



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

MAR 19 1985

Docket Nos.: 50-361, 50-362, 50-368  
and 50-382, 50-528

APPLICANTS: Southern California Edison Company (SCE)  
Arkansas Power and Light Company  
Louisiana Power and Light Company  
Arizona Public Service Company

FACILITY: CE Plants with Core Protection Calculators

SUBJECT: SUMMARY OF MEETING TO DISCUSS CPC ISSUES

On March 8, 1985, members of the NRC staff met in Bethesda, Maryland with the Core Protection Calculator (CPC) Oversight Committee, which includes representatives of Combustion Engineering (CE) and the licensees/applicants that have CPC's at their facility. Attendees at the meeting are given in Enclosure 1. The Agenda for the meeting, and the slides presented at the meeting by the CPC Oversight Committee are given in Enclosure 2.

At the conclusion of the meeting it was agreed that action was required to resolve three broad areas of concern:

1. LONG-TERM

Further discussions are needed between the CPC Oversight Committee and the NRC staff to establish what link, if any, exists between the allowable values and/or ranges of CPC addressable constants listed in Table 2.2-2 of the CE Standard Technical Specifications (STS), and the limiting safety analyses which are the basis for safe plant operation. If justified, steps should be initiated to significantly modify or delete the table to reflect the staff policy that only safety-significant parameters should be controlled by the Technical Specifications. Changes of this magnitude, it is anticipated, will result in changes to the CE STS and, consequently, may have to be approved by the Committee to Review Generic Requirements (CRGR).

2. NEAR-TERM

Further discussions are needed in the near future to define acceptable Technical Specification limits on CPC TYPE I and II addressable constants, within the boundaries of the existing CE STS, that will not unnecessarily restrict plant operation, and will clearly define the range of values for each constant that:

- a. May be changed by the plant operating staff without On-Site Review Committee (OSRC) review or NRC review.
- b. May be changed by the plant operating staff only after OSRC review, but without NRC review
- c. May be changed only by license amendment, following NRC review and approval.

It is anticipated that the Technical Specifications resulting from this effort would be issued with the and Palo Verde license, and, after requests by the licensees, would be incorporated by license amendment into the Arkansas Nuclear One, Unit 2 (ANO-2), Waterford and San Onofre Nuclear Generating Station, Units 2 and 3 (SONGS 2/3) Tech. Specs.

3. IMMEDIATE

It appears that SONGS 2 can not operate at full power within the limits of the allowed values for TYPE I addressable constants currently in the SONGS 2 Tech. Specs. Therefore, the SONGS 2 licensee should immediately submit a request to change any values that must be changed, along with

- (1) The safety basis for the change
- (2) The basis for why the current value will result in de-rating of the plant
- (3) The time schedule for restart, and when the change will be needed.

**ORIGINAL SIGNED BY**

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Enclosures:  
As stated

cc: See next page

\*Previous concurred on by:

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MAR 19 1985

MEETING SUMMARY DISTRIBUTION

Docket No(s): 50-361/362

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Meeting to Discuss CPC Issues  
March 8, 1985

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AGENDA

NRC - CPC OVERSIGHT COMMITTEE MEETING

MARCH 8, 1985

I - Reload Cost Reduction and CPC/COLSS Improvement Programs

A- San Onofre Unit 2, Cycle 3 Schedule

1. Generic Documents
2. SONGS 2 Documents

B- NRC Staff Review and Approval Schedule

1. Generic Documents
2. SONGS 2 Documents

II - CPC Addressable Constants

A- History of Technical Specification

1. Arkansas Nuclear One, Unit 2 - Cycle 2
2. Allowable Ranges
3. Administrative Controls

B- Operating Experience

1. Arkansas Nuclear One, Unit 2
2. San Onofre Nuclear Generating Station, Units 2 and 3

C- NRC Concerns

D- Azimuthal Tilt

1. Technical Basis
2. Allowable Range

## CPC IMPROVEMENT PROGRAM

### SUMMARY

#### GOALS

- o AVOID FUTURE CPC SOFTWARE CHANGES
- o REDUCE INNECESSARY PLANT TRIPS
- o SIMPLIFY RELOAD ANALYSES

#### PROGRAM

- o OPTIMIZATION OF CPC/CEAC SOFTWARE FOR RELOADS
- o CEAC DESENSITIZATION TO SPIRIOUS SIGNALS
- o RELOAD DATA BLOCK CONSTANTS

#### PLAN FOR INITIAL IMPLEMENTATION

- o OPTIMIZATION OF SOFTWARE AND CEAC DESENSITIZATION FOR ANO-2 MID CYCLE 5 AND SONGS-2 CYCLE 3
- o RELOAD DATA BLOCK FOR WATERFORD-3 CYCLE 2 AND PVNGS-1 CYCLE 2

#### DOCUMENTATION FOR NRC

- o DETAILED PRESENTATION OF MODIFICATIONS AND METHODOLOGY
- o SOFTWARE MODIFICATIONS DOCUMENT
- o PHASE I AND II TEST REPORTS

## COLSS/CPCS IMPROVEMENTS PROGRAM

- APRIL 1985 - DETAILED NRC PRESENTATION
- AUGUST 1985 - SOFTWARE MODIFICATION DOCUMENTS TO NRC (SONGS, ANO)
  - DETAILED NRC PRESENTATION (UPDATE)
  - SOFTWARE CHANGE PROCEDURE TO NRC (WATERFORD, PALO VERDE)
  - RELOAD DATA BLOCK CONSTANTS CHANGE PROCEDURE TO NRC (WATERFORD, PALO VERDE)
  - CYCLE SPECIFIC DOCUMENTS TO NRC (SONGS)
- NOVEMBER 1985 - CYCLE SPECIFIC DOCUMENTS TO NRC (ANO)
  - PHASES I & II TEST REPORTS TO NRC (SONGS, ANO)
- MARCH  
~~JANUARY~~ 1986 - SONGS IMPLEMENTATION
- FEBRUARY 1986 - ANO IMPLEMENTATION
  - SOFTWARE MODIFICATION DOCUMENTS TO NRC (WATERFORD, PALO VERDE)
- MAY 1986 - CYCLE SPECIFIC DOCUMENTS TO NRC (WATERFORD)
- JUNE 1986 - PHASES I & II TEST REPORTS TO NRC (WATERFORD, PALO VERDE)
- AUGUST 1986 - WATERFORD IMPLEMENTATION
  - CYCLE SPECIFIC DOCUMENTS TO NRC (PALO VERDE)
- JANUARY 1987 - PALO VERDE IMPLEMENTATION

## SONGS-2, Cycle 3 Reload Licensing Schedule

### Schedule Milestones

- |  |                        |
|--|------------------------|
| A. Detailed Presentation of CPC Improvement Program to NRC (CPC Oversight Committee) | April 1985             |
| B. Kick-off Meeting with NRC (SONGS-Specific Changes)                                | May 1985               |
| C. Submit Methodology (including CPC) Changes to NRC                                 | August 1, 1985         |
| D. Submit RAR to NRC   | August 15, 1985        |
| E. Tech. Spec. Changes to NRC  | August 15, 1985        |
| F. Phase I/II Test Report to NRC   | November 15, 1985      |
| G. <u>End of Cycle 2</u>   | <u>January 1, 1986</u> |
| H. <u>Startup of Cycle 3</u>   | <u>March 1, 1986</u>   |

## ADDRESSABLE CONSTANTS

### ALLOWABLE VALUES

- TABLE 2.2-2 OF TECH. SPEC. 2.2.2 LISTS ALL ADDRESSABLE CONSTANTS
  - TYPE I (CHANGE PERIODICALLY)
  - TYPE II (CHANGE ONLY IN SPECIFIC SITUATIONS SUCH AS CYCLE STARTUP)
- TYPE I ADDRESSABLE CONSTANTS ARE GIVEN ALLOWABLE VALUES (RANGES)