Three Mile Island Unit 2 Decommissioning

Bureau of Radiation Protection September 26, 2025





BRP Involvement

- This presentation is from the viewpoint of the Bureau of Radiation Protection (BRP).
- BRP does not have regulatory authority of the radiologically licensed activities for the decommissioning.
- Radiologically licensed activities are regulated by the Nuclear Regulatory Commission (NRC).
- The Radiation Protection Act requires BRP to provide a comprehensive environmental monitoring program.
- It also requires BRP to be involved with waste tracking at the site.



Crane Clean Energy Center

Formerly TMI- Unit 1

The reactor is owned by Constellation.

Fuel was moved to the Independent Spent Fuel Storage Installation (ISFSI) in December 2022.

The site was planned to remain in SAFSTOR until 2075, with license termination occurring in 2079. Site restoration was planned for 2081.

Restart of the Reactor

TMI- Unit 1 was renamed Crane Clean Energy Center (CCEC) in 2024 when it was announced that it would be restarted.

The planned restart is for 2027, with Constellation pursing license extension to at least 2054.

Public Information

NRC License Information-

https://www.nrc.gov/infofinder/reactors/ccec.html

The NRC anticipates having public meetings every 6 months.



Decommissioning

The reactor is owned by TMI-2 Solutions, a subsidiary of EnergySolutions.

TMI-2 Solutions partnered with Jingoli to help manage the decommissioning construction aspects.

The site transitioned to active decommissioning in 2023.

TMI Status- Unit 2

Fuel-Bearing Material Recovery

Current operations are to recover fuel-bearing material and reduce the source term.

These operations are expected to continue into 2029.

Fuel Storage

Fuel-bearing material will be stored on an ISFSI adjacent to the Unit 1 ISFSI until the Department of Energy takes possession of it.

Additional source-term reduction in this phase will see waste of various types packaged and shipped for offsite disposal.



Construction of ISFSI



Construction of the ISFSI for fuel-bearing material has neared completion.

14 casks will be placed on the ISFSI.



Current Activities

- Completed widening the equipment hatch to allow access with larger equipment.
- Constructing a Decommissioning Support Building.
- In the process of remediating some high-radiation areas using remote equipment.



Decommissioning Work



Enlarged Equipment Hatch



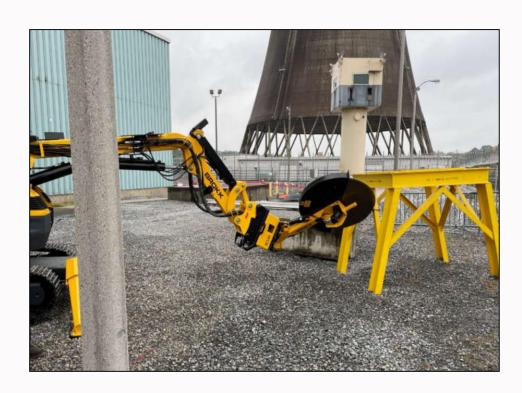
Decommissioning Support Building



Decommissioning Work



Video-Monitored Remote Work



Robotic Equipment Training



Radioactive Waste Shipments



Low-level radioactive waste shipments have continued to be sent to EnergySolutions in Clive, Utah.

Roughly 23 shipments have been made this year (mostly intermodals), and possibly an additional 24 shipments will be sent this year.



BRP's Role

- BRP participates in routine meetings associated with the TMI Unit 2 cleanup including:
 - weekly calls
 - monthly meetings with NRC's project staff and inspectors
 - Decommissioning Nuclear Safety Review Board meetings
 - Community Advisory Panel Meetings
 - Facilitates as needed between TMI Unit 2 and other regulatory parts of the department.



BRP's Role

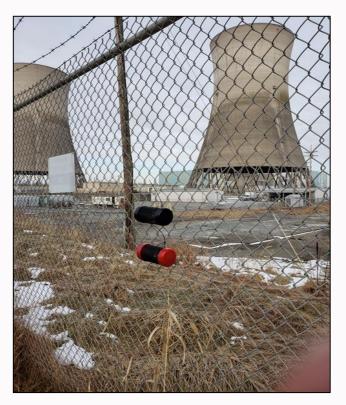
- BRP continues to perform its routine Radiological Environmental Monitoring Program (REMP). Changes will be evaluated based upon both unit's future REMP.
- Currently, CCEC's program remains the same.
- Unit 2's REMP is focused mostly in areas of the current work.
- CCEC is currently evaluating its monitoring program prior to startup.
- BRP will adjust our REMP as needed.



REMP Photos



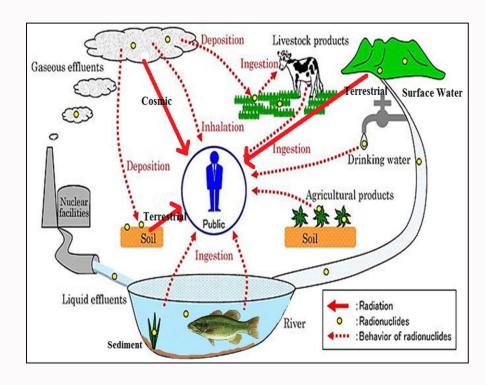
Monitoring Locations



Dosimeter Placement Example



REMP Photos



Exposure Pathways



Air Sampler Housing



Get In Touch

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