

# **01-16 DOE Authorization Strategy**

May 2024

Jason P Andrus, Alison Wells





#### DISCLAIMER

This information was prepared as an account of work sponsored by an agency of the U.S. Government. Neither the U.S. Government nor any agency thereof, nor any of their employees, makes any warranty, expressed or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness, of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. References herein to any specific commercial product, process, or service by trade name, trade mark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the U.S. Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the U.S. Government or any agency thereof.

#### 01-16 DOE Authorization Strategy

Jason P Andrus, Alison Wells

May 2024

Idaho National Laboratory Idaho Falls, Idaho 83415

http://www.inl.gov

Prepared for the U.S. Department of Energy Under DOE Idaho Operations Office Contract DE-AC07-05ID14517



# Nuclear Safety and DOE Authorization

Jason Andrus, Alison Wells

5/13/2024

# Z Nuclear Safety Overview

Organizational Mission to Assist in the Development and Deployment of Reactor Experiments in a Safe and Compliant Manner

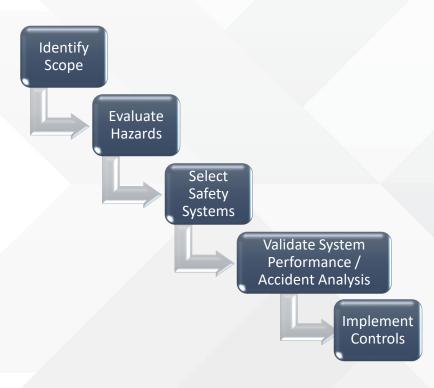
Engage with Reactor Designers to Support Design Interfaces and Develop Safety Basis Documents





## Role of Safety and Authorization

- DOE-STD-1189-2016
  - Process Standard Stage Gates
  - Establishment of Regulatory Requirements
  - Clarity of Path Forward
  - Integration of Safety and Design
  - Reduce Project Risk by Establishing Regulatory Certainty through formal regulatory approvals.
- Flexibility in risk analysis and presentation methods.
  - ANSI/ANS 15.21, DOE-STD-3009, LMP/TICAP





## **Major Updates**

#### Long Lead Procurement Tailoring

- DOE Letter Allows for Applying a Graded Approach
  - QA Program Implementation
  - DOE Safety Submittals
- MFC-ADM-0200 Provides Details

DOE Guidance on Autonomous Controls

DOE Clarifying Guidance on SSC Classifications







### **Best Practices**

- Communications and Briefings
- Regular Touch-ups at All Appropriate Levels
- w Early Identification and Collaborative Resolution of Challenges
- >>> Clear Definition of Boundaries and Transferal of Roles
  - QA Program Implementation



## **Lessons Learned**



Intentional use of Digital Tools



Early Identification and Alignment on Specific Technical Challenges and Resolution Pathways



Level of Maturity for Deliverables



Establishment of Detailed Schedules and Visibility to All Affected Stakeholders



Early Alignment and Expectations for Design Phases



Interface Details Have to be Thought Through and Documented Well



