AP1000 Working Group Meeting, September 3, 2009

Implementation of DC/COL-ISG-08,

"Necessary Content of Plant-Specific Technical Specifications"

PTS at COL Issuance

- §§ 182a and 185b of the Atomic Energy Act
  - TS shall contain information Commission deems necessary:
    - 52.79(a)(30) and paragraph IV.A.2.c of design certification rule (DCR) appendices to part 52 require COL applications to include PTS satisfying 50.36 and 50.36a;
    - IV.A.2.e of DCR appendices to part 52 requires COL applications to address COL action items
  - TS shall be a part of any operating license issued
    - §52.97(c) – a COL shall contain the terms and conditions, including technical specifications, as the Commission deems necessary and appropriate
  - COL shall be issued if Commission determines
    - the application contains sufficient information to support COL issuance, and
    - there is reasonable assurance that the facility will be constructed and will operate in conformity with the license, the provisions of this Act, and the Commission's rules and regulations

Plant-Specific Technical Specifications (PTS) at COL Issuance

- The NRC issued, on December 9, 2008, final interim staff guidance (ISG)(DC/COL-ISG-08) that informs stakeholders of the information that needs to be incorporated into plant-specific technical specifications in accordance with the Atomic Energy Act §§182a and 185b and 10 CFR Parts 50 and 52.

- A combined license (COL) must include final plant-specific technical specifications, acceptable for governing plant operation within its design basis.

- A COL cannot include action (or information) items in the plant-specific technical specifications for the license holder to resolve after the COL is issued. Present and future COL applicants shall resolve all generic technical specification COL action (or information) items before COL issuance.

Staff Position
Why?

- The NRC staff is unable to conclude that PTS would satisfy 10 CFR 50.36 if they contain placeholders for site-specific information to be provided by the combined license holder, even if providing this information before fuel load is a condition of the combined license. Without satisfactory PTS, the Commission cannot make the statutory and regulatory findings required by 10 CFR 52.97 for issuing a combined license.
- PTS issued with a combined license must be complete, implementable and provide a basis for the Commission to conclude that the plant will operate in accordance with the relevant requirements.

TECHNICAL SPECIFICATION (TS) COMBINED LICENSE (COL) INFORMATION

In accordance with DC/COL-ISG-8, at COL issuance all TS information must be resolved by:

- providing a plant specific value (Option 1), or
- providing a value that is bounding to plant specific value (Option 2), or
- providing an administrative control TS that requires use of an NRC-approved methodology to determine plant specific value and a document for recording value (Option 3) (e.g., a setpoint control program)

Options Used by COL Applicants

- Option 1 is used to provide most TS values/information
- Option 2 rarely used due to difficulty in justifying bounding TS values/information
  - NOTE: Options 1 & 2 require NRC staff approval of TS site-specific values, or bounding values, and their justification
- Option 3 use requires NRC-approved methodology
  - Proposed by COL applicant; may be plant-specific or generic methodology (i.e., Topical Report), that is identified in administrative controls TS
  - Site-specific information is determined after COL issuance, but before unit enters Applicability of associated TS per LCO 3.0.4
  - Implementation of methodology to determine site-specific information subject to oversight process (inspection)
  - License amendment not needed to implement methodology to determine site-specific information because information is outside TS (decrease in administrative burden)
  - Changes to site-specific information are subject to §50.59 and approved methodology
  - Changes to site-specific information are provided to NRC as specified in administrative controls TS

Example of the Use of Option 3 by COL Applicants
Setpoint Control Program (SCP) Specification

- The SCP TS requires establishing, implementing, and maintaining a program to implement the regulatory requirement of §50.36(c)(1)(ii)(A) that TS will include limiting safety system settings (LSSS) for automatic protective devices related to those variables having significant safety functions

Example of the Use of Option 3 by COL Applicants **Setpoint Control Program (SCP) Specification**

- SCP TS is needed because implementing a setpoint methodology requires information that is not available before COL issuance
- E.g., determining the uncertainty values to be used in setpoint calculations requires that
  - Instrumentation hardware (sensors, signal processing, logic platforms, load drivers, initiators, actuated devices) be fully identified, procured, and installed, and
  - As-built locations of hardware and wiring pathways for electrical signals be known

Setpoint Control Program (SCP) Specification

- The SCP TS conforms to Option 3 of DC/COL-ISG-8 and requires
  - Calculating instrumentation settings (e.g., NTSP, LTSP, AV, AFT, ALT) in conformance with the approved instrumentation setpoint methodology and conditions in NRC safety evaluation
  - Assessing channel operability during channel calibration surveillance (e.g., based on trip setting as-found value; drift) and entering instrumentation with abnormal drift into corrective action program
  - Resetting trip setpoint within as-left tolerance (ALT) band around the nominal trip setpoint (NTSP) as part of channel calibration surveillance
  - Trending and evaluating as-found instrumentation trip settings
  - Establishing a document to record current instrumentation settings
  - Changing the setpoint document per §50.59 and the approved methodology
  - Providing NRC updates to the setpoint document each cycle