



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

September 14, 2009

LICENSEE: Luminant Generation Company LLC

FACILITY: Comanche Peak Steam Electric Station, Units 1 and 2

SUBJECT: SUMMARY OF AUGUST 25, 2009, CATEGORY 1 MEETING WITH LUMINANT GENERATION COMPANY LLC – PRE-APPLICATION MEETING TO DISCUSS FUTURE REQUEST FOR ONE-TIME LICENSE AMENDMENT TO TECHNICAL SPECIFICATION 3.8.1, “AC SOURCES – OPERATING” (TAC NOS. ME1739 AND ME1740)

On August 25, 2009, a public meeting was held between the U.S. Nuclear Regulatory Commission (NRC), and representatives of Luminant Generation Company LLC (Luminant, the licensee), at NRC Headquarters, One White Flint North, 11555 Rockville Pike, Rockville, MD. Luminant intends to submit in the future a request for a one-time license amendment request to revise Technical Specification 3.8.1, “AC Sources – Operating” for Comanche Peak Steam Electric Station, Units 1 and 2. The change is needed in order to facilitate the installation of a planned plant modification, which would provide the capability to connect a spare offsite source transformer to the onsite Class 1E busses within the existing limiting condition for operation required completion time.

The purpose of the meeting was to provide NRC staff with an overview of the proposed modification and receive an early NRC staff feedback.

A list of meeting attendees is provided in Enclosure A.

Results of Discussion

The licensee provided an overview of the proposed modification during the meeting, including the insight into the risk assessment for the proposed one-time amendment request. The proposed one-time amendment request will extend the 72 hours completion time to 14 days for Required Action A.3 for TS 3.8.1 to facilitate a modification that will improve the reliability and availability of 345 KV offsite source. A copy of the slides for the presentation is provided as Enclosure B.

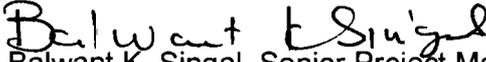
The NRC staff suggested that the licensee should include the following additional information in the formal submittal:

- The proposed one-time amendment request should describe how the proposed modification complies with the of General Design Criteria 17
- The proposed amendment request should include a detailed timeline for implementing the proposed modification.

No member of the public was present during the meeting. Also, no Public Meeting Feedback Forms were received for this meeting.

Please direct any inquiries to me at (301) 415-3016, or Balwant.Singal@nrc.gov.

Sincerely,


Balwant K. Singal, Senior Project Manager
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-445 and 50-446

Enclosures:

- A. List of Attendees
- B. Copy of the Presentation Slides

cc w/encl: Distribution via Listserv

ENCLOSURE A

LIST OF MEETING ATTENDEES

AUGUST 25, 2009, PUBLIC MEETING WITH

LUMINANT GENERATION COMPANY LLC

ENCLOSURE B

COPY OF THE PRESENTATION BY
LUMINANT GENERATION COMPANY LLC

Proposed License Amendment Request

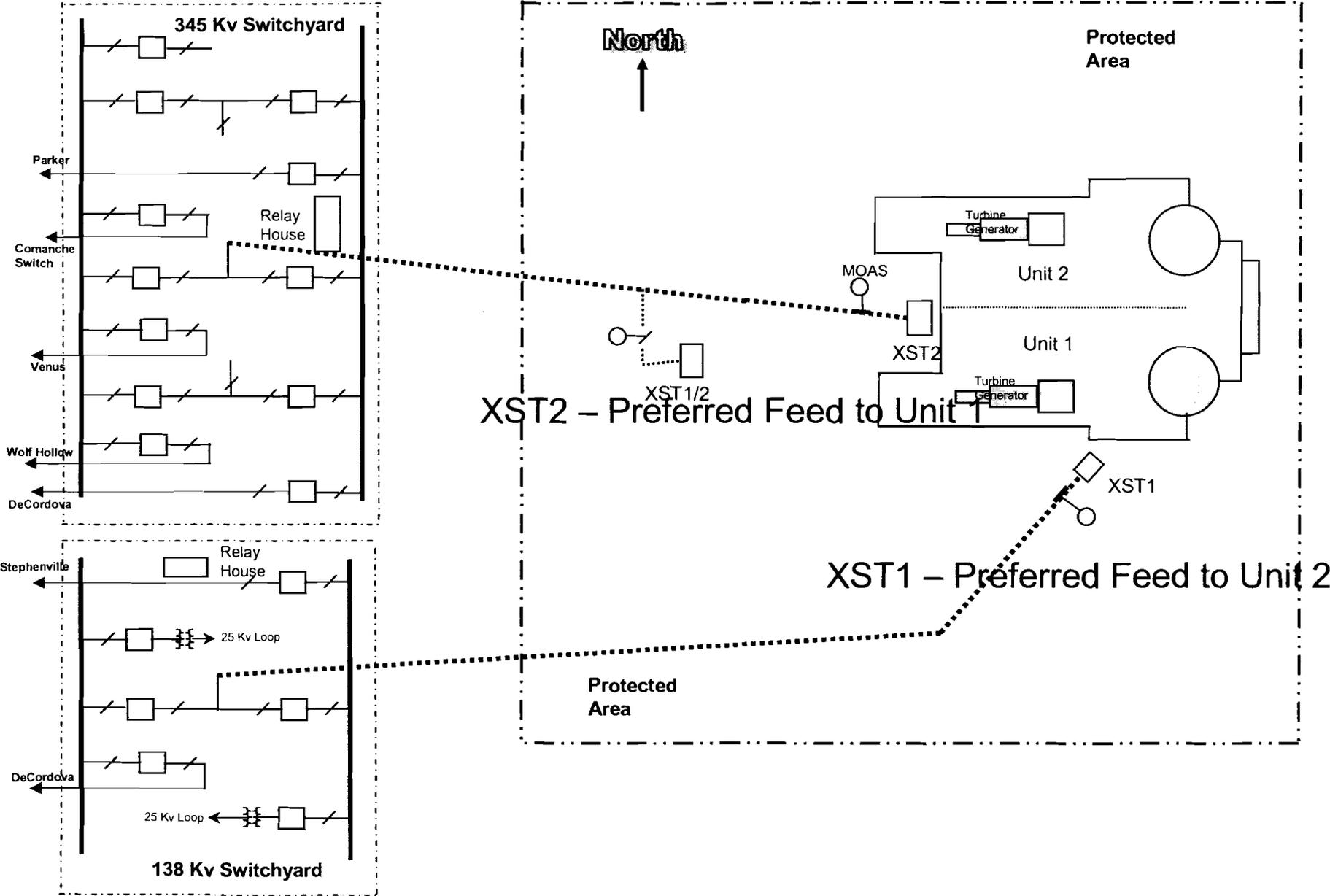
Allowance Of A One-Time, 14-Day TS
Completion Time Extension For
Required Action A.3
From 72 hours to 14 Days
To Facilitate A Modification
That Will Improve The
Reliability/Availability of 345KV Offsite
Source

Luminant Pre-Application Meeting

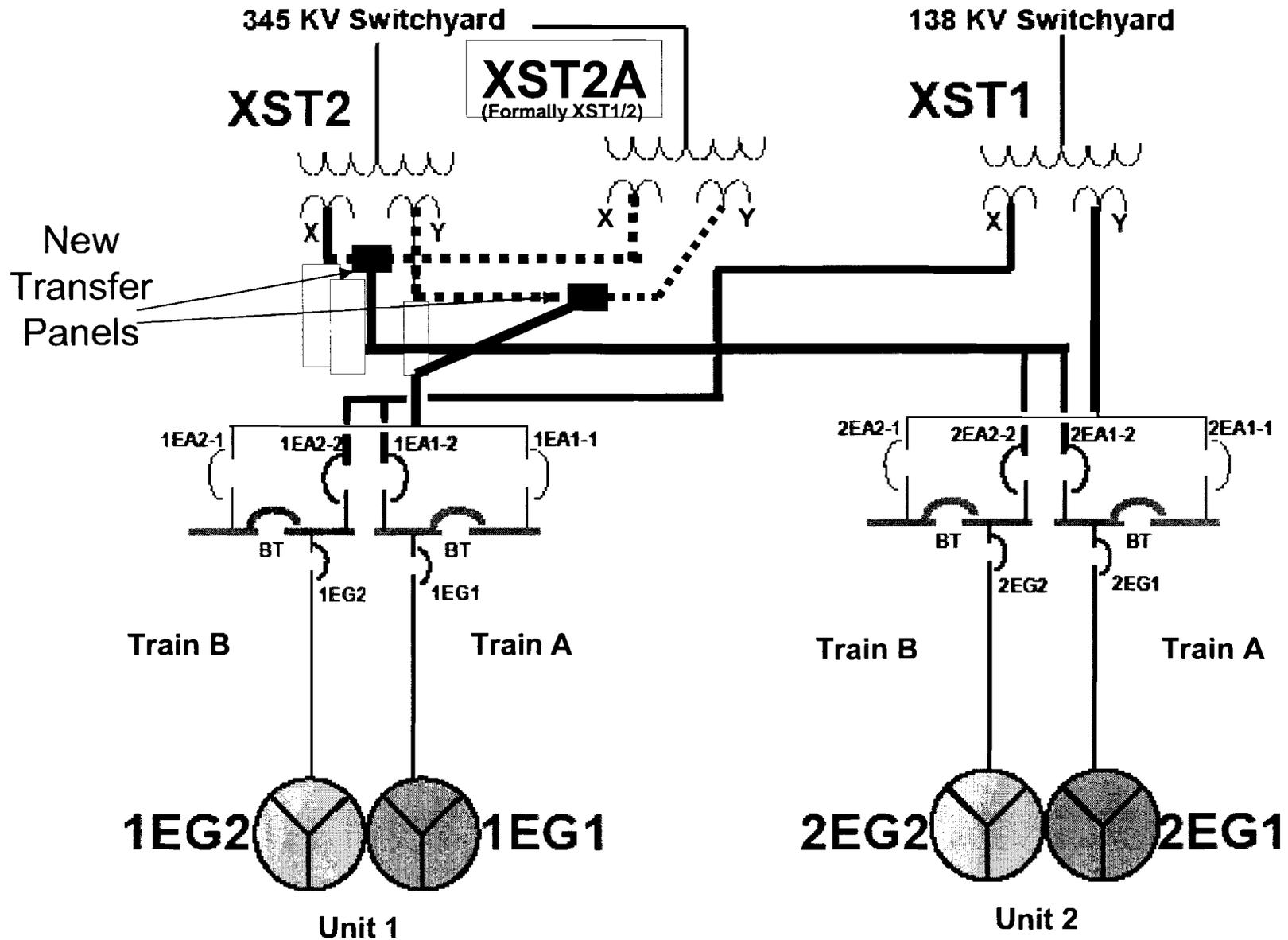
Agenda

Tim Hope, Manager, Nuclear Licensing	Introductions
Rod Sorrell, System Engr.	Current Plant Design
Tom Brown, Mod. Engineering Mgr.	Plant Modification Overview
Tamera Ervin-Walker, Licensing Engr.	TS 3.8.1 and Extended CT
Dan Tirsun, Risk Assessment & Application	Risk Assessment
NRC Staff	Questions/Feedback
Tim Hope, Mgr., Nuclear Licensing	Closing remarks/summary

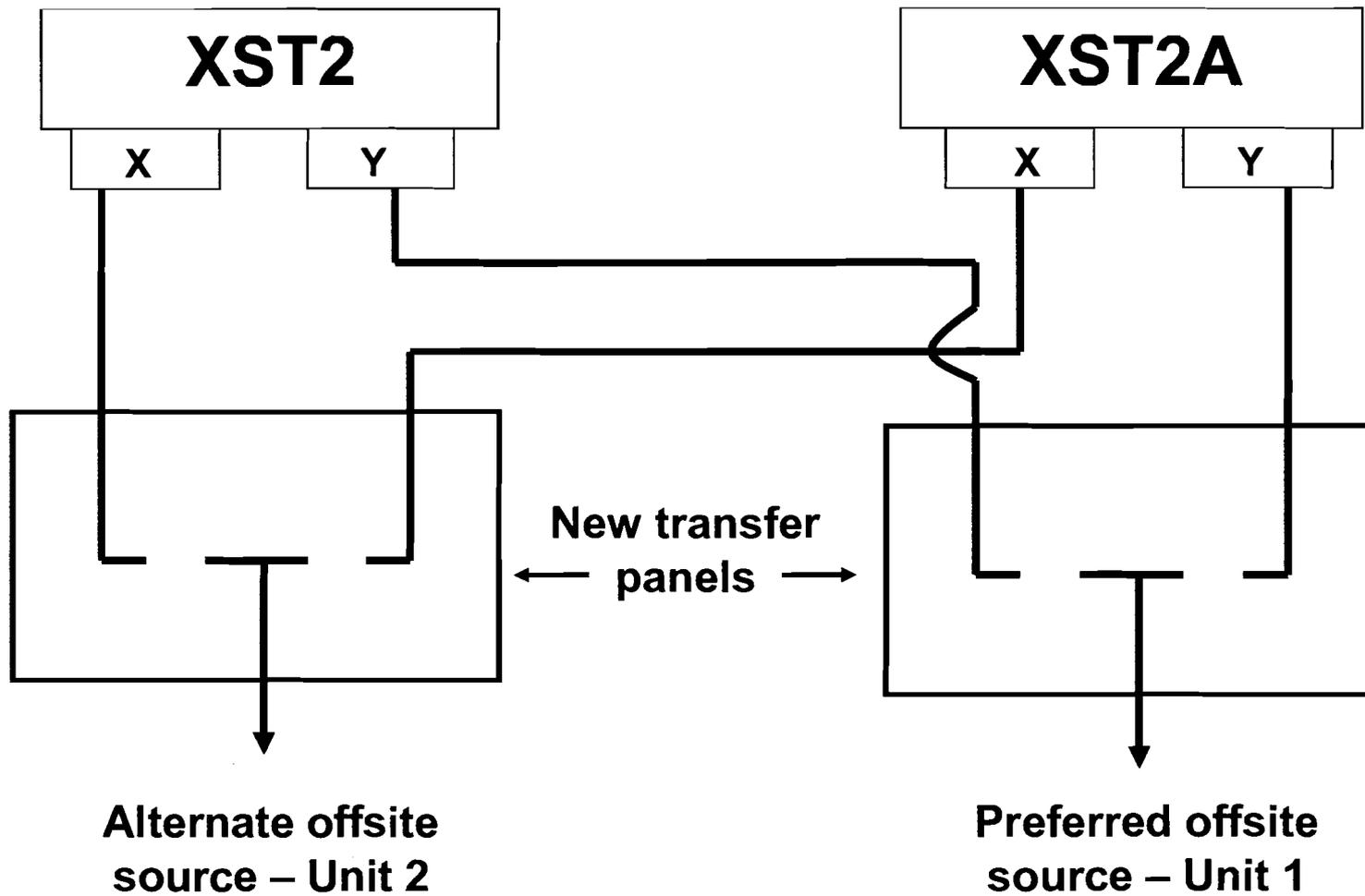
CPNPP Offsite AC Power Sources

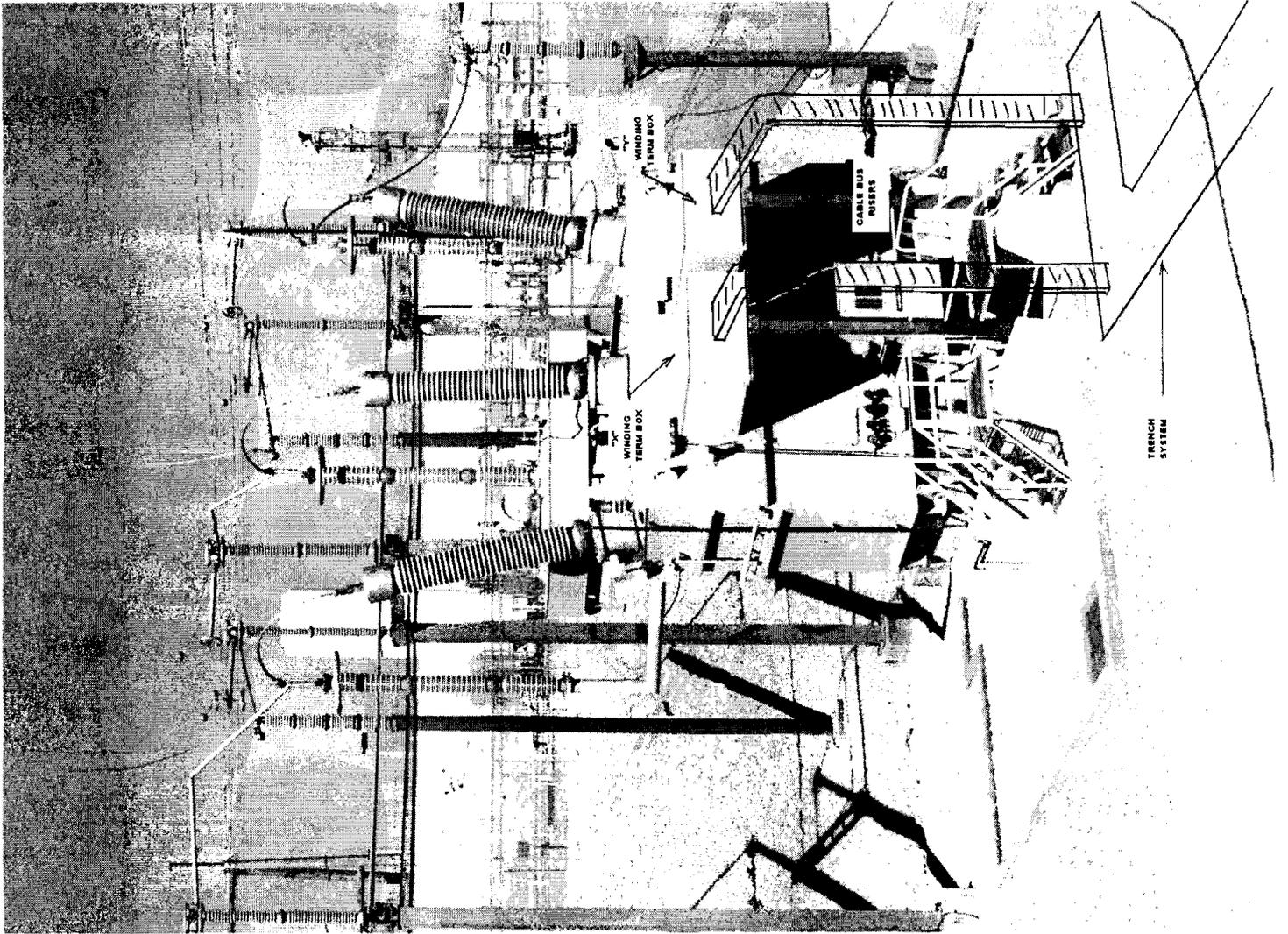


Plant Modification Overview



Plant Modification Overview





Technical Specification 3.8.1

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One required offsite circuit inoperable.	A.1 Perform SR 3.8.1.1 for required OPERABLE offsite circuit.	1 hour <u>AND</u> Once per 8 hours thereafter
	<u>AND</u> -----NOTE----- In MODES 1, 2 and 3, the TDAFW pump is considered a required redundant feature. -----	
	A.2 Declare required feature(s) with no offsite power available inoperable when its redundant required feature(s) is inoperable.	24 hours from discovery of no offsite power to one train concurrent with inoperability of redundant required feature(s)
	<u>AND</u>	
	A.3 Restore required offsite circuit to OPERABLE status	72 hours

Technical Specification 3.8.1

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One required offsite circuit inoperable.	A.1 Perform SR 3.8.1.1 for required OPERABLE offsite circuit.	1 hour <u>AND</u> Once per 8 hours thereafter
	<u>AND</u> -----NOTE----- In MODES 1, 2 and 3, the TDAFW pump is considered a required redundant feature. -----	
	A.2 Declare required feature(s) with no offsite power available inoperable when its redundant required feature(s) is inoperable.	24 hours from discovery of no offsite power to one train concurrent with inoperability of redundant required feature(s)
	<u>AND</u>	
	A.3 Restore required offsite circuit to OPERABLE status	72 hours *

* For XST2 only, the Completion Time for Required Action A.3 may be extended beyond the "72 hours" up to 14 days for a one-time outage to complete terminations as part of the plant modification to facilitate connection of either XST2 or XST2A to the 1E buses, to be completed by March 1, 2011.

Risk Analysis

- Objectives for this section
 - Summarize PRA Model Scope and Quality
 - Describe the Risk Assessment
 - Discuss the Sensitivity Analyses
 - Discuss the Configuration Risk Management Program and Risk Reduction Measures
 - Summarize the Results
 - Overall Conclusions / Risk Insights

PRA Model Scope and Quality

- High Confidence that the PRA Model Scope and Quality are adequate to address the risk aspects of the LAR
 - WOG peer review, focused self assessments, focused peer reviews and MSPI review with no outstanding findings and observations of significance.
 - Self assessment of CPNPP PRA model to RG 1.200 including NRC memorandum - clarifications to revision 1.
 - Model generally meets at least Capability Category II for most of the supporting elements.
 - Most of these Gaps could be eliminated by more detailed documentation or programmatic guidance.
 - Gaps in modeling detail or capability were generally confined to the Internal Flooding and Large Early Release Frequency elements. The modeling gaps are generally due to the age and associated conservatism of the model, or that some elements of the Standard were beyond the scope of the original analysis.
 - Evaluation of gaps identified in the RG 1.200 self assessment shows there none that adversely impact this LAR.

PRA Model

Scope and Quality

- Adequately addresses as-built, as-operated plant
- Plant specific data and plant specific best estimate T-H to address success criteria
- Loss of Offsite Power modeling is robust
- Electric power systems modeling is robust
- SBO / RCP Seal LOCA modeling is robust and uses WOG 2000 model with high temperature seals
- Convolution method used for LOOP recovery analyses

Description of Risk Assessment

- Applicable Guidance and Criteria
 - RG 1.174, RG 1.177, RG 1.200 Rev 1
- Quantitative Analyses for Internal Events and Flood, Level 1 and 2
- Quantitative and Qualitative Analyses / Evaluations for External Events
 - Fire and Tornado PRA
 - based on IPEEE methods
 - LAR impacts evaluated using current model
 - Seismic margins
- Supported by detailed walk-down of plant

Discussion of Sensitivity Analyses

- Sensitivity studies are used to address uncertainties. These studies include:
 - Reliability of components important to the risk contributions of the CT extension
 - LOOP recovery values
 - Recovery of important components
 - LOOP Weather and Plant Centered frequencies
 - Tornado F1 and F2 non-recovery probability
 - Deferred maintenance
- Results of these studies show that there are no uncertainties that significantly affect the conclusions of this risk evaluation.

Configuration Risk Management Program

- CPNPP has a Configuration Risk Management Program
 - Incorporates the characteristics of the model Configuration Risk Management Program described in RG 1.177
 - CRMP description has been incorporated into plant Technical Specifications – 5.5.18
 - Previously approved for risk informed Technical Specifications change for Centrifugal Charging Pumps – B 3.5.2 Required Action A.1
- CRMP is a requirement of the Maintenance Rule Program. CPNPP endorses the guidance in NUMARC 93-01, “Industry Guideline For Monitoring the Effectiveness Of Maintenance At Nuclear Power Plants.”

Configuration Risk Management Program – Risk Mitigation Actions

[Implemented during the extended CT]

1. Restricted Access to and Suspension of Maintenance in the Switchyard.
2. Testing of Diesel Generators and Turbine Driven Auxiliary Feedwater Pumps within Two (2) Weeks Prior to the Start of the XST2 14 CT.
3. Rescheduling of Testing and Maintenance on the DGs, TDAFWPs, XST1, and SSWPs to occur outside the extended CT window.
4. Temporary Diesel Generators Sets Will Be Onsite For Each Unit for Defense-In-Depth For Shutdown Cooling.
5. Suspension of Hot Work Activities Near XST1 Power and Control Cabling.
6. Roving Hourly Fire Watch Along Paths of XST1 Power and Control Cabling.
7. Selection of Time of Year Due to Weather Considerations.
8. Seismic Walkdown for the DGs and TDAFWPs.
9. Operations preparations and grid monitoring during the CT.

Summary of Results

- The resulting cumulative risk metrics in the following table show the addition of the risk metrics from each of the event analyses and how they meet the acceptance guidelines.
 - As seen in Table 1, for Unit 2 the fire ICCDP is slightly above $5E-07$. Also, the cumulative Δ CDF and ICCDP are slightly above $1E-06/\text{yr}$ and $5E-07$, respectively.
 - To address this specific issue, risk reduction measures were identified for each of the fire events.
 - Given these risk reduction measures, Unit 2 fire events and cumulative Δ CDF and ICCDP would fall below the guideline values if they were quantitatively addressed.

Table 1: Comparison of Risk Assessment Total Results to Acceptance Guidelines

Unit	Output Parameters	Value	Frequency	Acceptance Guideline	Below Acceptance Guideline
Internal Events					
Unit 1	CDF_NEW _{XST2}	1.02E-05	Per Year	< 1.00E-04/yr	Yes
	ΔCDF _{XST2}	2.75E-07	Per Year	< 1.00E-06/yr	Yes
	ICCDP _{XST2}	2.75E-07	Dimensionless	< 5.00E-07/yr	Yes
Unit 2	CDF_NEW _{XST2}	9.93E-06	Per Year	< 1.00E-04/yr	Yes
	ΔCDF _{XST2}	2.54E-07	Per Year	< 1.00E-06/yr	Yes
	ICCDP _{XST2}	2.54E-07	Dimensionless	< 5.00E-07/yr	Yes
Fire Events					
Unit 1	Fire_CDF _{New}	2.11E-05	Per Year	< 1.0E-04/yr	Yes
	Fire_ΔCDF	2.17E-07	Per Year	< 1.00E-06/yr	Yes
	Fire ICCDP	2.17E-07	Dimensionless	< 5.00E-07/yr	Yes
Unit 2	Fire_CDF _{New}	2.17E-05	Per Year	<1.00E-04/yr	Yes
	Fire_ΔCDF	7.88E-07	Per Year	< 1.00E-06/yr	Yes
	Fire ICCDP	7.88E-07	Dimensionless	< 5.00E-07/yr	No
Flood Events (Units 1 and 2)					
Both	Flood CDF	6.91E-08	Per Year	< 1.0E-04/yr	Yes
High Wind / Tornado Events (Units 1 and 2)					
Both	High Wind / Torn CDF	3.70E-06	Per Year	< 1.0E-04/yr	Yes
Seismic Events (Units 1 and 2)					
Both	Seismic CDF	7.61E-09	Per Year	< 1.0E-04/yr	Yes
Total Values (Internal Events and Fire Events)					
Unit 1	CDF _{NEW_Total}	1.40E-05	Per Year	< 1.00E-04/yr	Yes
	ΔCDF _{Total}	4.92E-07	Per Year	< 1.00E-06/yr	Yes
	ICCDP _{Total}	4.92E-07	Dimensionless	< 5.00E-07/yr	Yes
Unit 2	CDF _{NEW_Total}	2.49E-05	Per Year	< 1.00E-04/yr	Yes
	ΔCDF _{Total}	1.04E-06	Per Year	< 1.00E-06/yr	No
	ICCDP _{Total}	1.04E-06	Dimensionless	< 5.00E-07/yr	No

Overall Conclusions of Risk Assessment

- Based upon the comprehensive risk assessment, the one time extension of the XST2 CT from 3 to 14 days will have minimal impact on plant risk.

Closing Remarks

Questions? Feedback?

No member of the public was present during the meeting. Also, no Public Meeting Feedback Forms were received for this meeting.

Please direct any inquiries to me at (301) 415-3016, or Balwant.Singal@nrc.gov.

Sincerely,

/RA/

Balwant K. Singal, Senior Project Manager
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-445 and 50-446

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