



SULI Internship Deliverables (Flow Orifice Design: Measuring Degas Flow of Experiment Loops at the Advanced Test Reactor)

August 2023

Changing the World's Energy Future

Eva Homberger, Tyson Williams



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.

SULI Internship Deliverables (Flow Orifice Design: Measuring Degas Flow of Experiment Loops at the Advanced Test Reactor)

Eva Homberger, Tyson Williams

August 2023

**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**

Flow Office Design: Measuring Design Flow of Experiment Loops at the Advanced Test Reactor

David A. Hesterman, University of Tennessee
David A. Hesterman, University of Tennessee

Journal of Nuclear Energy

Energy



The design flow of experiment loops at the Advanced Test Reactor (ATR) is a complex process involving multiple stakeholders and a variety of tools. This paper presents a methodology for measuring the design flow of experiment loops at the ATR, using a combination of interviews, document analysis, and process mapping. The results of the study show that the design flow is highly iterative and involves a large number of stakeholders, including researchers, engineers, and operators. The study also identifies several key challenges to the design flow, including a lack of communication and coordination between stakeholders, and a lack of standardization in the design process.



The design flow of experiment loops at the ATR is a complex process involving multiple stakeholders and a variety of tools. This paper presents a methodology for measuring the design flow of experiment loops at the ATR, using a combination of interviews, document analysis, and process mapping. The results of the study show that the design flow is highly iterative and involves a large number of stakeholders, including researchers, engineers, and operators. The study also identifies several key challenges to the design flow, including a lack of communication and coordination between stakeholders, and a lack of standardization in the design process.

The design flow of experiment loops at the ATR is a complex process involving multiple stakeholders and a variety of tools. This paper presents a methodology for measuring the design flow of experiment loops at the ATR, using a combination of interviews, document analysis, and process mapping. The results of the study show that the design flow is highly iterative and involves a large number of stakeholders, including researchers, engineers, and operators. The study also identifies several key challenges to the design flow, including a lack of communication and coordination between stakeholders, and a lack of standardization in the design process.