



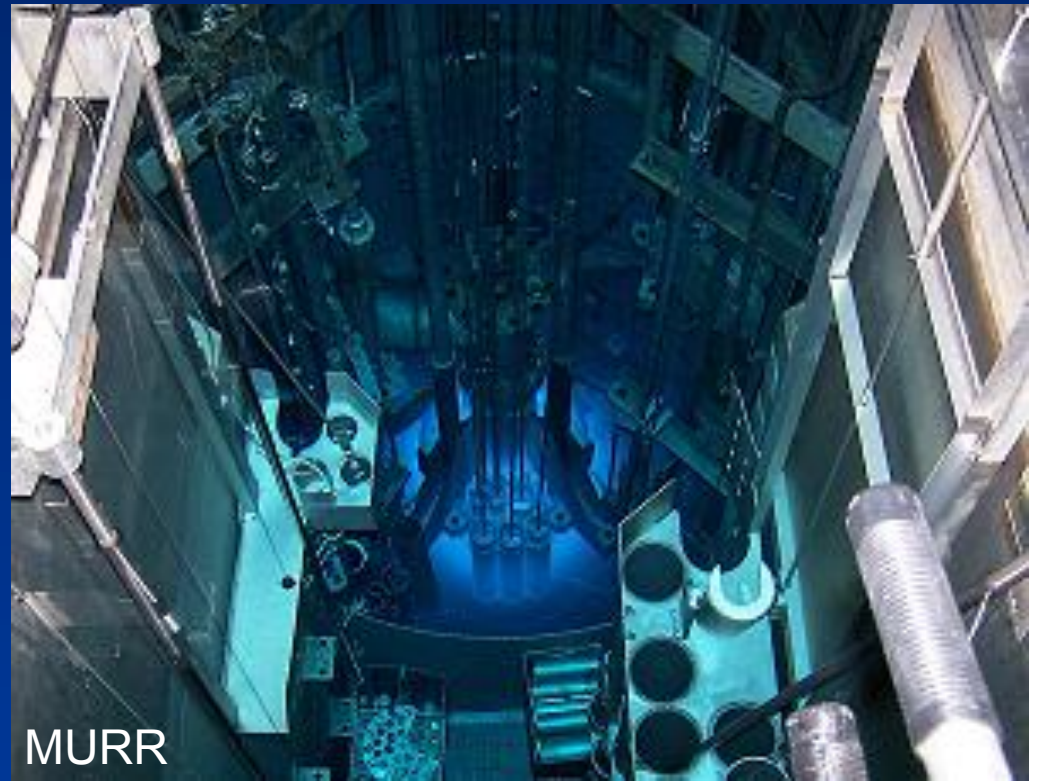
# High-Enriched Uranium (HEU) to Low-Enriched Uranium (LEU) Conversion Status

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- Licensing Civilian Use of HEU
- Conversion Timeline
- Conversion Process
- Summary





## Licensing Civilian Use of HEU

- NRC requires licensees of non-power reactors, who were authorized to possess and use HEU to convert from HEU to LEU fuel if federal funding is available
- Four remaining sites currently operate with HEU
  - GE Hitachi,
  - MIT, NIST and MURR (HPRRs)
- High Performance Research Reactors (HPRR) will be converted to LEU when suitable fuel becomes available
- Estimated HPRR conversion completion for 2015



## Conversion Timeline

- 1982 – Commission policy statement on conversion
- 1984 – Conversion of University of Michigan as Reduced Enrichment for Research and Test Reactors (RERTR) program demonstration
- 1986 – Commission issues 10 CFR 50.64 Conversion Rule
- 1987 to 1988 – Commission issues generic fuel safety evaluation reports for TRIGA, silicide plate and SPERT LEU fuel
- 1988 to 2009 – Commission approves the conversion of 16 non-power reactors from HEU to LEU fuel
- 1996 – Commission issues acceptance criteria for HEU to LEU conversions (NUREG-1537)
- 2009 – A joint Obama-Medvedev statement to continue to minimize civilian use of HEU
- 2015 – Current DOE-National Nuclear Security Administration (NNSA) estimated date to complete conversion of NRC-licensed HPRR

## Conversion Process

- DOE-NNSA provided funding for conversion for HPRRs
- NRC will review the U-Mo fuel under development by NNSA to determine if it is suitable for use in NRC-licensed reactors
- NRC will review (if needed) any new fuel fabrication facilities needed to produce the new U-Mo fuel
- NRC will, after review, issue an enforcement order directing the conversion and any necessary changes to the license, facility and procedures



## Summary

- Safety always over schedule
- NRC working closely with DOE-NNSA
- NRC committed to completion of HPRR conversions
- NRC continues to support U.S. non-proliferation policies and the mission of RERTR