UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C 20555

MAY 29 1984

Docket Nos.: 50-445
and 50-446

MEMORANDUM FOR: B. J. Youngblood, Chief
Licensing Branch No. 1
Division of Licensing

FROM: J. J. Stefano, Project Manager
Licensing Branch No. 1
Division of Licensing

SUBJECT: SUMMARY REPORT OF MEETING WITH TEXAS UTILITIES RE ENVIRONMENTAL QUALIFICATION OF MECHANICAL EQUIPMENT FOR COMANCHE PEAK

The meeting was held at the Westinghouse offices (4901 Fairmont Ave. Bethesda, MD) on April 26, 1984 at the request of Texas Utilities (TU). A list of NRC and TU participants is contained in Attachment A. Attachment B is a list of questions prepared by TU which served as the basis for meeting discussions. The meeting was noticed in the PDR and docketed on April 13, 1984.

NRC staff responses to TU's questions are annotated in Attachment B. The meeting was requested to further amplify the staff's requirements regarding mechanical equipment environmental qualification and to clarify our letter dated December 16, 1983 which considered this issue open. D. Woodlan advised that TU may still appeal. He will advise of TU management's decision to comply or appeal on/or before May 15, 1984.

Agreements reached follow:

1. TU will advise the Project Manager of a decision to comply or appeal on/or before 5/15/84.

2. If TU agrees to comply, they will provide data on the extent to which EQ will have been completed before fuel load, and before ascension to power, by 7/31/84.

3. TU indicated they had received answers to all their questions and had a clear understanding of what is required by the staff, to obtain its acceptance and resolve this outstanding SER issue.

John J. Stefano, Project Manager
Licensing Branch No. 1
Division of Licensing

Attachments:
As stated

cc: See next page

CONCURRENCES:

DL:LB#1	EQB	DL:LB#1
JStefano:es	VNoonan	BJYoungblood
5/14/84	5/29/84	5/14/84

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John J. Stefano, Project Manager
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Attachments:
As stated

cc: See next page

COMANCHE PEAK

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ATTACHMENT A

NRC/TU MEETING OF 4/26/84

EQ OF MECHANICAL EQUIPMENT

RE COMANCHE PEAK

LIST OF PARTICIPANTS

NRC

*V. Noonan, EQB
R. LaGrange, EQB
J. Garg, EQB
J. Stefano, DL

TU

D. Woodlan
C. Wilson

*part time

1. GENERAL QUESTIONS FROM TU

1. Where is this position/requirement (i.e., the re-review you have required) written down?

ANS: Staff letter of 12/16/83 and the SRP 3.11 (NUREG-0588).

2. What alternatives are available?

ANS: Non established. Proposals will be considered.

3. What is the regulatory basis for this requirement?

ANS: GDC 4 & Appendix B, 10CFR50

4. When did this position become a requirement?

ANS: During review of Shoreham.

5. This requirement was first imposed on what plant?

ANS: Shoreham

6. What plants are required to comply with this requirement?

ANS: All NTOL's since Shoreham except sister units of units licensed earlier.

7. What plants do not comply?

ANS: Sister plants and plants licensed over two years ago.

8. On what basis has operation been allowed (and is still allowed) without compliance?

ANS: No basis is presently documented.

9. Has rulemaking or regulatory guidance been proposed to document this requirement?

ANS: No.

If yes, please reference.

ANS: N/A

If not, when will it be done?

ANS: Requirements are being developed for CRGR review for backfitting Operating Plants.

10. Have any plants been licensed in the past 12 months without satisfying this requirement?

ANS: Yes, LaSalle 2, San Onofre (sister units)

11. What will be the effects if this backfit is not completed by the time we are ready to:

- load fuel?
- start no load tests?
- start low power testing?
- start ascention to full power?
- at end of first refueling?

ANS: TU may be granted a low power license to load fuel and go up to 5% power based on a commitment to this program. A license will not be granted to exceed 5% power until the program is complete and JIO's are provided for all problems, if any.

NOTE: TU said that they would provide the required commitment by the end of July 1984 if they choose to conduct the review.

12. For the record, why is the present CPSES design unacceptable and what is the justification for requiring this additional work?

ANS: The present CPSES program does not provide enough information -specifically:

1) Who approved the materials used,
2) On what basis were materials approved, and
3) The data needed to support the approvals.

The staff will listen if TU has more information in these three areas.

II. SPECIFIC QUESTIONS FROM TU

1. What is meant by "required operating time"?

ANS: Duration after the accident.

2. Is the format used in the previous submittals acceptable?

ANS: Yes, but TU should specifically address how long materials are good for (i.e., the acceptable installed life before the material should be replaced.)

3. Precisely what documentation must be submitted?

ANS: A statement that TU meets GDC-4 based on completion of a review program as required by the NRR letter of 12-16-83. Problems must be justified with JIO's.

A PROPOSED PROGRAM

The program below was presented by TU as a description of a program that TU is considering if they choose to commence the review vice appealing the issue. The proposal was found acceptable by the staff.

PURPOSE

To satisfy the requirement of the NRC staff that an additional study be performed to provide additional documentation to show that mechanical equipment at CPSES is adequately environmentally qualified (i.e., to show with adequate assurance that the mechanical equipment at CPSES will not suffer a common mode failure due to the environment effects of a design basis accident that could jeopardize plant safety or the health and safety of the general public).

SCOPE

Safety-related mechanical equipment which must perform an active safety-related function following a design basis accident and which is located in a potentially harsh environment due to that accident.

DEFINITIONS

design basis accident = LOCA, Steam Line Break, Feed Line Break, HELB outside containment

safety-related mechanical equipment = Safety Class 1, 2, or 3 equipment as defined by the CPSES design and as described by the CPSES FSAR.

active function = a function that requires the equipment to actuate or operate; that is, perform mechanical movement

potentially harsh environment = an environment which is significantly more severe than the environment that would occur during normal plant operation, including anticipated operational occurrences (based on the definition of mild environment in 10 CFR 50.49)

PRACTICAL IMPLEMENTATION

Active/Passive for this study (examples)

Active	Passive
Pumps	Piping/pipe supports
Valves (which may be required to operate)	Fire stops and seals
Fans	Venturies/Orifices
Dampers (which may be required to operate)	Cable trays & conduit
Check valve	Vent, drain and instrument root valves
Safety valves	Excess flow check valves
	Terminal or Junction Boxes

HVAC compressors	Vessel, Tanks, Heat Exchangers
Hydraulic snubbers	Expansion joints, flexible snubbers
Containment Hatches	strainers/filters
*Pressure Boundary valves (pressure boundary materials only)	Spool pieces/flanges

* Added to list by NRC Staff during meeting, but still open for discussion.

Potentially harsh environment - The CPSES equipment will be considered in a potentially harsh environment for this study if the accident of concern could cause the equipment to see:

1. Direct water or chemical spray.

2. A rapid atmospheric increase of 2 psi or more,

3. A rapid temperature increase of 5°C or more (or a peak above 130°F),

4. An increase in relative humidity of 5% or more, or

5. A radiation exposure dose of 10^4 Rads or more (or a total integrated dose of 10^4 Rads or more).

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Meeting Summary Distribution

Docket File
NRC PDR
Local PDR
PRC System
NSIC
LB #1 Reading File
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