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(TEMPORARY FORM)

CONTROL NO: 8359

FILE: _____

FROM: Metropolitan Edison Co Reading, PA L. J. Lawyer		DATE OF DOC 8-9-74	DATE REC'D 8-13-74	LTR X	TWX	RPT	OTHER
TC: Robert Bernero		ORIG 1 signed	CC	OTHER	SENT AEC PDR SENT LOCAL PDR		XXX XXX
CLASS	UNCLASS XXX	PROP INFO	INPUT	NO CYS REC'D 1	DOCKET NO: 50-289		

DESCRIPTION:

Ltr re gen'l Tech Specs activity limits on primary & secondary coolant.....

ENCLOSURES:

ACKNOWLEDGED

DO NOT REMOVE

PLANT NAME: THREE MILE ISLAND UNIT #1

FOR ACTION/INFORMATION 8-14-74 GMC

BUTLER (L) W/ CYS	✓ SCHWENGER (L) W/9 CYS	ZIEMANN (L) W/ CYS	REGAN (E) W/ CYS
CLARK (L) W/ CYS	STOLZ (L) W/ CYS	DICKER (E) W/ CYS	W/ CYS
TARR (L) W/ CYS	VASSALLO (L) W/ CYS	KNIGHTON (E) W/ CYS	W/ CYS
KNIEL (L) W/ CYS	PURPLE (L) W/ CYS	YOUNGBLOOD (E) W/ CYS	W/ CYS

INTERNAL DISTRIBUTION

✓ REG FILE	TECH REVIEW	DENTON	LIC ASST	A/T IND
✓ AEC PDR	HENDRIE	GRIMES	DIGGS (L)	BRAITMAN
✓ OGC	SCHROEDER	GAMMILL	✓ GEARIN (L)	SALTZMAN
MUNTZING/STAFF	MACCARY	KASTNER	✓ GOULBOURNE (L)	B. HURT
CASE	KNIGHT	BALLARD	KREUTZER (E)	
GLAMBUSSO	PAWLICKI	SPANGLER	LEE (L)	PLANS
BOYD	SHAO		MAIGRET (L)	MCDONALD
✓ MOORE (L)(LWR-2)	STELLO	ENVIRO	REED (E)	CHAPMAN
DEYOUNG (L)(LWR-1)	HOUSTON	MULLER	SERVICE (L)	DUBE w/input
SKOVHOLT (L)	NOVAK	DICKER	SHEPPARD (L)	E. COUPE
GOLLER (L)	ROSS	KNIGHTON	SLATER (E)	
P. COLLINS	IPPOLITO	YOUNGBLOOD	SMITH (L)	D. THOMPSON (2)
DENISE	TEDESCO	REGAN	TEETS (L)	KLECKER
✓ REG OPR	LONG	PROJECT MGR	WILLIAMS (E)	EISENHUT
FILE & REGION (3)	LAINAS		WILSON (L)	
MORRIS	BENAROYA	HARLESS		
STEELE	VOLLMER			

1485 203

EXTERNAL DISTRIBUTION

1 - LOCAL PDR HARRISBURG, PA	(1)(2)(10)-NATIONAL LABS	1-PDR-SAN/LA/RY
1 - TIC (ABERNATHY)	1-ASLBP(E/W Bldg, Rm 529)	1-BROOKHAVEN NAT LAB
1 - NSIC (BUCHANAN)	1-W. PENNINGTON, Rm E-201 GT	1-G. ULRIKSON, ORNL
1 - ASLB	1-B&M SWINEBROAD, Rm E-201 GT	1-AGMED (RUTH GUSMAN)
1 - P. R. DAVIS	1-CONSULTANTS	Rm B-127 GT
16 - ACRS	NEWARK/BLUME/AGBAGIAN	1-RD..MUELLER, Rm F-2
SENT TO LIC ASST GOULBOURNE 8-14-74		

7910260 682



METROPOLITAN EDISON COMPANY

SUBSIDIARY OF GENERAL PUBLIC UTILITIES CORPORATION

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TELEPHONE 215 - 929-3601

August 9, 1974
GQL 0224



Mr. Robert Bernero
Directorate of Licensing
U.S. Atomic Energy Commission
Washington, D.C. 20545

50-289

Dear Mr. Bernero:

This letter is in response to the general Technical Specification activity limits on the primary and secondary coolant for Three Mile Island, Unit 1, which were sent to Mr. J. G. Herbein, TMI Station Superintendent, on May 5, 1974. A review of these activity limits by our Radiation Safety and Environmental Engineering Section resulted in the enclosed list of questions and comments, which we trust will receive your attention before the general Technical Specifications are issued in their final form.

Please recognize that any of the recommended changes to the standardized Technical Specifications listed on the enclosure with this letter should not be considered proposed changes to the Technical Specifications for Three Mile Island, Unit 1, nor should they be considered proposed changes to the standardized Technical Specifications once they have been formally issued to Met-Ed.

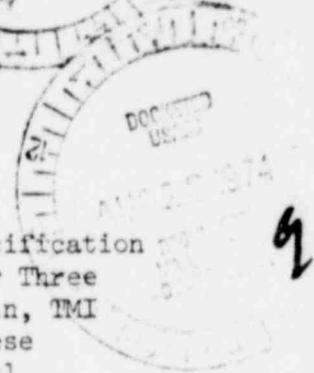
Sincerely,

L. L. Lawyer
L. L. Lawyer
Manager-Operational
Quality Assurance

REGULATORY DOCKET FILE COPY

LLL:JFV:pa
Enclosure: Technical Questions

File: 7.7.4.3.6.1
20.1.1



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Technical Questions

1. Is it the intent of this specification to replace the existing technical specification section 3.1.4, Reactor Coolant System Activity, and section 3.13, Secondary System Activity? If this is the case, why was the basis for accident analysis changed from section 3.1.4, which utilized the whole body dose as limiting-versus-thyroid dose?

2. P. 1 Maximum Reactor Coolant Activity Specification

Line 1; Note 1. The licensee requests clarification of the term "dose equivalent I-131." Please provide the formula for calculating dose equivalent I-131 in terms of actual quantity and isotopic mixture present.

3. Same paragraph as #2.

There is not sufficient information present in the proposed specification and basis to permit calculation and/or derivation of the proposed limits. Please provide additional information and assumptions used in the derivation of the proposed limits. It should be noted that this information may also be required by the licensee at some time to determine if an unreviewed safety question exists and to revise the FSAR accordingly.

4. Same paragraph as #2.

Lines 5 and 7. The licensee requests clarification of the terms "equilibrium limit" and "equilibrium value".

5. Same paragraph as #2.

Line 11. Licensee requests clarification of the factors contributing to the determination of the value of $36/E$ $\mu\text{ci/gm}$ other than the change in X/Q .

6. Specification

Second paragraph; Second sentence. The licensee requests clarification of the requirement to lower the equilibrium iodine activity limit by an amount proportionate to the amount by which the 48-hour limit was exceeded. Licensee further requests clarification of the term "maximum value" in the fifth line of this paragraph.

7. Figure 1.

Licensee requests more information concerning the basis for the curve in Figure 1.

8. Page 2, Sampling Frequency.

Licensee notes that table 4.2.1 as referenced in the first sentence concerns Inservice Inspection Requirements. The licensee believes that the sampling requirements of Table 4.1-3 and Table 1 of Appendix B for primary and secondary analyses are sufficient to maintain safe operations, considering the probability of the simultaneous occurrence of a hypothetical break and loss of off-site power and considering the requirements for daily reactor coolant leakage evaluations.

9. Page 2, Sampling Frequency.

Item (c). The specification for Maximum Reactor Coolant Activity (p.1) does not discuss an equilibrium limit for secondary activity.

10. Page 2, Reporting Requirements.

Licensee requests clarification as to where the "above information" shall be included in the semi-annual report.

11. Page 2, Reporting Requirements.

Second sentence. Licensee requests clarification of the term "limits of the specification." What type of report must be submitted to the Directorate of Licensing within 30 days?

12. Page 2, Sampling Frequency and Table 4.2.2.

The licensee considers the sampling frequency requirements to be unduly excessive and unjustified for the following reasons:

- a. There is no need to sample iodine upon complete depressurization of the reactor coolant system since the accident conditions on which the subject limits apply cannot occur.

- b. Below 1800 psi the reactor must be shut down and the accident consequences are significantly reduced.
- c. Table 4.1-3 and Table 1 of Appendix B presently require the reactor coolant system to be sampled 5 times a week when T_{avg} is greater than 200°F, the secondary coolant system to be sampled weekly, and primary coolant to be sampled for I-131 and -133 weekly. In addition, Table 4.1-2 requires Reactor Coolant Leakage to be evaluated daily when the reactor coolant system temperature is greater than 525°F. The above sampling is considered sufficient to determine if unusual fuel failures or steam generator leakage has occurred and equilibrium limits will be exceeded. If such conditions are not present, it is unnecessary to sample following a change in power exceeding 15 percent of rated power as proposed or every 4 hours.

13. Page 3, Basis.

Second paragraph; Line 4. Licensee requests clarification of the term "adverse meteorological conditions".

14. Page 3, Basis.

Fourth paragraph. Licensee requests basis for changing X/Q value of 2×10^{-4} sec/m³, as in present technical specifications, to 9×10^{-4} sec/m³.

15. Page 3, Secondary System Activity.

Specifications. Licensee requests clarification of the value of 0.1 μ ci/gm and wishes to know why it differs from the present technical specification value of 1.0 μ ci/cc.

16. Same paragraph as #15.

Licensee requests clarifications of the limit of 500°F. It appears that what is desired is for the plant to go to hot shutdown, which is defined as a reactor coolant temperature less than 525°F.

17. Page 3, Secondary System Activity.

Similar comment to item #14 with respect to X/Q value.

18. Table 4.1-2

Licensee requests clarification of gross activity requirements in specification 3.1.D, as mentioned in notes (1) and (2). The rationale for this is that there is no existing specification 3.1.D.

19. Table 4.1-2.

Licensee requests clarification of the frequency for isotopic analysis. Is it to be bi-weekly or semi-annually?

20. Table 4.1-2.

Licensee requests clarification of the check for radiochemical analysis for E determination and its frequency.