Accident Tolerant Fuel Industry Working Group

NRC Commission Briefing

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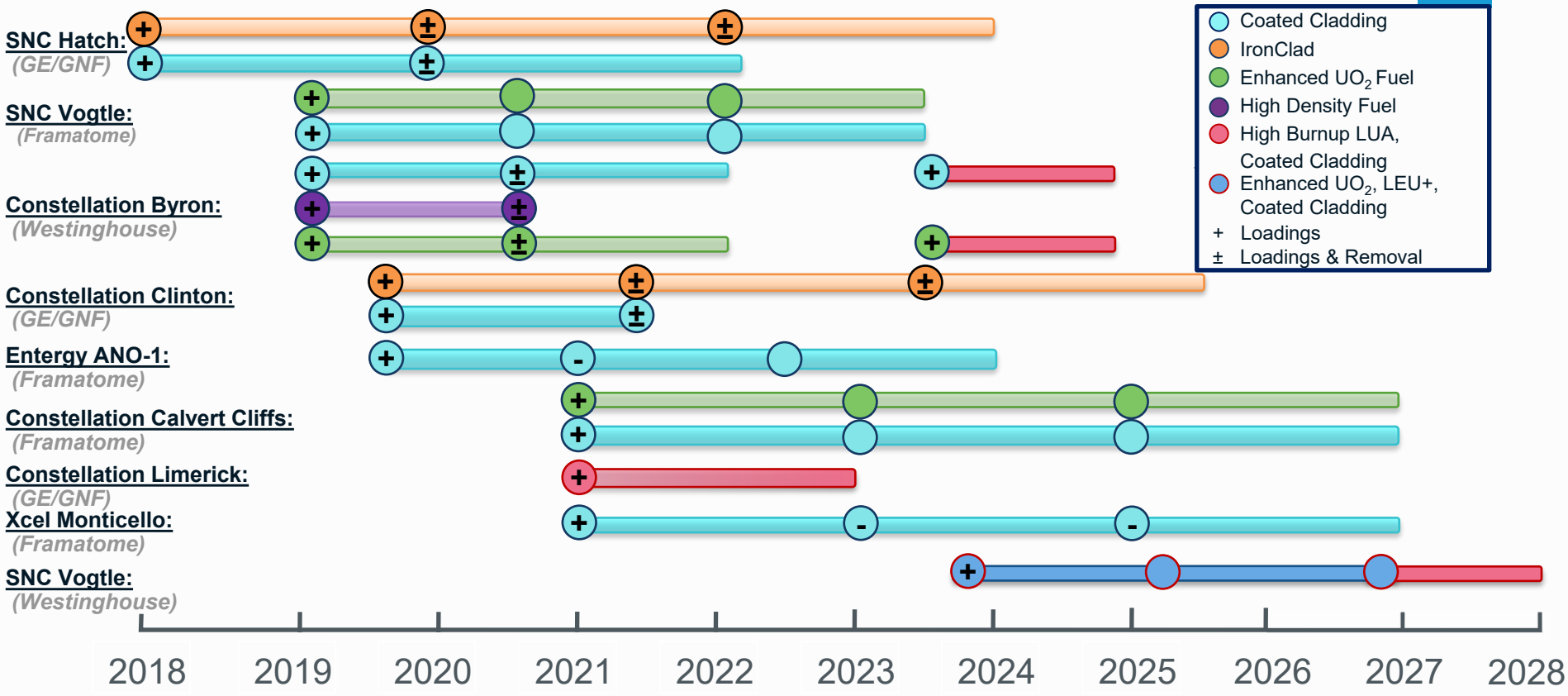
Industry Strategic Aspirations

- Develop and deploy fuel technologies that enhance accident tolerance and provide operational resiliency while enabling sustained economic performance through minimizing cost and improving efficiency
- Safely and economically enable 24-month cycle operation for the entire fleet of existing light water reactors:
  - Burnups up to ~75 GWd/MTU
- Achieve fuel licensing infrastructure to support burnup and enrichment extensions (LEU+) beyond legacy limits in the mid-2020s
- Commercialization and economies of scale of these advanced fuel technologies through sustainable volumes to meet the domestic and global demand

Key U.S. ATF/LEU+/HBU Commercial Testing



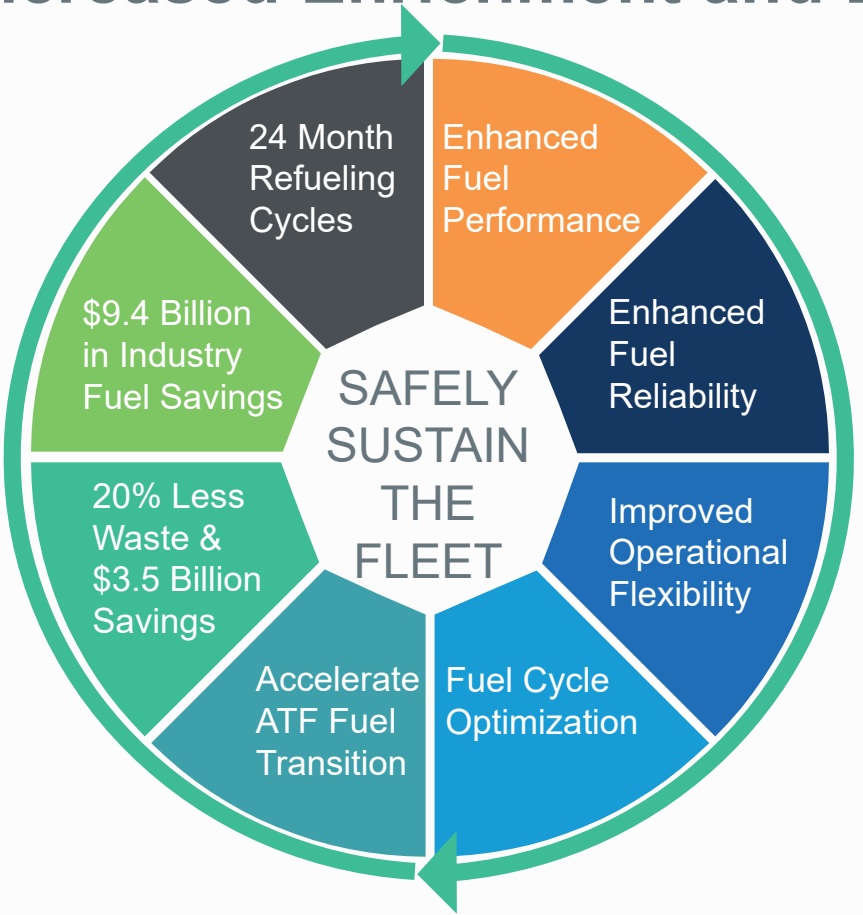
Regulatory Infrastructure

- Industry appreciates NRC's attention and focus on developing a more effective ATF/LEU+/HBU licensing pathway
- A more streamlined and improved regulatory infrastructure is essential to provide greater clarity, efficiency, predictability, and stability
- A holistic modernized, technology neutral, and performance-based regulation could accelerate fuel licensing and support industry's strategic aspirations for ATF/LEU+/HBU

ATF Deployment with Increased Enrichment and Burnup

IMPROVED PLANT ECONOMICS

HIGHER FUEL EFFICIENCY



ENHANCED SAFETY & PERFORMANCE

LESS WASTE

