

RIC TH-26 Panel Discussion: Addressing Lessons Learned from 10 CFR Part 52 Licensing Experience

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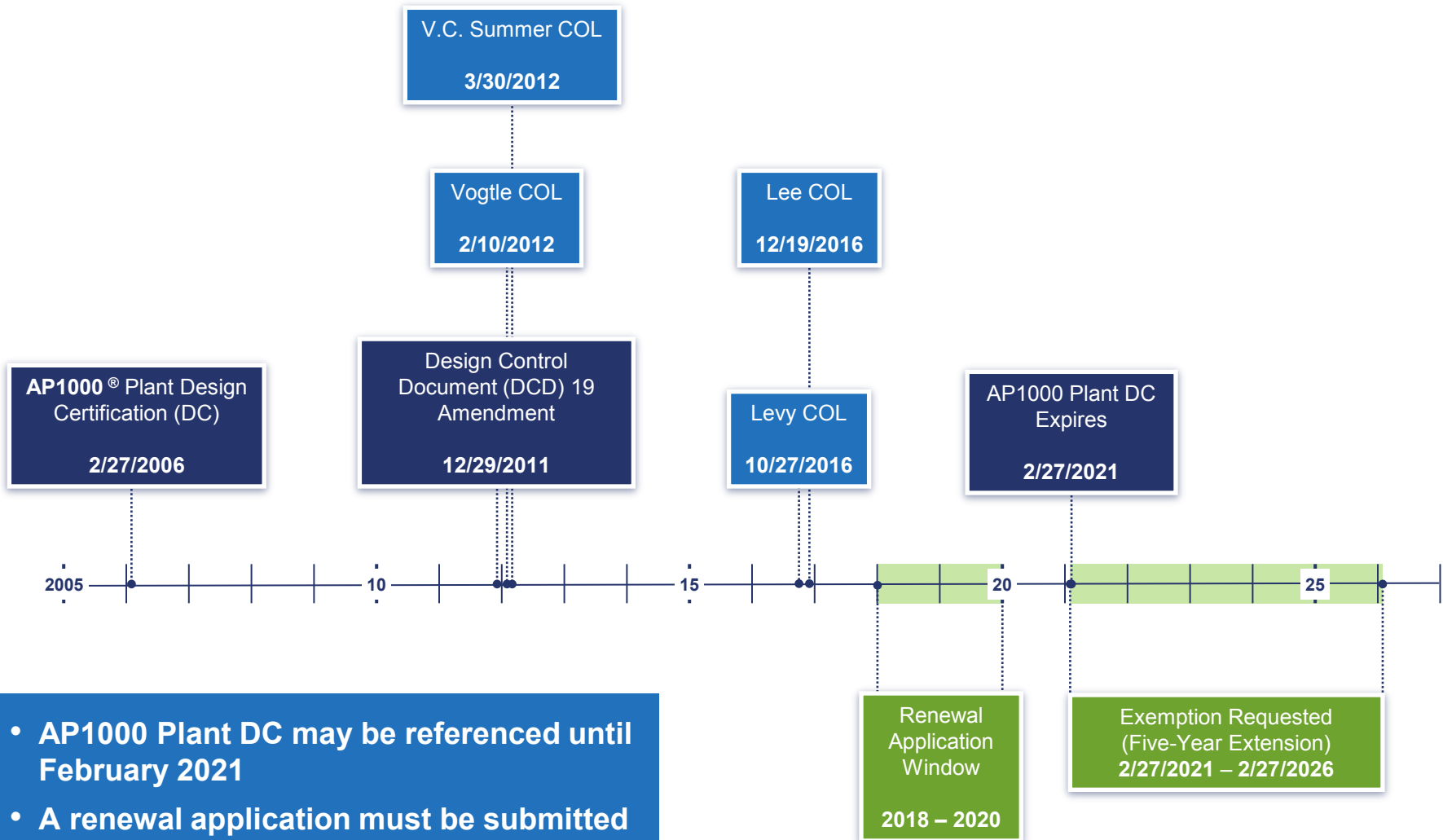
Agenda

- Introduction and Topic Selection
- Design Certification Renewal
- Licensing Basis Updates Prior to Construction
- T2* Simplification Implementation

Introduction and Topic Selection

- General list of topics related to 10 CFR Part 52 lessons learned
 - Design Certification (DC) and COLA
 - Through application, amendment and construction to renewal
 - Efficiency, predictability, effectiveness
- Topics chosen
 1. Design Certification renewal
 2. Licensing basis updates prior to construction
 3. T2* simplification and implementation

Design Certification Renewal Timeline



- AP1000 Plant DC may be referenced until February 2021
- A renewal application must be submitted no later than February 2020

Design Certification Renewal

- Exemption request submitted
 - Extend DC from 15 years to 20 years, expiring in February 2026
 - Enable complete identification and evaluation of lessons learned
 - No compromise to safety or security
 - Status: under NRC review
- Unique circumstances regarding DC renewal application/timing
 - Construction and startup will still be in process
 - Only Certified Design under construction
 - First Certified Design with a reference plant to face renewal

Following NRC review and decision

Licensing Basis Updates Prior to Construction

Construction must be in verbatim compliance with the current licensing basis

- “Construction” defined in 10 CFR 50.10

“Activities constituting construction are the driving of piles, subsurface preparation, placement of backfill, concrete, or permanent retaining walls within an excavation, installation of foundations, or in-place assembly, erection, fabrication, or testing, which are for ...”

Licensing Basis Updates Prior to Construction

Further guidance provided by ISG 25, “*Changes During Construction Under 10 CFR Part 52*”

“New nuclear power plant construction must be conducted in accordance with the combined license (COL) current licensing basis (CLB),¹ ... Other changes require a license amendment, an exemption, or both, and require NRC approval in advance of the construction² of the plant change or modification ... ”

¹ *In this ISG, the staff uses the term “current licensing basis” in the sense that the term is used in 50.54(f)*

² *Construction as defined in 10 CFR 50.10 is, in part, the in-place assembly, erection, fabrication or testing for specified SSCs*

Licensing Basis Updates Prior to Construction

- Significant challenge for new construction projects
 - Changes identified during design finalization and construction are normal and frequent
 - Related construction is halted (or re-sequenced) until CLB is updated
- ISG 25 Preliminary Acceptance Request (PAR) helpful
 - The staff has been very responsive in providing a **No Objection Letter** upon LAR Acceptance
- Construction delays still a significant challenge
 - PAR process reliant on LAR development and staff acceptance; best case four weeks – too long

**Possible solution:
Change CLB compliance to “prior to the
applicable ITAAC ICN and/or 103(g) finding”?**

T2* Simplification Implementation

- Changes to T2* information required prior NRC approval before implementation
- LAR count for current construction projects:
 - Approximately 135 currently identified
- Approximately one-fourth are changes exclusive to T2*

T2* Simplification Implementation

- NRC lessons learned identified reductions to T2* information as an opportunity for improvement
- Applied to future design certifications
- Not applicable to current design certifications and related COLs
- Significant opportunity to improve construction efficiency available by applying T2* reduction to current construction projects

Possible Solution:

Determine how industry and the Staff can reduce the T2* requirements for existing design certifications.

Thank you!