MARVEL Technology Review

You are invited to participate in the third annual MARVEL Technology Review Hybrid Meeting on March 7, 2024, from 9:00 am to 5:00 pm MT, at Idaho National Laboratory, Engineering Research Office Building (EROB), 2525 Fremont Ave, Idaho Falls, Idaho, Conference Room 159B or *virtually using the link below*.

The Microreactor Applications Research Validation and Evaluation Project (MARVEL) is a DOE Microreactor Program-sponsored research effort led by Idaho National Laboratory, in collaboration with Los Alamos National Laboratory and Argonne National Laboratory, to demonstrate microreactor technology and application integration. It will be the *FIRST* microreactor connected to and powering a microgrid! The MARVEL team would like to share their experiences and progress with the broader stakeholder community.

The objective of this event is to provide an update on MARVEL's technical progress in 2023 as we move toward initial operation in the 2026 timeframe.

TEAMS Virtual attendance: MARVEL Technology Review LINK

Please send the following information to lori.braase@inl.gov by February 28 if you are a *U.S. Citizen* and would like to *attend in person.*

You will receive confirmation or of your attendance by March 1. If you don't, please contact Lori Braase.

U.S. Citizens:

- Full Name, email, and cell phone number
- Title/Company Name and Address
- CV or Bio
- Dietary Restrictions
- Bring your identification with you for badging.



Microreactor Program website - https://gain.inl.gov/SitePages/MicroreactorProgram.aspx



MARVEL Technology Review Agenda March 7, 2024; 9:00 am – 5:00 pm MT

| MT | Topic | Presenter |
|-----------------------|--|--------------------------|
| 9:00 am | Welcome / Logistics | Lori Braase |
| 9:05 am | Microreactor Program Overview | Diana Li, DOE-NE |
| | | John Jackson, |
| | | Microreactor Program NTD |
| | MARVEL Overview & Status | |
| 9 <mark>:20</mark> am | 90% Final Reactor Design/FY23 Progress | Mike Patterson |
| | Fission & Safety | |
| 9:35 <mark>am</mark> | Neutronics | Travis Lange |
| 10:30 <mark>am</mark> | Fuel Performance Evaluation | Jordan Evans |
| 11:00 am | Thermal Hydraulics & Safety Basis | Carlo Parisi |
| 11:30 am | ASME Section III, Div. 5 analysis | Cody Hale |
| 12:00 pm | Lunch on your own | |
| | Utilization | |
| 1:15 pm | Microgrid | Porter Hill |
| | Reactivity Controls | |
| 1:45 pm | Control Drum and Shutdown Rod | Tony Crawford |
| | Construction & Assembly | |
| 2:15 pm | Final Assembly and Construction | Liliana Leal (Walsh Eng) |
| | MARVEL Reactor Technology | |
| 3:00 pm | Readiness & Startup Testing | Abdalla Abou Jaoude |
| 3:30 pm | MARVEL Software Design Lessons Learned | Andrew Heim |
| 4:00 pm | Advanced Sensor & Controls Deployment | Pattrick Calderoni |
| 4: <mark>30 pm</mark> | Open Forum / Q&A | John Jackson |
| | - " | Lori Braase |
| 5:00 pm | Adjourn | |



Braase 8Feb24