knowledgeable and passionate about the technology
- Flexible to new review approaches
- Unique technical and regulatory challenges for each facility
- Resource limitations



*We make the safe use
of nuclear technology
possible*

Opportunities to Continue Improving

Strive to get it right the first time, gain clarity with:

- Pre-submittal interactions
- Public meetings
- Clarifications calls
- Audits
- Guidance development

Remove inefficiencies, we (NRC and community) need to always ask:

- Are there requirements that aren't necessary?
- Is the process not working or could it be improved?
- Are we using an appropriate risk-informed approach?



Contact Info:

Josh Borrromeo, Chief Non-Power Production and Utilization
Facility Licensing

Joshua.Borrromeo@nrc.gov

301-415-1217