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# Reactor Decommissioning Overview

Division of Spent Fuel Management

REG CON 2016

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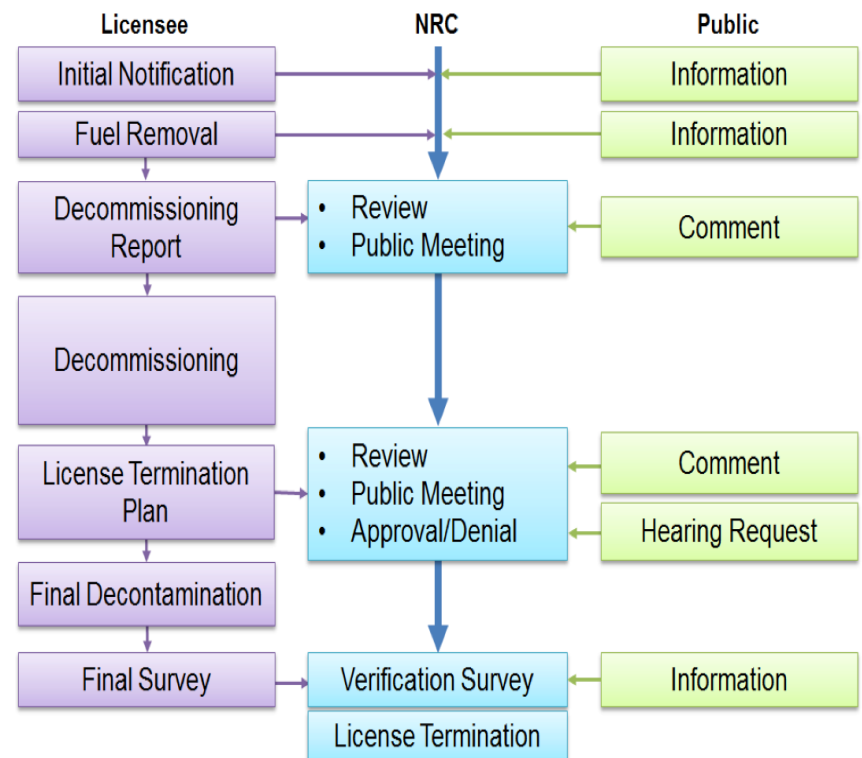
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# Decommissioning Program Regulatory Framework

## Decommissioning Program

- Statutory authority
  - Integrated Decommissioning Program
- Comprehensive regulations:
  - Public involvement
  - Environmental review
  - Financial assurance
  - Site characterization
  - Site remediation/Radiological clean-up
  - Final site surveys
- Regulatory guidance
- Oversight and inspection

## Decommissioning Process



# Recent Premature Power Reactor Shutdowns



# Zion 1 & 2 - Progress and Expected End Point



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# Reactor Decommissioning Program Status

- 10 power reactors have terminated their licenses and have been released for unrestricted use
- 20 power reactors in decommissioning
  - 6 power reactors in active DECON or active dismantling:
    - Zion 1 & 2, Humboldt Bay 3, LaCrosse, and San Onofre 2 & 3
  - 13 power reactors in SAFSTOR or deferred dismantlement
  - Fort Calhoun ceased operations October 24, 2016 and is expected to select SAFSTOR
- 6 power reactors have announced they will permanently cease operations by 2019.
  - FitzPatrick<sup>1</sup>, Pilgrim, Oyster Creek, Clinton, and Quad Cities 1 & 2
- Additional near term shutdowns are possible

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<sup>1</sup> Current negotiations on the potential sale of FitzPatrick, pending approvals from State and Federal agencies, may prevent shutdown

# Connecticut Yankee

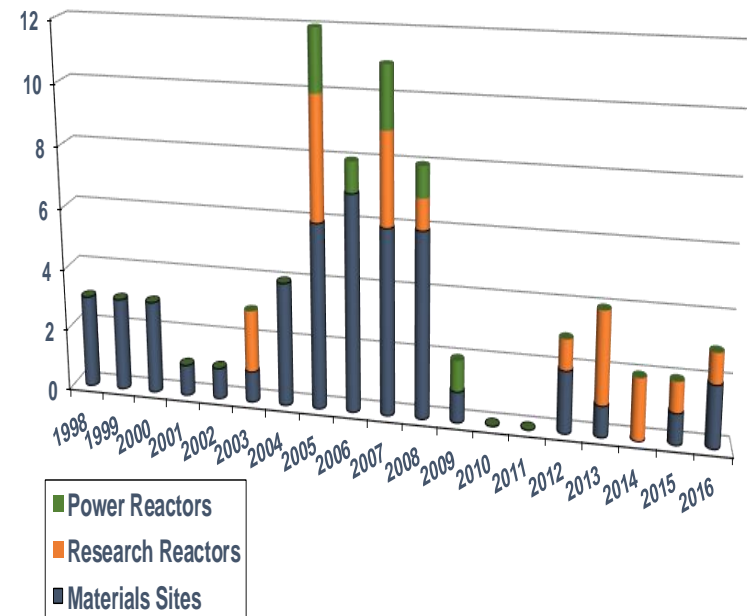


# Summary & Conclusion

## Decommissioning Program

- NRCs decommissioning program is a successful and internationally recognized program
- NRC power reactor decommissioning is expanding as more shutdowns are anticipated
- Several regulatory issues to improve the efficiency of reactor transitioning from operation to decommissioning are being addressed in rulemaking
- Lessons learned continue to inform the regulatory guidance

## License Terminations Since 1997



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# Reactor Decommissioning Branch



**Carpe Cesium**

AKA,  
*The Dead Reactor Society*

