

A photograph of the National Reactor Training and Research Institute (NRTI) building, a tall, modern structure with a central glass-enclosed core and two wings of rectangular windows. An American flag flies on a tall pole in front of the building. The scene is framed by green trees in the foreground and a clear blue sky. The image has a dark blue overlay at the top and bottom.

TRTR Conference  
– June 21, 2023

**Welcome to NRC Day**

# DANU Management Team

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

## Division Management

Mo Shams, Director

Jeremy Bowen, Deputy Director

Jon Greives, Acting Deputy Director

## Branch Chiefs

Josh Borromeo, NPUF Licensing Branch

Travis Tate, NPUF Oversight Branch

Andrew Proffitt, Advanced Reactor Licensing Branch 1

Michael Wentzel, Advanced Reactor Licensing Branch 2

Steven Lynch, Advanced Reactor Policy Branch

Candace de Messieres, Advanced Reactor Technical Branch 1

Greg Oberson, Advanced Reactor Technical Branch 2



# **Non-Power Production and Utilization Facility Oversight Branch - Overview**

Travis L. Tate, Chief

# Meet the UNPO Branch Chief



Travis L. Tate

B.S. Nuclear Engineering, University of Tennessee, Knoxville

Science Applications International Corporation, staff nuclear engineer supporting various Department of Energy activities at facilities in Oak Ridge, TN and Savannah River Site

Nuclear Regulatory Commission

- Operating Reactor Licensing Project Manager
- NRR Technical Assistant
- Branch Chief in NRR (license renewal, accident dose analysis, reactor licensing)
- Acting Branch Chief in Region I
- Branch Chief in NMSS
- Chief of UNPO since January 2020

# Functions

- Non-Power Production and Utilization Facility Oversight Branch (UNPO)
  - Implements the NRC's safety and security inspection and operator licensing oversight programs for non-power production and utilization facilities (NPUFs) from initial licensing to decommissioning
  - Conducts the NRC's review of NPUF security plans and emergency plans and coordinates NRR's event response for NPUFs



# NPUF Oversight Branch

Travis Tate, Chief

## Inspection Staff

- Craig Bassett
- **Kevin Roche**
- Andrew Waugh (security support)
- Juan Arellano
- **Brian Lin – Inspector**
- **Vacancies – 3 (actively hiring)**
- **Michael Balazik – PM**

## Licensing Assistants

- Nicole Parker
- **Vacant – Operator Licensing (Nia Jones acting)**

## Examiner Staff

- John Nguyen
- Michele DeSouza
- Amy Beasten (Inspector support)
- Dan Hoang
- Tuan Le
- **Vacancy – 1 (actively hiring)**
- **Paulette Torres – PM**

## Security Specialist

- **Vacant – (Beth Reed supporting)**



# NPUF Inspection Program

- Inspection Manual Chapter 2545, “Research and Test Reactor Inspection Program”
  - Completed 26 inspections thru March 31, 2023 (mid FY ‘23)
    - Security (8): 1 Non-cited violation SL IV; 1 violation SL IV
    - Safety (18): 2 Non-cited violations SL IV; 1 violation SL IV
- Increased oversight at NIST in accordance with supplemental inspection plan
  - Completed inspections necessary to inform restart authorization decision
  - Issued quarterly supplemental inspection report
  - No violations
- Completed UT-Austin special inspection
  - Severity Level III violation, operations with unauthorized fuel
  - Severity Level IV violation, 10 CFR 50.59 change process



# NPUF Inspection Guidance and Initiatives

- Guidance
  - Issued NPUF guidance for reactive inspection decision-making
    - Supplements MD 8.3 guidance
  - IMC 0615 “Research and Test Reactors Inspection Reports” draft revision
    - Streamline inspection report writing
    - Removes confusion between inspection follow-up items and unresolved items
- Initiatives
  - Reactor Program System Integration
    - Inspection follow-up item tracking
    - Tracking/trending violations
    - Report generator function
    - Inspection report tracking
  - Program performance monitoring
  - SHINE operational readiness and operations inspections



# NPUF Inspection Program Evaluation

- OIG Audit of Inspection Program for Class II facilities
- Lessons Learned
  - No gaps in existing inspection program
  - Reactive inspection guidance
  - Sharing operating experience
  - Using operating experience to inform inspection sample selection and focus areas
    - Safety oversight committee
    - Operations and fuel movement activities

# NPUF Operator Licensing Program

- 23 facility examinations conducted thru May 31, 2023
- 358 active operator licenses
  - 161 reactor operators (RO)
  - 197 senior reactor operators (SRO)

Type	Total # of Written Exams	# of Written Exam Failures	(%)	Average Written Exam Grade	Average Written Failure Grade	Total # of Operating Exams	# of Operating Exam Failures	(%)
NEW	41	3	7.32%	84.26	74.70	41	2	4.88%
REAPP	5	0	0.00%	80.95		1	0	0.00%
RO	46	3	6.52%	83.95	74.70	42	2	4.76%
NEW	9	0	0.00%	83.90		9	1	11.11%
UPGRADE	20	0	0.00%			22	0	0.00%
SRO	29	0	0.00%	83.90		31	1	3.23%
Total for HQ:	75	3	4.00%	83.95	74.70	73	3	4.11%



# NPUF Operator Licensing Program Activities

- Revision 3 to NUREG 1478
  - Clarifying language for 1 year facility experience
  - Clarifying guidance on timing of actions (examination confirmations, application submittals)
  - Clarifying guidance on use of waivers, deferrals, excusals
- SHINE facility operator licensing
- Collaborative Learning Environment tool

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## Timeliness Metrics

- Inspection Reports
  - **11%** within 45-day goal
  - Average: **73** days
- Examination Reports
  - 70% within 60-day goal
  - Average: 50 days

ONE  
WHITE FLINT  
NORTH

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**Contact Info:**

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