

NRC Commissioner Briefing on Subsequent License Renewal

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Today's Briefing

- Second License Renewal – Bridge to the Future
- Key Safety Principles Maintained
- Process Optimization
- Moving Forward



Nuclear Plants Are Critical Infrastructure

- U.S. has the largest and best-run fleet of nuclear power plants in the world
- Generate 20% of America's electricity overall; 62% of emissions-free electricity
- Like other infrastructure, nuclear plants provide tremendous benefits for nearly a century
- Nuclear energy needs to be included in any plan to rebuild America

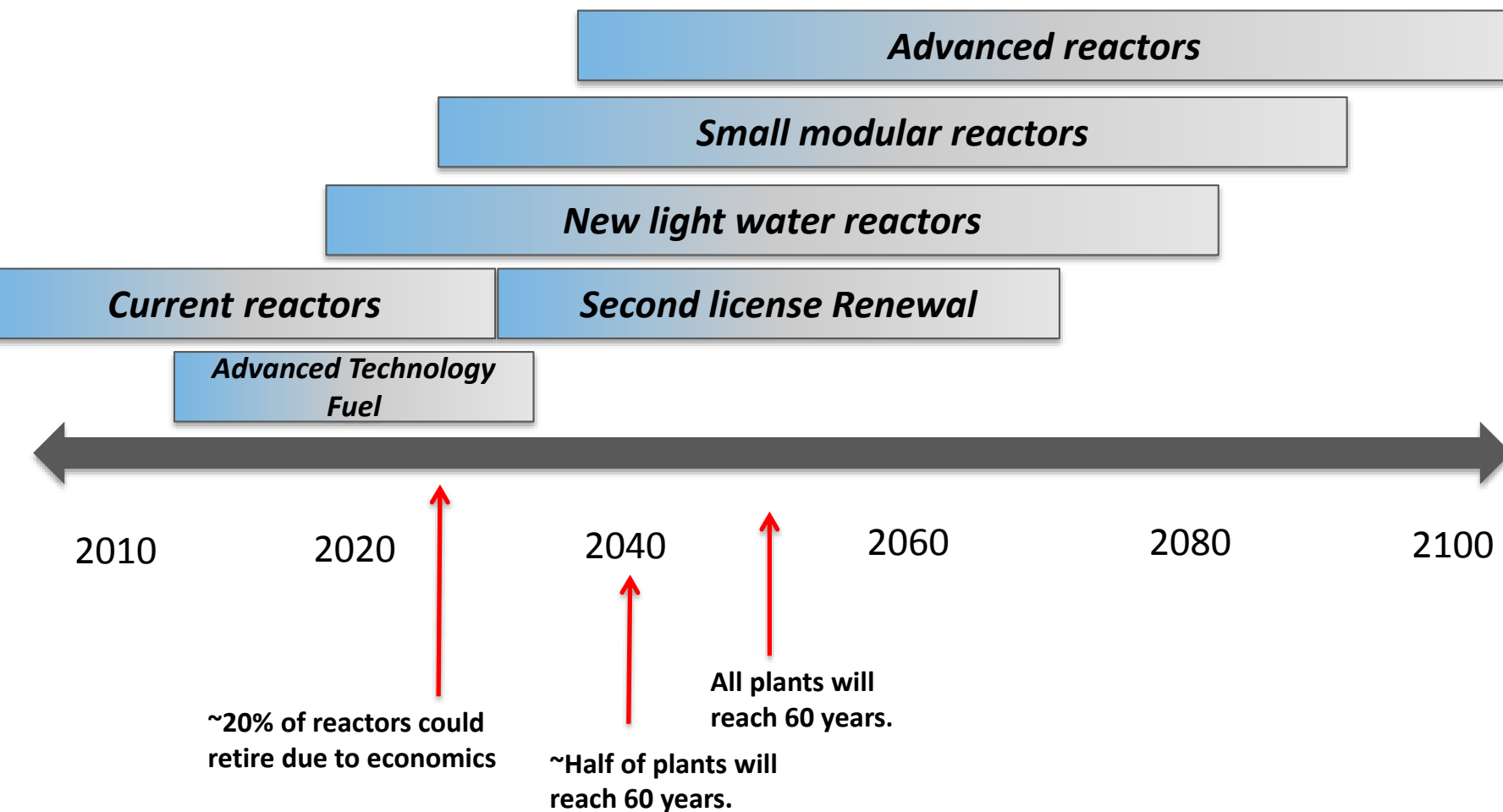


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Defining Our Future: A Logical Progression



Key Principles for License Renewal

- **Current regulatory process** is adequate to ensure that the licensing basis of all operating plants provides and maintains an **acceptable level of safety** so that operation will not be detrimental to public health and safety or common defense and security
- Each plant's licensing basis is required to be **maintained during any renewal term** in the **same manner and to the same extent** as during the original licensing term

Regulation is Sound

- 10 CFR Part 54 anticipates further rounds of License Renewal
- Existing regulatory processes ensure safe operation
 - 10 CFR 50, Appendix B
 - Aging Management Programs
 - Maintenance Rule
 - Reactor Oversight Process
 - Design basis is maintained
- Process proven through experience, **86** with renewed license, **42** reactor units in PEO (approx. 128 reactor years in PEO)
- Reliable, predictable process

Regulatory Guidance is Sound

- Significant Industry input to NRC as SLR GALL report was prepared over the last three years
 - Comprehensive industry comments submitted on the draft GALL in February, 2016
 - Industry participated in nine GALL-focused public meetings with NRC in 2016 to resolve industry comments
- Final SLR GALL Report provided for stakeholder review Feb. 8
- NEI/industry completed development of NEI 17-01 guidance for preparing a license renewal application and submitted for NRC endorsement in March
- Part 54 Environmental Review
 - Draft “*Model SLR New and Significant Assessment Approach for SAMA*” submitted to NRC to improve Environmental Review Process

SLR Research

- Research and data being collected at EPRI, DOE and other facilities in U.S. conclude there are no technical “show stoppers” for operation beyond 60 years
- NRC has participated in seven NEI organized SLR site visits since 2015
 - Salem/Hope Creek Station, Oak Ridge National Lab, EPRI, Pacific Northwest National Lab, AREVA, Westinghouse and University of Tennessee
 - Site tours and presentation focused on aging management programs for concrete, cables and metal

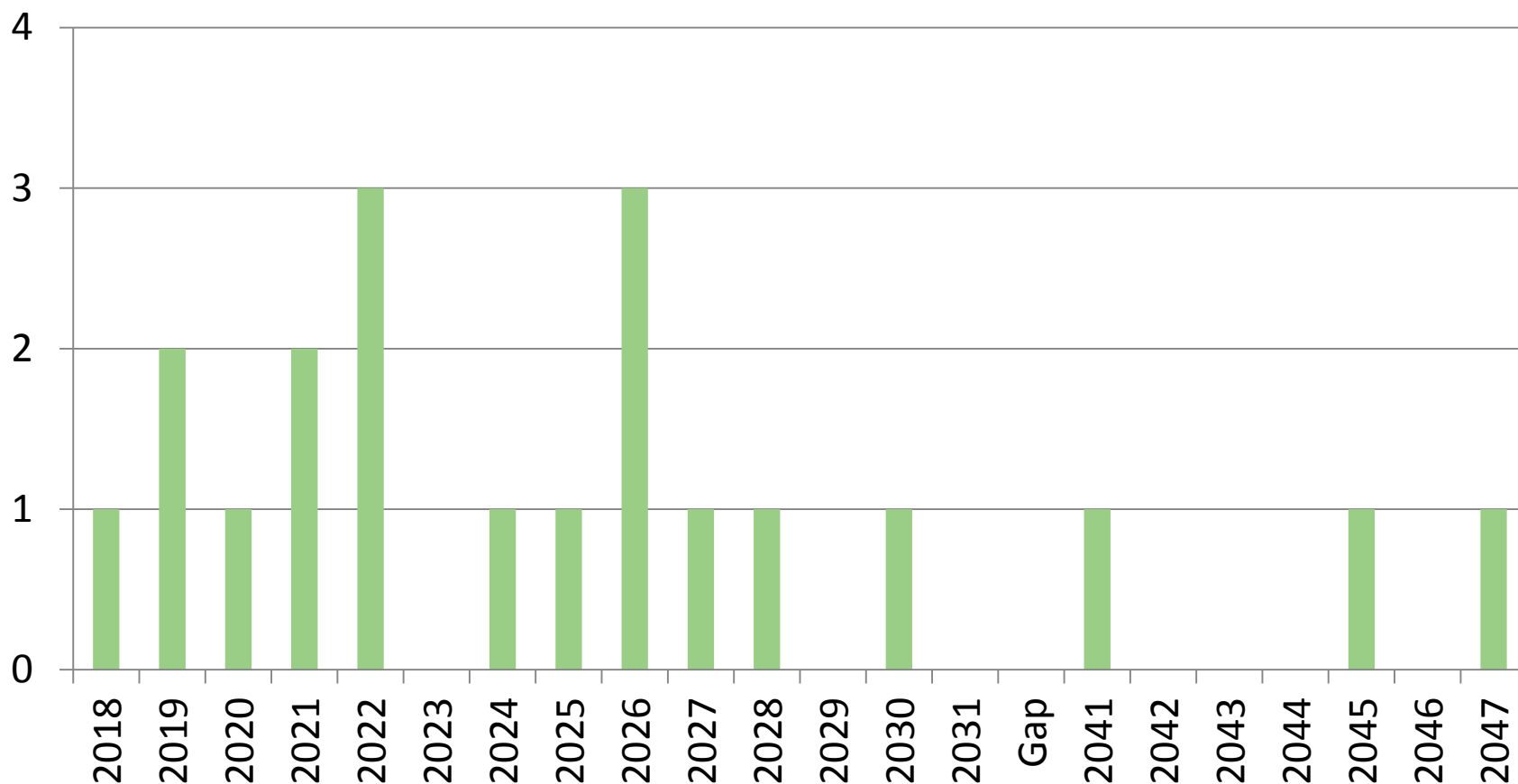
SLR Application Optimization

- Industry participated in three public meetings with NRC
- Commitment to 18-month safety and environmental application review
- Application of lessons learned from first round of License Renewal to improve application efficiency
 - Improved resource allocation and schedule coordination
 - Increased use of electronic communication tools
 - Elimination of redundancy - scoping meeting
 - Peer reviewed applications and RAI discipline
- Final meeting to address SLR application optimization on May 11

SLR Lead Plant Update

- Peach Bottom on track for BWR application submittal 3rd quarter 2018
- Surry Station on track for PWR application submittal 1st quarter 2019
- Industry aligned in commitment to dedicating resources needed for success of lead plant SLR applications
- Industry survey conducted in May 2016 to determine how many plants may take advantage of SLR in the future

Anticipated SLR Applications Per Year



Summary

- Technical data and research of aging management programs support SLR
- SLR GALL incorporates lessons learned from first round of license renewals
- NRC committed to optimizing application review process to accomplish an 18-month review
- Lead plants on track for 2018 and 2019 application submittals
- SLR applications must be of the highest quality to ensure 18-month NRC review goal can be met
- Plant safety is and will be maintained throughout licensed period