

Lessons Learned On The La Crosse Boiling Water Reactor Decommissioning Project

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La Crosse Boiling Water Reactor



- AEC Demo. Reactor
- Allis-Chalmers Co.
- AKA “The Tractor Reactor”

LACBWR Background

- Located on the Mississippi River near La Crosse, WI
- Co-located with an Operating Coal-fired Power Plant
- Permanently Ceased Operations in April 1987
- Reactor Defueling Completed in June 1987

Regulatory History

- AEC Sold Plant to Dairyland Power Cooperative (DPC)
- Provisional Operating License Granted in August 1973
- License Amended to Possession Only in August 1988
- LACBWR Decommissioning Plan (DP) Approved in August 1991

Recent Regulatory Activities



- Spent Fuel Elements to Dry Cask Storage in September 2012
- Reactor Vessel and Major Components Removed by 2015
- Possession Only License Transfer from DPC to La Crosse Solutions (LS) in May 2016 to complete the decommissioning
- LTP Amendment, Safety Evaluation, and Environmental Assessment Issued in May 2019
- Final Status Survey for License Termination in 2020

Key Lessons Learned

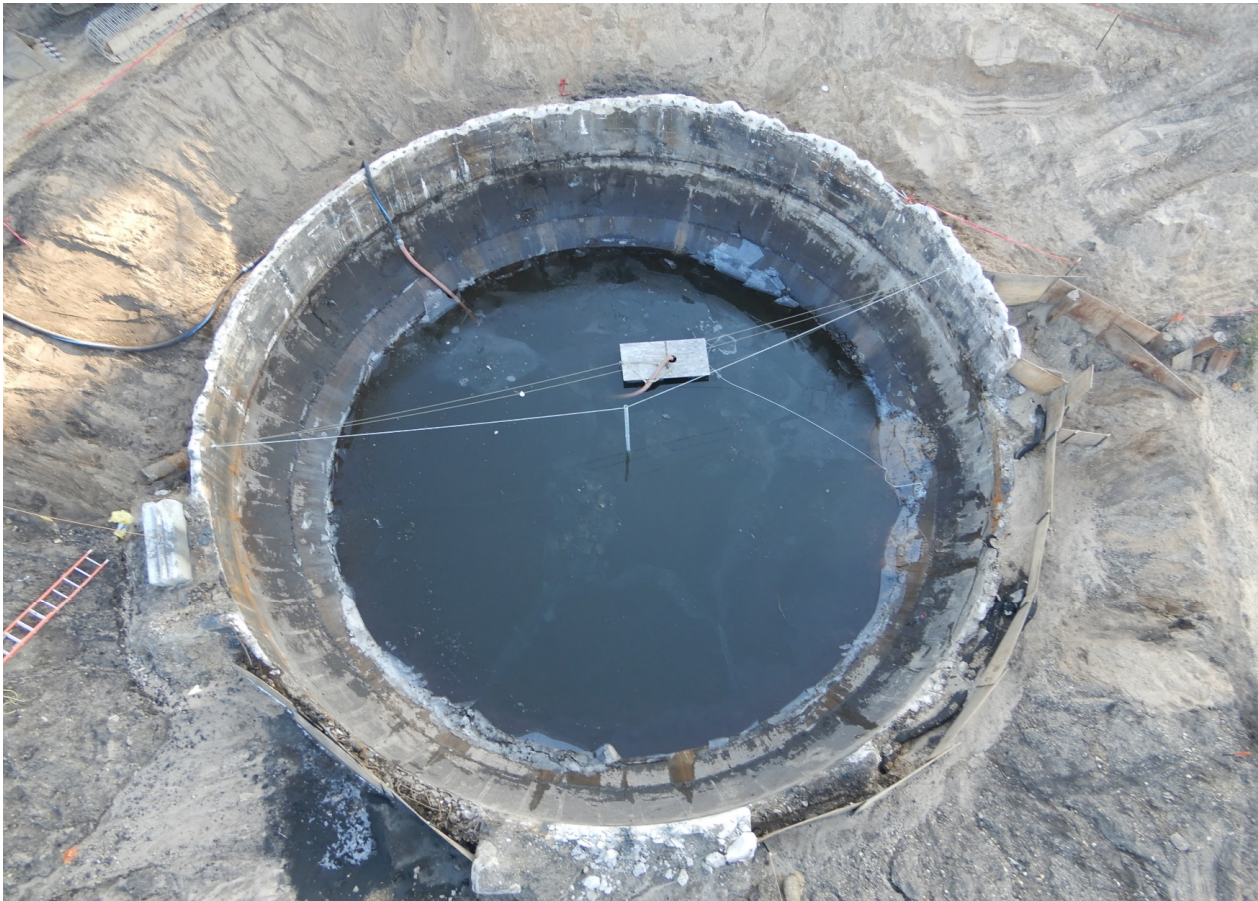


- Modifications or Alternatives to Current NRC Decommissioning Guidance (i.e., MARSSIM, RESRAD, etc.) May Require Additional Staff Review Time
- New Decommissioning Approaches Without Adequate Supporting Information to Evaluate Technical Basis May Require Additional Staff Review Time
- Coordinate with the NRC and Other Stakeholders Early in the Decommissioning Process to Identify Potential Timeline Impacts

LACBWR Containment



Reactor Building Foundation



Reactor Building Foundation



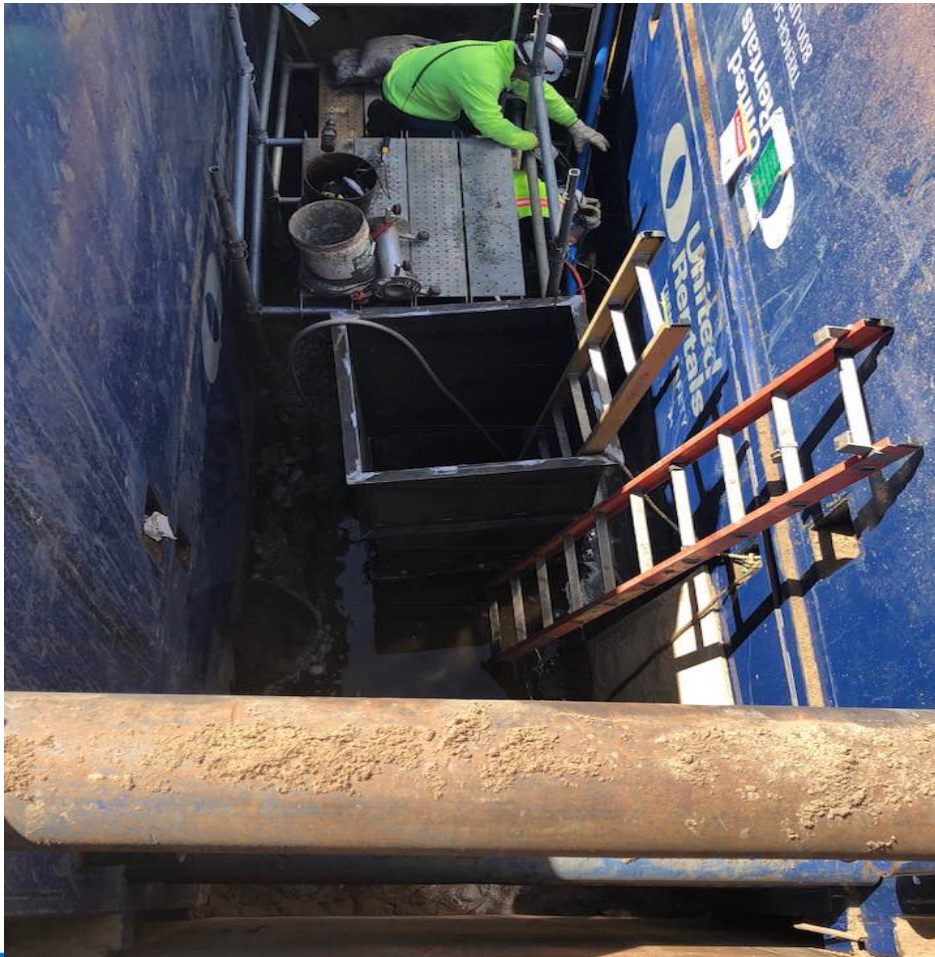
Reactor Bowl Water Intrusion



Containment Venting – Tritium Release



Circulation Water Discharge Pipe



Conclusions

- Although Alternative Decommissioning Approaches Can be Proposed, the Increased Review Time for Methodology and Dose Modeling Differing from the MARSSIM and RESRAD Guidance May be Significant
- Submissions Lacking Sufficient Detail to Establish the Technical Basis of Alternative Approaches May Require More Substantial Requests for Additional Information

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