

UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

May 10, 1996

LICENSEE: Consumers Power Company

FACILITY: Palisades Nuclear Plant

SUBJECT: SUMMARY OF MEETING AND TELEPHONE CONFERENCE TO DISCUSS

STANDARD TECHNICAL SPECIFICATION CONVERSION SUBMITTAL

On April 16, 1996, the staff met with representatives from Consumers Power Company (CPCo) at NRC Headquarters to discuss the licensee's request for conversion to the standard technical specifications (STS). The licensee's submitted its application to convert the existing Palisades custom ter circal specifications (CTS) to a format and content consistent with NUREG-1432, Rev 1, "Standard Technical Specifications for Combustion Engineering Plants," by letter dated March 29, 1996. The purpose of the meeting was to provide an opportunity for the staff to present lessons learned from previous STS conversion reviews and to describe the review process to the licensee. The meeting also provided CPCo with the opportunity to address staff questions regarding the structure and content of the submittal. A list of attendees is provided as Attachment 1.

The staff described the process currently employed in the review of STS conversion submittals. The staff will conduct an initial review of the submittal to verify completeness and acceptability, and to identify any items that are considered to be beyond the scope of a routine STS conversion. A beyond scope item is a proposed technical change which seeks to change an existing CTS requirement and also represents a proposed change to the STS. Such items can have a significant effect on the review schedule because of the additional technical review required to determine their acceptability.

The licensee's conversion implementation plan was discussed. The March 29, 1996, submittal indicated that the licensee planned to defer selection of an implementation schedule pending establishment of an expected approval date by the NRC. The staff encouraged the licensee to begin to develop an implementation plan as soon as possible. The staff emphasized that early implementation planning is essential in ensuring an orderly operational transition to the STS. Establishment of an implementation plan is also beneficial in focusing staff attention on completion of the conversion review. The licensee committed to provide an implementation plan by July 15, 1996.

The licensee's March 29, 1996, conversion submittal identified two items which are currently under analysis and may require a supplement to the conversion submittal depending on the outcome of these analyses. The staff questioned the licensee regarding the expected completion time for these analyses, since any delay could affect the completion of the staff's review. The licensee committed to provide a supplement by September 1, 1996, if the analyses indicate changes are required.

Following the outline of the review process, the licensee provided a summary of significant differences between the CPCo conversion submittal and the STS. The licensee noted that implementation of the Pressure-Temperature Limit Report (PTLR) is not in the submittal and stated it is currently developing the methodology. The licensee committed to submit the PTLR methodology by July 15, 1996.

The relationship of TS submittals currently under staff review to the conversion submittal was discussed. The licensee indicated that several of these changes are needed prior to the November 1996 refueling outage and review of the individual requests should therefore continue in lieu of incorporating review of these requests into the conversion review. The staff stated that CPCo will be expected to submit supplements to revise the associated sections of the conversion submittal upon issuance of the individual changes.

The licensee then provided an overview of the submittal structure. The staff noted that CPCo has not provided marked-up pages of the CTS in the conversion submittal. Marked-up pages have typically been provided with previous conversion submittals and the staff considers them to be useful in ensuring all TS requirements are properly dispositioned. The licensee indicated its belief that mark-ups of the existing TS pages would have been confusing due to the custom nature of the Palisades TS (which were developed prior to development of the original STS) and the extensive changes required to adopt the STS format. Therefore, in lieu of marked-up pages, CPCo has provided tables in the submittal that indicate the disposition of each TS requirement. The staff indicated that we would attempt to conduct the review using the tables provided and stated that we would inform the licensee within about a month if we determine that we require mark-ups of the existing TS.

Disposition of TS requirements that would be relocated to other documents was then discussed. The staff expressed concern regarding whether the detail available in the final safety analysis report would be sufficient to support relocation of requirements to that document. The staff noted that the licensee has not indicated in the submittal tables where requirements removed from TS are to be relocated or what controls will be placed on their revision subsequent to relocated or what controls will be placed on their revision be provided in order to support a staff conclusion regarding whether relocated requirements will be adequately controlled. The licensee committed to provide the new location for these requirements and the method for controlling future changes to them by July 15, 1996.

Subsequent to the meeting, the staff conducted an initial acceptance review of the submittal which identified significant deficiencies. A telephone conference was held with CPCo on April 26, 1996, to apprise the licensee of these deficiencies and to inform CPCo that the problems identified make staff review of the submittal impractical in its present condition. Talking points which were provided to the licensee as a basis for this discussion are provided as Attachment 2.

The licensee generally agreed with the staff's assessment and stated that it would begin to evaluate options for supplementing the submittal. The licensee stated that it will propose a schedule for supplementing the conversion submittal following an initial review to determine the scope of additional effort required to correct the deficiencies. The licensee intends to complete this review in 2 to 3 weeks. The staff indicated that preparation of CTS mark-ups as part of this review effort would likely help the licensee to identify deficiencies and would assist subsequent staff review. The licensee stated that it would prepare mark-ups as part of its review effort and would provide a complete CTS mark-up in the supplemental submittal.

If there are any questions regarding this meeting summary, please contact me at (301) 415-1312.

Original Signed By:
Robert G. Schaaf, Project Manager
Project Directorate III-1
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Attachments:

- #1. List of Attendees
- 2. NRC Handouts

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Robert G. Schaaf, Project Manager

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1. List of Attendees

2. NRC Handouts

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MEETING ATTENDEES

APRIL 26, 1996

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|---------------|--------------------|
| Robert Schaaf | NRC |
| Chris Grimes | NRC |
| Carl Schulten | NRC |
| Dick Smedley | CPCo |
| Barry Young | CPCo |
| | |

PALISADES PLANT CONVERSION TO NUREG-1432 STS

Evaluation of the Conversion Application

An initial assessment of the Palisades TS change requests was performed with the intent of evaluating the acceptability of the submittal. This process involved a sample of several TS sections. The comments that resulted from this review are provided below for discussion with the licensee on the conference call scheduled for 4/26/96.

- I. Comments from RTS Section 3.2 Sample Review
 - A. Power Distribution Limits TS (Part 5, Section 3.2) change reseasts were reviewed for the purpose of understanding the format and content of the submittal. The following items are classified as less restrictive changes in Attachment 3 but were not included in the "No Significant Hazards Analysis;" therefore, appropriate justifications for the changes are not contained in the submittal.
 - 1. Current TS (CTS) 3.23.2.Al discussion of change states "The action has been changed to reduce power to below applicability range of 25% RTP. This places the reactor in a conservative state with ample thermal margin."
 - CTS 3.23.3, A3 discussion of change states "Changed action to be <25% RTP within 12 hours. This places the plant in a conservative condition and takes the plant out of the applicability range."
 - 3. CTS 4.19.1.2.d discussion of change states "Frequency reduces from "continuously" to 15 minutes. This is adequate time to safely monitor ASI since any effects of Xenon redistribution due to rod insertion, boron changes, etc have other immediate indication which would flag the possibility of an ASI change.
 - B. The following item was classified as an Administrative change but contains a significant relaxation to the current TS requirements. CTS 4.19.2.1.b discussion of change states "Requirement unchanged." The CTS requires the radial peaking factors to be measured at least once per week during power operation. The RTS SR 3.2.2.1 requires a 31 day frequency for verifying the LCO is within limits.

II. Comments from RTS Section 3.3 Sample Review

The following items were classified as Administrative changes in Attachment 3. Additional changes were identified that were not justified in the submittal.

- A. RPS settings iaw Tbl 2.3.1 "When RPS req by 3.17.1." The discussion of change states the CTS requirements are "Unchanged in intent" The explicit statement is eliminated in STS format. Implicit in LCO 3.0.1 definition/stated in Bases."
 - 1. CTS "trip setting limits" are stated as "Allowable Values" in RTS Table 3.3.1-1. This is an additional Administrative Change.
 - 2. RTS Table 3.3.1-1 Function 2, "Hi Startup Rate", is an additional Function not included in CTS Table 2.3.1. Is this a More Restrictive Change?
 - 3. RTS Table 3.3.1-1 Function 2, "Hi Startup Rate", has no Allowable Value listed. Provide justification for not including an Allowable Value for this Function.
- B. Variable Hi power Trip settings. The discussion of change states "Requirement Unchanged."

The Allowable Values for the Variable High Power Trip Function in RTS Table 3.3.1-1 are changed, as discussed below, without justification or discussion of the changed terms (i.e., core power to RTP).

- "≤15% above core power" is changed to "≤15% RTP above current THERMAL POWER"
- 2. "a minimum of ≤30% RATED POWER" is changed to "not <30% RTP"
- 3. "and a maximum of ≤106.5% RATED POWER" is changed to "nor >106.5% RTP".

III. Comments from RTS Section 3.4 Sample Review

- A. The TS number column from the Comparison Table lists specific CTS sections. Not all items within the referenced CTS item are being addressed. The following items were noted as changes for an item that was classified as an administrative change:
 - 1. The Comparison Table indicates that CTS 3.1.1.a was incorporated as RTS 3.4.6. CTS 3.1.1.a is applicable to "plant is operating in cold shutdown or above". RTS 3.4.6 is only applicable to MODE 4. The Comparison Table does not reference any other sections of the RTS such as 3.4.5 which is applicable to MODE 3.

- 2. CTS 3.1.1.a states "operation whenever a change is being made in the boron concentration of the primary coolant" but 3.4.6 does not include this requirement and no discussion exists of what was done with this requirement.
- 3. CTS 3.1.1.a provides an exception for emergency conditions which is not included in RTS 3.4.5 and a discussion of the disposition of the exception is not included.
- 4. CTS 3.1.1.a only requires that at least one primary coolant pump or one shutdown cooling pump with a flow rate greater than or equal to 2810 gpm. The RTS imposes an additional requirement of "Two loops or trains consisting of any combination of PCS loops and SDC trains be operable" in addition to the CTS requirements. No justification was provided for the more restrictive change.
- B. The differences in terminology between the CTS and RTS are r.c explained. For example, the CTS LCOs are based on the number of PCPs in operation but the RTS LCOs are based on the number of loops in service. No explanation is provided for the different terminology nor is reference listed in the Comparison Table as to where the definition of a PCS loop is contained.

IV. Comments from RTS Section 3.5 Sample Review

A. Administrative changes

CTS 3.3.1.b specifies maintaining all four safety injection 1. tanks operable and pressurized to 200 psig with a level of ≥174 inches but ≤200 inches and a range of boron concentration (≥1720 ppm but ≤2500 ppm). RTS 3.5.1 specifies a volume of water $(\ge 1030 \text{ ft}^3 \text{ and } \le 1176 \text{ ft}^3)$, a minimum pressure of ≥200 psig, and boron concentration within the limits specified in COLR. RTS 3.5.1 applicability is specified during Modes 1 and 2. adds requirements for conditions when two or more safety injection tanks are inoperable. The RTS additions specifies entering RTS 3.0.3 immediately when two or more safety injection tanks are inoperable. The RTS changes the CTS high and low level limits to volume limits which is an administrative change provided the volume limits correspond to the level limits. The boron concentration limits were moved from the TS to the COLR which is an administrative or a less restrictive change depending on the COLR requirements.

Finding: A technical justification should be provided for moving the boron concentration limits from the TS to the COLR. The justification should demonstrate that the requirements are the same in the COLR as in the CTS. A

technical justification should be provided for changing from level limits to volume limits. The justification should demonstrate that the two are comparable.

2. CTS 3.3.1.i specifies maintaining the safety injection bottle motor-operated isolation valve opened and electric power supply disconnected. RTS Surveillance Requirement 3.5.1.1 and 3.5.1.5 specify verifying the safety injection tank valves open and valve operator power removed. The RTS changes the CTS requirements by adding specific completion times and surveillance frequencies. Explain how this change is an administrative change that clarifies the requirements.

B. General Comments

- 1. Changes are not numbered for tracking purposes.
- 2. We estimate that approximately 40% to 60% of changes from CTS to RTS are documented.
- 3. Description of CTS to RTS changes to be brief and incomplete in many instances.
- 4. For all samples reviewed, the justification for change does not support the change to the current licensing basis.
- 5. Some changes identified by CTS number in the conversion tables do not address all changes made to the specific CTS LCO or SR. We believe that a more in-depth review will result in additional table entries.
- 6. There are unexplained differences between items in the RTS and CTS requirements. Therefore, these RTS requirements can not be verified to be within the boundary of the Safety Analysis.
- 7. Not all nomenclature differences between RTS and CTS requirements (i.e., CTS Actions are based on number of PCPs, and RTS Required Actions are based on operable loops) are justified.
- 8. Several instances of changes listed in the CTS to RTS comparison tables identified as "Requirement Unchanged", although, in the sample cases reviewed there are significant changes to the CTS requirements.

V. Comments from RTS Section 3.7 Sample Review

A. Less Restrictive Changes

- CTS 3.1.7.2 requires a minimum of 23 (out of 24) main steam safety valves operable when above cold shutdown. RTS 3.7.1 requires 24 main steam safety valves operable in Modes 1, 2, and 3, however, there is no required action if only 23 main steam safety valves are operable. Thus, the number of required main steam safety valves is effectively the same. In implementing the RTS, the CTS requirements of operability above 210°F are deleted, replaced with operability above 300°F, Mode 3. The safety valves are set at one of three settings -- 985 psig, 1005 psig, or 1025 psig. At a reactor coolant system temperature of less than 300°F, the main steam cannot approach these settings. Therefore, the main steam safety valves provide no protection when the reactor coolant system is < 300°F.
- B. Licensee did not identify this change.

1.

1. The CTS Table 3.1.7-2, footnote '*,' requires the valve setting be reset after testing or maintenance to within 1% of the nominal setpoint before returning the valve to service. RTS Surveillance Requirement 3.7.1.1 requires lift settings within 0.1% following testing. There are two changes here. First, the setting tolerance changes from 1% to 0.1%. Second, if there is valve maintenance, the RTS does not require verification of the lift settings, where the CTS does. Provide justification for the changes identified.