Vogtle Electric Generating Plant Units 3 & 4

Technical Specification Upgrade License Amendment Request

March 6, 2012

Technical Specification Upgrade License Amendment Request (TSU LAR)

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Introduction

- Presenters:
  - Wes Sparkman, SNC Licensing Supervisor
  - Pareez Golub, EXCEL Services
  - Dan Williamson, EXCEL Services
- Purpose of meeting
  - Familiarize NRC with layout and content of TSU LAR
  - Describe in more detail select proposed changes

Agenda

- Technical Specification Upgrade License Amendment Request (TSU LAR) Development
- TSU LAR Content & Format
- Sample of Proposed Changes
- LAR Review Schedule
- Summary & Next Steps

TSU LAR Development

- Purpose:
  - Improve consistency with standard TS NUREGs, select TSTFs, and ITS Writer's Guide
  - Improve presentation for better operator usability
  - Manage scope to aid in timely NRC approval
- Review team included SROs from multiple utilities as well as industry TS experts
- Reviewed NRC-approved, post-NUREG-1431, Rev. 2, TSTFs and select other TSTFs for applicability

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TSU LAR Content & Format

- TSU LAR markup labeling scheme similar to ITS conversion packages
- TSU LAR contains five Enclosures:
  - Enclosure 1: Introduction, Discussions of change, Regulatory Evaluation
  - Enclosure 2: TS Markup pages
  - Enclosure 3: Clean-typed TS pages
  - Enclosure 4: Clean-typed TS Bases pages *(information only)*
  - Enclosure 5: Regulatory commitments

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TSU LAR Content & Format
(Continued)

- TS annotation scheme: VEGP TS annotated with alphanumeric designator to identify changes
- Each proposed change is classified into the following categories:
  - Administrative changes (“A”): Changes that do not result in new requirements or change operational restrictions or flexibility.
  - More Restrictive changes (“M”): Changes that result in added Restrictions or reduced flexibility.
  - Relocated Specifications (“R”): Changes that relocate Specifications that do not meet the selection criteria of 10 CFR 50.36(c)(2)(ii).
  - Detail Removed changes (“D”): Changes that eliminate and/or relocate details to licensee-controlled documents.
  - Less Restrictive changes (“L”): Changes to the TS that result in reduced restrictions or added flexibility.
- Each category of changes is supported by a generic NSHC except for “L”; each Less Restrictive change has a unique NSHC

Sample of Proposed Changes: Instrumentation

- Reformatted TS 3.3.1, “Reactor Trip System (RTS) Instrumentation,” and TS 3.3.2, “Engineered Safety Feature Actuation System (ESFAS) Instrumentation” into multiple Specifications with formatting similar to:
  - NUREG-1430 instrumentation section
  - TS 3.3.3, “Post Accident Monitoring”

- Created individual TS for specific subsets of the Protection and Safety Monitoring System (PMS) including, for example:
  - Instrumentation / Sensors
  - Manual Actuation Channels
  - Trip Logic
  - Actuated Devices

Sample of Proposed Changes: Instrumentation *(Continued)*

- Proposed approach improves operator usability by:
  - Eliminating Instrument Table reference to multiple Conditions for an inoperable Function
  - Combining common Instrument Functions for reduced complexity
  - Providing better alignment with design of digital I&C (PMS)
- Removed interlocks from list of actuation Functions:
  - Interlocks are not actuation functions
  - Interlocks support OPERABILITY of other listed actuation Functions
  - Presentation is more consistent with other standard TS

Sample of Proposed Changes: Actuation Device Test (ADT) Removal

- Per current TS definition, ADT is a test of the actuated equipment
- Deleted TS definition for ADT as well as ADT SRs - SR 3.3.2.7 and SR 3.3.2.8 (SR 3.3.2.9 is modified)
- Added equivalent requirement to test the actuated equipment in the individual system TS
- Included equivalent SR in individual system TS ensuring that Surveillance failures result in entering Actions for inoperable actuated equipment
- No change to SR Frequency

Sample of Proposed Changes: Closed System Valves

- Subset of closed system Containment Isolation Valves (CIVs) have requirements in two separate TS
- Proposed change revises TS 3.6.3 to exclude all closed system CIVs
- All affected CIVs subject to the same or more restrictive requirements than currently in TS 3.6.3
- Example: MSIV bypass valves and main steam line drain valves are added to TS 3.7.2

Sample of Proposed Changes: Isolation Valve Applicability

- Various Isolation Valve TS (both Instrumentation as well as Valve Component TS) have varying Applicability exceptions
  - TS 3.3.2: "...if all MSIVs are closed"
    vs
    TS 3.7.2: "... steam flow is isolated"
  - TS 3.3.2: "...associated flow path is isolated"
    vs
    TS 3.1.9: {no exception}
    TS 3.7.3: "...closed and deactivated"
    TS 3.7.10: {no exception}
  - TS 3.3.2: "...flow paths are isolated"
    vs
    TS 3.7.7: "... flow paths are isolated"
- Exceptions are being removed - resulting in Actions remaining applicable when OPERABILITY is not restored

Sample of Proposed Changes: Relocated TS 3.9.5

- TS 3.9.5, “Containment Penetrations,” relocated based on the following 10 CFR 50.36 (c)(2)(ii) evaluation:
  - The status of containment penetrations during movement of irradiated fuel assemblies within containment is not installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary. The Containment Penetrations Specification does not satisfy criterion 1.
  - The status of containment penetrations during movement of irradiated fuel assemblies within containment is not a process variable, design feature, or operating restriction that is an initial condition of a DBA or Transient Analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. The Containment Penetrations Specification does not satisfy criterion 2.
  - The status of containment penetrations during movement of irradiated fuel assemblies within containment is not a structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a DBA or Transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. The Containment Penetrations Specification does not satisfy criterion 3.
  - The status of containment penetrations during movement of irradiated fuel assemblies within containment was found to be a non-significant risk contributor to core damage frequency and offsite releases. The status of containment penetrations during movement of irradiated fuel assemblies within containment does not contain constraints of prime importance in limiting the likelihood or severity of the accident sequences that are found to be important to public health and safety. The Containment Penetrations Specification does not meet criteria 4.
- Therefore, TS 3.9.5 does not meet the 10 CFR 50.36(c)(2)(ii) criteria for inclusion into the TS.

Sample of Proposed Changes: Relocated TS 3.9.6

- TS 3.9.6, “Containment Air Filtration System (VFS),” relocated based on the following 10 CFR 50.36 (c)(2)(ii) evaluation:
  - The VFS exhaust subsystem is not installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary. The VFS exhaust subsystem Specification does not satisfy criterion 1.
  - The VFS exhaust subsystem is not a process variable, design feature, or operating restriction that is an initial condition of a DBA or Transient Analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. The VFS exhaust subsystem Specification does not satisfy criterion 2.
  - The VFS exhaust subsystem is not a structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a DBA or Transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. The VFS exhaust subsystem Specification does not satisfy criterion 3.
  - The VFS exhaust subsystem was found to be a non-significant risk contributor to core damage frequency and offsite releases. The VFS exhaust subsystem does not contain constraints of prime importance in limiting the likelihood or severity of the accident sequences that are found to be important to public health and safety. The VFS exhaust subsystem does not meet criteria 4.
- Therefore, TS 3.9.6 does not meet the 10 CFR 50.36(c)(2)(ii) criteria for inclusion into the TS.

TSU LAR Review Schedule

- Requested LAR approval by 12/31/2012
- LAR approval date selected to support Licensed Operator exams to minimize retraining impact

Summary and Next Steps

- Summary
- Action Items
- Future meetings