

## CCNPP3COLA PEmails

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**From:** Steckel, James  
**Sent:** Monday, November 15, 2010 9:27 AM  
**To:** Poche, Robert  
**Cc:** CCNPP3COL Resource  
**Subject:** NRC Chapter 16 Slides for Go To Meeting  
**Attachments:** NRC Calvert Chap 16 ACRS Presentation 11-30-2010.pdf

Rob,

Here are the NRC Chapter 16 draft slides for today's Go To meeting.

Jim Steckel

James Steckel  
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**Hearing Identifier:** CalvertCliffs\_Unit3Cola\_Public\_EX  
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**From:** Steckel, James

**Created By:** James.Steckel@nrc.gov

**Recipients:**  
"CCNPP3COL Resource" <CCNPP3COL.Resource@nrc.gov>  
Tracking Status: None  
"Poche, Robert" <Robert.Poche@constellation.com>  
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# **Presentation to the ACRS Subcommittee**

**UniStar Calvert Cliffs Nuclear Power Plant (CCNPP) Unit 3  
COL Application Review**

**Safety Evaluation Report**

**CHAPTER 16: Technical Specifications**

November 30, 2010

# Order of Presentation



- **Surinder Arora** – Calvert Cliffs RCOLA Lead PM
- **UniStar** – RCOL Applicant
- **Peter Hearn** – Chapter 16 PM
- **Hien Le** – Chapter 16 Technical Specifications Branch Reviewer
- **Joe DeMarshall** - Chapter 16 Technical Specifications Branch Reviewer

# Staff Review Team



- **Technical Staff**

- ♦ **Hien Le**

- Technical Specifications Branch Reviewer

- ♦ **Joe DeMarshall**

- Technical Specifications Branch Reviewer

- ♦ **Derek Scully**

- Technical Specifications Branch Reviewer

- **Project Managers**

- ♦ **Surinder Arora**

- ♦ **Peter Hearn**

# Major Milestones Chronology



07/13/2007	Part 1 of the COL Application (Partial) submitted
12/14/2007	Part 1, Rev. 1, submitted
03/14/2008	Part 1, Rev. 2, & Part 2 of the Application submitted
06/03/2008	Part 2 of the Application accepted for review (Docketed)
08/01/2008	Revision 3 submitted
08/14/2008	Review schedule presented in a public meeting
03/09/2009	Revision 4 submitted
06/30/2009	Revision 5 submitted
07/14/2009	Review schedule published
09/30/2009	Revision 6 submitted
04/12/2010	Phase 1 review completion milestone
May, 2010	Phase 2 reviews complete for Chapters 4, 5, 8, 12, 17 & 19
02/18/2010	ACRS begins Phase 3 review

# Overview of Staff's Review



SRP Section/ Application Section		Site Specific Yes/No	Number of RAI Questions	Number of SE Open Questions
16.1	Use and Application	No	0	0
16.2	Safety Limits	No	0	0
16.3.0	LCO and SR Applicability	No	0	0
16.3.1	Reactivity Control System	No	0	0
16.3.2	Power Distribution Limits	No	0	0
Totals			Continued on Next page	Continued on Next page

# Overview of Staff's Review (cont'd)



SRP Section/ Application Section		Site Specific Yes/No	Number of RAI Questions	Number of SE Open Questions
16.3.3	Instrumentation	Yes	19	1
16.3.4	Reactor Coolant System	No	0	0
16.3.5	Emergency Core Cooling System	No	0	0
16.3.6	Containment Systems	No	0	0
16.3.7	Plant Systems	Yes	0	0
Totals			Continued on Next page	Continued on Next page



# Overview of Staff's Review (cont'd)



SRP Section/ Application Section		Site Specific Yes/No	Number of RAI Questions	Number of SE Open Questions
16.3.8	Electrical Power Systems	No	2	0
16.3.9	Refueling Operations	No	0	0
16.4	Design Features	Yes	0	0
16.5	Administrative Controls	Yes	0	0
Totals			21	1

# COL Review Topics of Interest

## Chapter 16.3.3 – Instrumentation



### Description of Open Items

- RAI 260, Question 16-22 was issued as a follow-up RAI for the applicant to provide the additional information necessary for the staff to conclude that the PTS, Administrative Controls, Setpoint Control Program Specification contains sufficient and appropriate details to ensure regulatory compliance with the requirements of 10 CFR 50.36(c)(1)(ii)(A).

# COL Review Topics of Interest



## Section 16.3.3 - Instrumentation

### Setpoint Controls Program

- Plant-specific setpoint information cannot be obtained prior to COL issuance because instrumentation uncertainties used in setpoint calculations would not ordinarily be determined until after completion of the detailed design.
- Uncertainty determinations rely upon supporting information such as equipment selection, as-built configuration, and system test results.

# COL Review Topics of Interest



## Section 16.3.3 - Instrumentation

### Setpoint Controls Program (cont'd)

- COL applicants must complete site-specific TS information in the plant-specific TS in accordance with DC/COL-ISG-8, “Necessary Content of Plant-Specific Technical Specifications When a Combined License Is Issued,” prior to COL issuance using one of three options:
  - ♦ Option 1 provides site-specific TS information (plant-specific setpoint values – cannot do before COL issuance).
  - ♦ Option 2 provides useable bounding information (values that bound the plant-specific setpoint values, but by which the plant may be safely operated).
  - ♦ Option 3 relocates site-specific information to a licensee-controlled document and establishes an administrative control TS that requires determining the information using an NRC-approved methodology and that controls changes to the information.

# COL Review Topics of Interest



## Section 16.3.3 - Instrumentation

### Setpoint Controls Program (cont'd)

- UniStar has proposed an Administrative Controls Technical Specification for a Setpoint Control Program to satisfy 10 CFR 50.36(c)(1)(ii)(A) in lieu of specifying explicit values for the Limiting Safety System Settings in the PTS (Option 3).
- The SCP is a Departure from the EPR GTS that will require staff approval via an exemption from the future Design Certification Rule.

# COL Review Topics of Interest



## Section 16.3.3 - Instrumentation

### Setpoint Controls Program (cont'd)

- The proposed SCP TS is currently written to support protection functions implemented via conventional analog bistables. Analog bistables are not utilized in the digital U.S. EPR Protection System.
- Revisions to the SCP TS are necessary to ensure that the specification is implementable and that it accurately reflects the surveillance testing strategy proposed for the digital U.S. EPR Protection System (i.e., performance of calibrations limited solely to those analog components subject to drift). (RAI 260, Question 16-22).

# Staff Findings



## The COL FSAR for Calvert Cliffs Unit 3 Provides:

- The staff's review confirmed that the COL applicant addressed the required information relating to technical specifications (TS) with the exception of the identified open item.
- The COL applicant is expected to address the outstanding information in the COL plant-specific TS.

# Acronyms



- **GTS** – Generic Technical Specifications
- **PTS** – Plant-Specific Technical Specifications
- **LCO** – Limiting Condition of Operation
- **SR** – Surveillance Requirement