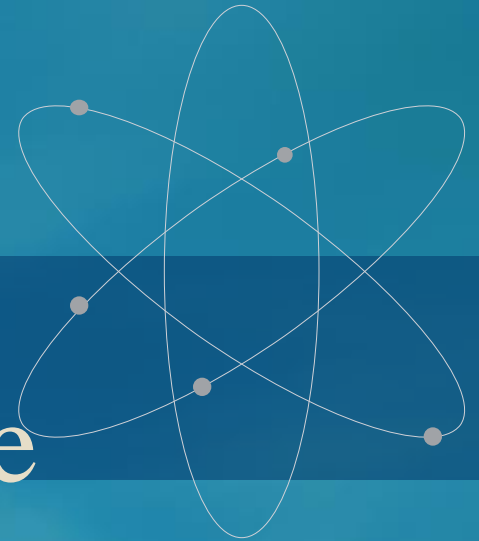


# TIA 2014-01

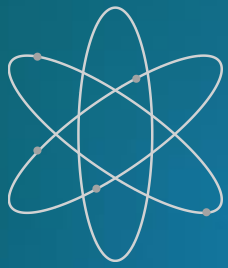
# Design/Service Life



Fall 2015 EQ Technical Conference  
Nuclear Utility Group on Equipment Qualification  
November 4-6, 2015  
Clearwater, Florida

**William Horin, Winston & Strawn, LLP (Counsel to NUGEQ ([whorin@winston.com](mailto:whorin@winston.com)))**

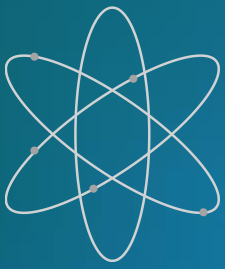
**Ron Wise, NEQ Consulting (NUGEQ Technical Consultant ([ronwise@aol.com](mailto:ronwise@aol.com)))**



# TIA 2014-01

## Design/Service Life

- Previously discussed with the Group in EQ Webinars and EQ Web Meeting
- Recent updates to NRC TIA review and actions
- Brief update and status provided here



# TIA 2014-01

## Design/Service Life

Task Interface Agreement – "Regulatory Position on Design Life of Safety Related Structures, Systems, and Components," May 7, 2015

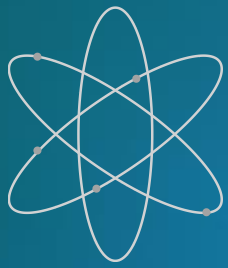
Concerns inspection issues at DC Cook, Monticello and Palisades

Broad topic statement

- "...structures, systems, and components (SSCs) that were in operation beyond the service life specified in vendor manuals, vendor correspondence or Certificates of Compliance..."

Broad application

- "...existing regulatory position as determined by Region III and the Office of Nuclear Reactor Regulation (NRR) regarding safety-related SSCs that have been in service longer than their documented service life, as specified in the licensee's 10 CFR 50.2 design basis..."

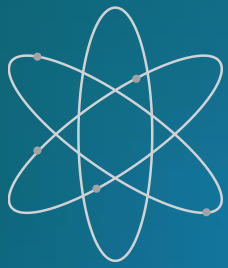


# TIA 2014-01

## Design Service Life

### TIA Background

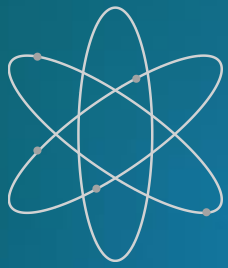
- Apparently intended by some staff to address broad issue concerning "Smart Sample" issue from 2010 related to failures that occurred before reaching a vendor service life.
- Focus not limited to issues at plants.
- Applicability framed as SSC's in mild environments, although language, logic and principles expressed in TIA present concerns for broader application in "design," "service," "qualified" life contexts



# TIA 2014-01

## Design Service Life

- Analysis premised on establishment of service life as reflected in vendor documentation as part of the design basis.
  - Reliance on Criterion III, "Design Control"
  - Reliance on Generic Letters (83-28, 90-03) related to Vendor Interface of Safety-Related Components
- Result of TIA analysis is that a vendor recommended service life is treated as a design basis parameter, and that .....
  - "When a licensee becomes aware that a safety-related SSC's service life has been exceeded or information challenges the presumption that a safety-related SSC can perform its specified function(s), the licensee must promptly address and document this nonconforming condition in accordance with the licensee's operability/functionality and corrective action programs" and take measures that "restore full qualification with the current licensing basis or modify the current licensing basis.."



# TIA 2014-01

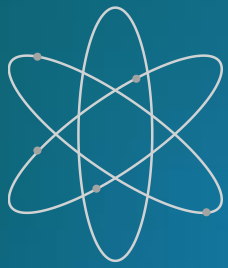
## Design Service Life

### TIA Status

The NRC, after further internal review, withdrew the TIA.  
Withdrawal not yet in ADAMS.

Ongoing effort to develop Regulatory Issue Summary (RIS) to address aging management of active safety-related components

Revision to the TIA procedure has been accomplished.



# TIA 2014-01

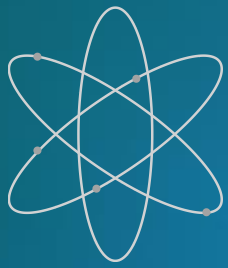
## Design Service Life

- NRC did not withdraw enforcement actions premised on withdrawn TIA.
  - Affected licensees have addressed the enforcement issues independently of TIA status.

### Excel Response, October 2, 2015

- Does not contest performance deficiency.
- Disagrees that the performance deficiency relates to Appendix B, Criterion III, "Design Control."
- Argues that Criterion V, "Instructions, Procedures, and Drawings" is more appropriate.



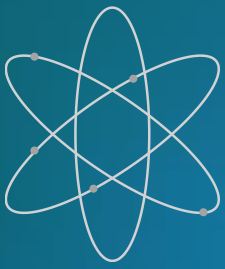


# TIA 2014-01

## Design Service Life

- Industry Response to TIA, Service Life Posture, Pending RIS
  - NEI letter, dated October 20, 2015, "Industry Position on the Role of Vendor Recommendations for Service Life of Safety-Related Components"
  - Apparent role of vendor recommendations in TIA, and anticipated RIS, considered by industry to "represent a significant expansion of regulatory requirements with respect to the definition of design basis information..."

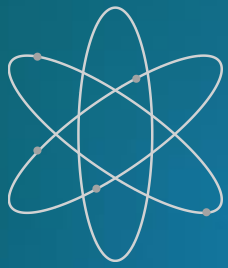




# TIA 2014-01

## Design Service Life

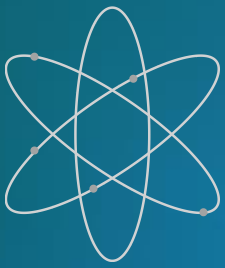
- Industry Position Paper Transmitted by October 20, 2015  
Letter
  - Deviations from vendor correspondence, vendor manuals or Certificates of Compliance regarding replacement or refurbishment intervals are acceptable under licensees' quality assurance programs, which address development and modification of maintenance schedules during the operational phase, when licensees have implemented other programs for development of preventive maintenance schedules including the EPRI PM Bases Database Program.
  - A nonconformance does not exist based only on the identification of safety related SSCs that are in operation for periods of time greater than the vendor recommended replacement or refurbishment intervals provided in vendor correspondence, vendor manuals or Certificates of Compliance.



# TIA 2014-01

## Design Service Life

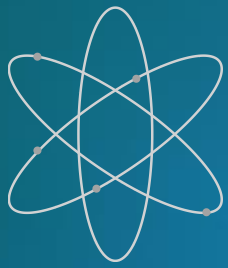
- Industry Position Paper Transmitted with October 20, 2015 Letter
- Licensees are required to develop and maintain maintenance schedules in accordance with the requirements of 10 CFR 50 Appendix B, Criterion V, Regulatory Guide 1.33, and the licensee's quality assurance program. Regulatory concerns should address the licensee's compliance with these requirements because vendor correspondence, vendor manuals or Certificates of Compliance related to replacement or refurbishment intervals are not 10 CFR 50.2 design bases or supporting design information.
- Licensees' reviews of the effectiveness of maintenance required by the Maintenance Rule should evaluate modifications to maintenance schedules to address unacceptable failures of safety related SSCs.



# TIA 2014-01

## Design Service Life

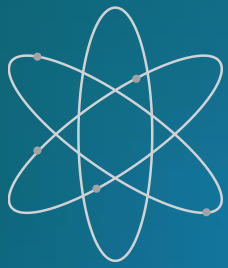
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# TIA 2014-01

## Design Service Life

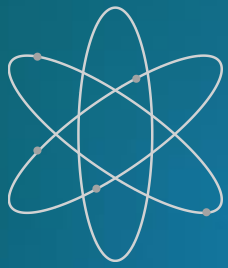
- Schedule for RIS uncertain
- NRC/NEI interaction related to the October 20, 2015, letter is likely prior to RIS



# TIA 2014-01

## Design Service Life

- Mixed NRC Enforcement History Since TIA
- Salem Inspection, Report issued July 28, 2015
  - Magne Blast breaker failure
  - Changed duty cycle frequency was not addressed in breaker maintenance and overhaul planning
  - NRC finding: NCV for "failure to establish appropriate breaker preventive maintenance periodicity", Criterion V (Instructions, Procedures, and Drawings) basis
  - Industry considers Criterion V basis and analysis appropriate

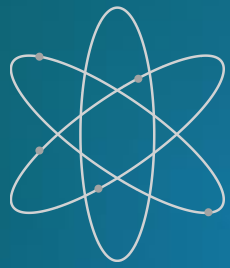


# TIA 2014-01

## Design Service Life

### Sequoyah

- Non-cited Green violation referenced at exit
- Cutler Hammer Breaker - Class 1E, non-harsh environment application
- NRC asserted a Criterion III violation, AND commented that the licensee had failed to establish a "qualified life" for the breaker
- TVA interim response was that this is non-EQ equipment, was not subject to EQ requirements, and that assurance of operability was provided through surveillance, maintenance, consideration of vendor recommendations. No regulatory requirement dictates a qualified life.
- NRC Inspection Report reflected same positions, TVA to respond.

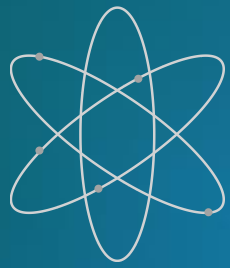


# TIA 2014-01

## Design Service Life

- Next steps not yet defined
- A number of questions remain to be resolved by the NRC regarding the proper context for considering vendor recommendations

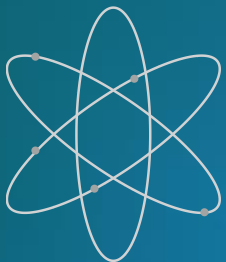




# TIA 2014-01

## Design Service Life

QUESTIONS?



# Presentation title