December 11, 2014

L-2014-370
10 CFR 50.90

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, D.C. 20555-0001

Re: St. Lucie Units 1 and 2
Dockets Nos. 50-335 and 50-389
Response to Request for Additional Information Regarding License Amendment Request to Implement Technical Specifications Task Force (TSTF)-425, Revision 3, "Relocate Surveillance Frequencies to Licensee Control – Risk Informed Technical Specifications Task Force (RITSTF) Initiative 5B"

References:

1. FPL letter L-2014-015 dated 2-20-14: St. Lucie Plant - Application for Technical Specification (TS) Change Regarding Risk-Informed Justifications for the Relocation of Specific Surveillance Frequency Requirements to a Licensee Controlled Program (ADAMS Accession No. ML14070A087)

2. NRC letter dated November 17, 2014: Request for Additional Information - TSTF 425 LAR - TACs MF3495/96

Per Reference 1 above, Florida Power & Light Company (FPL) requested an amendment to the Renewed Facility Operating Licenses for St. Lucie Unit 1 and Unit 2. The license amendment request (LAR) would modify the St. Lucie Units 1 and 2 Technical Specifications by relocating specific surveillance frequencies to a licensee-controlled program with implementation of Nuclear Energy Institute (NEI) 04-10, "Risk-Informed Technical Specification Initiative 5b, Risk Informed Method for Control of Surveillance Frequencies" (ADAMS Accession No. ML071360456).

By letter dated November 17, 2014 (Reference 2), NRC staff requested additional information regarding the LAR. The enclosure and attachments to this letter provide detailed responses for the two STSB and four APLA requests for additional information (RAIs).

The information provided in this submittal does not impact the 10 CFR 50.92 evaluation of "No Significant Hazards Consideration" previously provided in FPL letter L-2014-015. This submittal makes no new commitments or changes to existing commitments.

Should you have any questions regarding this submittal, please contact Mr. Eric Katzman, Licensing Manager, at (772) 467-7734.

A001
NRR

I declare under penalty of perjury that the foregoing is true and correct.

Executed on December 11, 2014.

Respectfully submitted,

Joseph Jensen
Site Vice President
St. Lucie Nuclear Plant

Enclosure: 1. St. Lucie Units 1 and 2 TSTF-425 LAR RAI Response

Attachments: 1. Unit 1 Technical Specifications Markups
2. Unit 2 Technical Specifications Markups

cc: USNRC Regional Administrator, Region II
USNRC Senior Resident Inspector, St. Lucie Units 1 and 2
Ms. Cindy Becker, Florida Department of Health

Enclosure 1
St. Lucie Units 1 and 2 TSTF-425 LAR RAI Response

Response to Request for Additional Information Regarding License Amendment Request for Transition to Implement Technical Specifications Task Force (TSTF)-425, Revision 3, "Relocate Surveillance Frequencies to Licensee Control – Risk Informed Technical Specifications Task Force (RITSTF) Initiative 5B"

STSB RAI 1
STSB RAI 2
APLA RAI 1
APLA RAI 2
APLA RAI 3
APLA RAI 4

STSB RAI 1

FPL proposed to replace specific surveillance frequencies in the St. Lucie Units 1 and 2 TSs Tables 4.3-1 and 4.3-2 with "SFCP". However, FPL did not propose changes to the TSs that would incorporate the meaning of the acronym SFCP (Surveillance Frequency Control Program). Provide a proposed change to St. Lucie TSs Tables 4.3-1 and 4.3-2 that is consistent with TSTF-425 and clearly states that SFCP stands for the Surveillance Frequency Control Program.

For examples, reference the TSTF-425 license amendments for Surry Power Station Units 1 and 2, Hope Creek Generating Station Unit 1, and Salem Nuclear Generating Station Units 1 and 2 (ADAMS Accession Nos. ML110740033, ML103410243, and ML110410691, respectively).

RESPONSE

Unit 1 and Unit 2

It is proposed to add the acronym SFCP and its meaning to the Unit 1 and Unit 2 TSs in Section 1.0, "Definitions," Table 1.1, "Frequency Notation." In addition, an editorial correction is proposed for Unit 2 Table 1.1. Changes are shown in Attachment 1 and Attachment 2, respectively.

STSB RAI 2

The licensee proposed deleting multiple Tables from the St. Lucie Units 1 and 2 TSs that contain requirements for various TS Surveillance Requirements (SRs) in addition to surveillance frequencies.

For example:

- St. Lucie Unit 1 TS SR 4.3.3.1
- St. Lucie Unit 1 TS SR 4.3.3.5
- St. Lucie Unit 1 TS SR 4.3.3.8
- St. Lucie Unit 1 TS SR 4.4.7
- The licensee proposed similar changes for the St Lucie Unit 2 TSs, as shown in Attachment 4 of its submittal.

The NRC staff noticed that the afore-mentioned Tables not only address surveillance frequencies, but also list certain restrictions for particular surveillances. For example, Table 4.3-3 contains specific modes of operation for which the SR is required to be performed. The proposed changes would relocate these types of requirements in their entirety to the licensee's Surveillance Frequency Controlled Program (SFCP), which is not allowed per the NRC staff's approved TSTF-425. The TSTF pertains only to the relocation of certain *surveillance frequencies*, and not to the associated surveillances and related requirements. In addition, Title 10 of the Code of Federal Regulations, Section 50.36 (10 CFR 50.36), "Technical Specifications," requires that surveillance requirements must be included in a licensee's TSs. Per 10 CFR 50.36, SRs are requirements relating to test, calibration, or inspection to assure that the necessary quality of systems and components is maintained, that facility operation will be within safety limits, and that the limiting conditions for operation will be met.

Remove the proposed deletion of such Tables in their entirety from the submittal and ensure that the submittal contains changes per TSTF-425 (refer to the license amendments referenced in STSB RAI 1), or provide justification for these proposed changes.

- St. Lucie Unit 1 TS SR 4.3.3.1 currently states the following:
  Each radiation monitoring instrumentation channel shall be demonstrated OPERABLE by the performance of the CHANNEL CHECK, CHANNEL CALIBRATION and CHANNEL FUNCTIONAL TEST operations *during the modes and at the frequencies shown in Table 4.3-3* [emphasis added].

  The licensee proposed to replace the italicized text with the text in TSTF-425 Insert 1 and to delete TABLE 4.3-3 (on TS pages 3/4 3-24 and 3/4 3-24a) in its entirety.

  RESPONSE

  Unit 1 and Unit 2

  The requirement to demonstrate operability of instrument channels "during the modes shown in Table 4.4-3" is not a restriction on the modes in which SR 4.3.3.1 is to be performed. The modes shown in Table 4.4-3 are identical to the modes during which the instrument channels are required to be operable. SR 4.0.1 requires SRs to be met during the operational modes or other specified conditions in the Applicability for individual Limiting Conditions for Operation unless otherwise stated in the SR; therefore, the reference to modes in SR 4.3.3.1 is redundant to the requirements of SR 4.0.1. Deleting the reference to modes from SR 4.3.3.1 aligns the St. Lucie TSs more closely with NUREG-1432. This is an administrative deviation from the NRC staff's model application dated July 6, 2009 (74 FR 31996) with no impact on the NRC staff's model safety evaluation published in the same Federal Register Notice. On this basis, Unit 1 and 2 SR 4.3.3.1 may be revised to indicate that the surveillances are to be performed in accordance with the SFCP.

  Unit 1

  Table 4.3-3 need not be retained; however, the clarifying information cited in it and in Table 3.3-6 via footnotes must be aligned as shown in Attachment 1.

  Unit 2

  Table 4.3-3 need not be retained; however, the clarifying information cited in it and in Table 3.3-6 via footnotes must be aligned. The following insertion is proposed for Table 3.3-6 as shown in Attachment 2:

  INSERT 1
  With irradiated fuel in the storage pool and during

  Deleting Table 3.3-6 from the Unit 1 and 2 TSs is an administrative deviation from the model application, as well, that does not change any requirements and has no impact on the associated model safety evaluation.

- St. Lucie Unit 1 TS SR 4.3.3.5 currently states the following:
  Each remote shutdown monitoring instrumentation channel shall be demonstrated OPERABLE by performance of the CHANNEL CHECK and CHANNEL CALIBRATION operations *at the frequencies shown in Table 4.3-6* [emphasis added].

  The licensee proposed to replace the italicized text with the text in TSTF-425 Insert 1 and delete Table 4.3-6 (on TS page 3/4 3-35) in its entirety.

RESPONSE

Unit1 and Unit 2

Table 4.3-6 contains information only on surveillance frequencies. Per TSTF-425 this information is acceptable to relocate; therefore, Table 4.3-6 need not be retained.

- St. Lucie Unit 1 TS SR 4.3.3.8 currently states the following:
  Each accident monitoring instrumentation channel shall be demonstrated OPERABLE by performance of the CHANNEL CHECK and CHANNEL CALIBRATION operations *at the frequencies shown in Table 4.3-7* [emphasis added].

  The licensee proposed to replace the italicized text with the text in TSTF-425 Insert 1 and delete TABLE 4.3-7 (on TS page 3/4 3-44) in its entirety.

RESPONSE

Unit 1 and Unit 2

Table 4.3-7 contains information only on surveillance frequencies. Per TSTF-425 this information is acceptable to relocate; therefore, Table 4.3-7 need not be retained.

- St. Lucie Unit 1 TS SR 4.4.7 currently states the following:
  The Reactor Coolant System chemistry shall be determined to be within the limits by analysis of those parameters *at the frequencies specified on Table 4.4-3* [emphasis added].

  The licensee proposed to replace the italicized text with the text in TSTF-425 Insert 1 and delete Table 4.4-3 (on TS page 3/4 4-16) in its entirety.

RESPONSE

Unit 1 and Unit 2

Table 4.4-3 contains clarifying information about the sampling frequency that is not duplicated elsewhere; therefore, Table 4.4-3 must be retained. To effect the change allowed by TSTF-425, it is proposed to replace "3 times per 7 days" with "SFCP." Additionally, an editorial correction is proposed for both Unit 1 and Unit 2 Table 4.4-3. Changes are shown in Attachment 1 and Attachment 2, respectively.

APLA RAI 1

Nuclear Energy Institute (NEI) 04-10, Revision 1 (ADAMS Accession No. ML071360456), Section 4.0, Step 8, states that:

The risk impact of a proposed [Surveillance Test Interval (STI)] adjustment shall be calculated as a change of the test-limited risk (see Regulatory Guide 1.177, Section 2.3.3). Since the test-limited risk is associated with failures occurring between tests, the failure rate that shall be used in calculating the risk impact of a proposed STI adjustment is the time-related failure rate associated with failures occurring while the component is in standby between tests (i.e., risk associated with the longer time to detect standby-stress failures).

Please describe how the St. Lucie Surveillance Frequency Control Program will address the standby time-related contribution for extended surveillances.

RESPONSE

The standby time-related contribution evaluation will be performed in accordance with NEI 04-10, Revision 1, "Risk-Informed Technical Specifications Initiative 5b - Risk-Informed Method for Control of Surveillance Frequencies." The current draft of St. Lucie procedure ACP 1407.6, "Surveillance Frequency Control Program," Section 1.0, "Purpose," Step (4) notes that St. Lucie plant procedures/instructions are consistent with Nuclear Energy institute (NEI) industry guidance document NEI 04-10, Revision 1. Any changes to the frequencies listed in the Surveillance Frequency Control Program (SFCP) will comply with the following guidance from NEI 04-10, Revision 1, Section 4.0, "Surveillance Frequency Control Program Change Process," Step 8:

> In general, the failure probability values of components used in PRAs consist of a time-related contribution (i.e. the standby time-related failure rate) and a cyclic demand-related contribution (i.e. the demand stress failure probability). The risk impact of a proposed STI adjustment shall be calculated as a change of the test limited risk (see Regulatory Guide 1.177, Section 2.3.3). Since the test-limited risk is associated with failures occurring between tests, the failure rate that shall be used in calculating the risk impact of a proposed STI adjustment is the time-related failure rate associated with failures occurring while the component is in standby between tests (i.e. risk associated with the longer time to detect standby-stress failures). Therefore, caution should be taken in dividing the failure probability into time-related and cyclic demand-related contributions because the test-limited risk can be underestimated when only part of the failure rate is considered as being time-related while this may not be the case. Thus, if a breakdown of the failure probability is considered, it shall be justified through data and/or engineering analyses. When the breakdown between time-related and demand-related contributions is unknown, all failures shall be assumed to be time-related to obtain the maximum test-limited risk contribution.

APLA RAI 2

NEI 04-10, Revision 1, Section 4.0, Step 10, provides guidance on the initial assessment of Internal Events, External Events, and Shutdown Events. Please describe how shutdown events will be assessed as part of the St. Lucie Surveillance Frequency Control Program.

RESPONSE

The shutdown risk evaluation will be performed in accordance with NEI 04-10, Revision 1 which permits quantitative or qualitative assessment of shutdown risk impacts. The current draft of

St. Lucie procedure ACP 1407.6, "Surveillance Frequency Control Program," Section 1.0, "Purpose," Step (4) notes that St. Lucie plant procedures/instructions are consistent with Nuclear Energy institute (NEI) industry guidance document NEI 04-10, Revision 1. Documentation of the assessment will be performed in accordance with ACP 1407.8, "Surveillance Test Interval (STI) Evaluation Form Instructions" (under development). Section 3.2.6, "Section E: PRA Analysis," provides guidance for documenting the assessment of shutdown events that includes the following:

- Identification of applicable modes of operation that were used.
- If shutdown risk can be quantified then CDF and LERF will be calculated for shutdown risk and included in the cumulative risk of all changes assessed.
  St. Lucie does not currently have a RG 1.200 shutdown model. As such the shutdown risk assessments will be based on the St. Lucie shutdown safety program developed in support of NUMARC 91-06, an application specific shutdown analysis, a bounding sensitivity analysis, or other acceptable method described in NEI 04-10, Revision 1.
- Justification for a qualitative analysis (if quantitative was not used)
- Shutdown risk will be included in the comparison to applicable thresholds.

APLA RAI 3

Please confirm that the information provided in the following RAI responses associated with the adoption of National Fire Protection Association Standard 805 (NFPA 805) are also applicable to this application:

- Probabilistic Risk Assessment (PRA) RAI 01i (this RAI response, which is contained in Enclosure 2 to the licensee's letter, L-2014-109, dated April 25, 2014 (ADAMS Accession No. ML14135A394) is not publicly available per 10 CFR 2.390),
- PRA RAI 16 (ADAMS Accession Nos. ML14114A458 and ML14135A395),
- PRA RAI 17 (ADAMS Accession Nos. ML14114A458 and ML14259A373), and
- PRA RAI 13 (ADAMS Accession Nos. ML14070A097) and PRA RAI 18 (this RAI response, which is contained in Enclosure 2 to the licensee's letter, L-2014-289, dated September 10, 2014 (ADAMS Accession No. ML14259A368) is not publicly available per 10 CFR 2.390)

In general, these RAI responses provide more current information that was not available when the TSTF-425 application was submitted. Responses to NFPA 805 PRA RAIs 01i and 17b provide information and sensitivities associated with joint Human Error Probability (HEP) floor values. The response to NFPA 805 PRA RAI 17a addresses the disposition of Internal Events PRA peer review facts and observations (F&Os). The responses to NFPA 805 PRA RAI 16 provides the results of the most recent gap analysis to the latest endorsed version of the American Society of Mechanical Engineers (ASME) PRA standard and Regulatory Guide 1.200, Revision 2 (ADAMS Accession No. ML090410014). The responses also provide sensitivities for the disposition of F&Os from the most recent focused-scope peer review associated with the new interfacing-systems loss-of-coolant accident (ISLOCA) methodology. The responses to NFPA 805 PRA RAIs 13 and 18 provide background information and revised seismic risk values. If the information provided in these responses is not applicable to the TSTF-425 application, please explain and provide applicable information.

RESPONSE

PRA RAI 01i and 17b – HEP Floor Values

As indicated in response to APLA RAI 4 below, a HEP floor value of 1E-5 will be used as a sensitivity analysis to ensure that no potentially important HFE combinations are discounted. It is expected that components supporting long term cooling for Unit 1 will be impacted as a result of setting such artificial value. Analysis will be reviewed in detail for those components on a case-by-case basis.

PRA RAI 16 – Impact of Gap Analysis

A self-assessment that has been conducted whose results were reported under the referenced NFPA-805 RAI concluded that no gaps were identified in the compliance with ASME/ANS RA-Sa-2009 as endorsed by RG 1.200, Revision 2 for all SRs that have been reviewed by earlier standards, except those associated with the F&Os from the most recent focused scope peer review for ISLOCA. The response to PRA RAI 16 has also included a reference to sensitivity analysis which showed a reduced cumulative impact of the F&Os on CDF and LERF for St. Lucie Unit 1 and 2. Nevertheless, the models will be updated to include recommendations to consider these F&Os totally closed. Therefore, it is expected that the reduced impact of gap analysis F&Os is extended to the 5b program, where lower impact of ISLOCA scenarios in CDF/LERF calculations associated with any 5b SSCs would be expected.

PRA RAIs 17a – Internal Events F&Os

The response to AS-6 F&O with respect to 5b initiative is the same as that which was provided for NFPA-805. No credit is currently considered for low pressure feed in scenarios associated with recoverable Loss of Main Feedwater (LOMFW). Current PRA results indicate that recoverable LOMFW scenarios represent only about 2% and 5% of internal events' CDF values in Unit 1 and Unit 2, respectively. Improved recovery of these scenarios will neither alter nor significantly change the result insights that would warrant spending further resources on.

PRA RAIs 13 and 18 – Seismic Risk Values

There is no impact on 5b results due to revised seismic risk hazard values presented as part of responses to the above listed RAIs. The revised seismic risk values are evaluated based on plant-level high confidence of a Low Probability of Failure (HCLPF) using plant-specific Ground Motion Response Spectra (GMRS) that was recently developed by EPRI. Since this evaluation is not developed on the component, train, or system level, there is no impact on 5b results or conclusion.

APLA RAI 4

For F&O HR-G6-01 in the licensee's amendment request dated February 20, 2014, the comment states, in part, that the licensee should "Apply a lower bound for total combined human failures." The licensee, however, did not modify any joint HEP values in response to this finding.

NRC guidance (e.g., NUREG-1792 (ADAMS Accession No. ML051160213), NUERG-1921 (ADAMS Accession No. ML12216A104)) and industry guidance (e.g., EPRI 1021081) address the need to consider a minimum value for the joint probability of multiple human failure events (HFEs) (i.e., a joint HEP floor). The response to NFPA 805 RAI 17b (ADAMS Accession No. ML14114A458) states that: "Using a floor value of 1E-05, the risk increase for Unit 1 has ranged from two to three folds for CDF and LERF...," and, "Review of sequences associated

with the increased risk indicated that these sequences are dominated by joint HEPs that are associated with long term cooling for Unit 1...." Based on this information, STI changes for equipment associated with long term cooling for Unit 1 could be significantly impacted by use of a joint HEP floor. Use of a HEP floor could increase the importance of the equipment with respect to plant risk. An STI change would then have a greater delta risk because the risk significance of the component has increased.

Please explain how the St. Lucie Surveillance Frequency Control Program will consider the impact of the sensitivities for joint HEP floors for STI changes for equipment associated with long term cooling for Unit 1, or demonstrate that joint HEP floors would not significantly impact the relevant STIs for this application.

RESPONSE

A joint HEP floor will be applied in the probabilistic analyses used in the St. Lucie Surveillance Frequency Control Program as a sensitivity analysis to ensure that potentially significant HFE combinations are evaluated in detail. A floor value of 1E-5 will initially be used in the quantification. The HFE combinations that are significant contributors due to the artificial setting of their probabilities to a 1E-05 floor will be evaluated in more detail. Therefore, the JHEP floor will be used as a sensitivity analysis to ensure that no potentially important HFE combinations are discounted. It should be noted that EPRI 1021081 specifies a lower floor of 1E-06 for combinations where one of the HFEs appearing later in the chronological sequence has an alarm as a cue. It should also be noted that EPRI 1021081 states that the artificial floor should not be applied to those combinations containing at least two independent HFEs (that is, the JHEP obtained using the normal algorithm - e.g., the HRA Calculator algorithm) should be used.

Attachment 1

Unit 1 Technical Specifications Markups

TABLE 1.1

FREQUENCY NOTATION

NOTATION	FREQUENCY
S	At least once per 12 hours
D	At least once per 24 hours
W	At least once per 7 days
4/M*	At least 4 per month at intervals of no greater than 9 days and a minimum of 48 per year
M	At least once per 31 days
Q	At least once per 92 days
SA	At least once per 184 days
R	At least once per 18 months
S/U	Prior to each reactor startup
p**	Completed prior to each release
N.A.	Not applicable

SFCP → In accordance with the Surveillance Frequency Control Program

* For Radioactive Effluent Sampling

** For Radioactive Batch Release Only

TABLE 3.3-6

RADIATION MONITORING INSTRUMENTATION

INSTRUMENT	MINIMUM CHANNELS OPERABLE	APPLICABLE MODES	ALARM/TRIP SETPOINT	MEASUREMENT RANGE	ACTION
1. AREA MONITORS					
a. Fuel Storage Pool Area	1	*	≤ 15 mR/hr	$10^{-1} - 10^{4}$ mR/hr	13
b. Containment (CIS)	3	****	≤ 90 mR/hr	$1 - 10^{5}$ mR/hr	16
c. Containment Area – Hi Range	1	1, 2, 3, & 4	≤ 10 R/hr	$1 - 10^{7}$ R/hr	15
d. Control Room Isolation	1 per intake	ALL MODES	≤ 320 cpm	$10 - 10^{7}$ cpm	17
2. PROCESS MONITORS					
a. Containment					
i. Gaseous Activity RCS Leakage Detection	1	1, 2, 3 & 4	Not Applicable	$10 - 10^{6}$ cpm	14
ii. Particulate Activity RCS Leakage Detection	1	1, 2, 3 & 4	Not Applicable	$10 - 10^{6}$ cpm	14
b. Fuel Storage Pool Area Ventilation System					
i. Gaseous Activity	1	**	***	$10^{-7} - 10^{5}$ μCi/cc	12
ii. Particulate Activity	1	**	***	$1 - 10^{6}$ cpm	12

or irradiated

* With fuel in the storage pool or building.
** With recently irradiated fuel in the storage pool.
*** The Alarm Setpoints are determined and set in accordance with requirements of the Offsite Dose Calculation Manual.
**** During movement of recently irradiated fuel assemblies within containment.

TABLE 3.4-1

REACTOR COOLANT SYSTEM

CHEMISTRY LIMITS

PARAMETER	STEADY STATE LIMIT	TRANSIENT LIMIT
DISSOLVED OXYGEN	≤ 0.10 ppm*	≤ 1.00 ppm*
CHLORIDE	≤ 0.15 ppm	≤ 1.50 ppm
FLUORIDE	≤ 0.10 ppm	≤ 1.00 ppm

* Limit not applicable with $T_{avg} \leq 250°F$

TABLE 4.4-3

REACTOR COOLANT SYSTEM

CHEMISTRY LIMITS SURVEILLANCE REQUIREMENTS

PARAMETER	MINIMUM SAMPLING FREQUENCIES	MAXIMUM TIME BETWEEN SAMPLES
DISSOLVED OXYGEN	~~3 times per 7 days~~SFCP*	72 hours
CHLORIDE	~~3 times per 7 days~~SFCP	72 hours
FLUORIDE	~~3 times per 7 days~~SFCP	72 hours

* Not required with $T_{avg} \leq 250°F$

Amendment No.

Attachment 2

Unit 2 Technical Specifications Markups

TABLE 1.1

FREQUENCY NOTATION

NOTATION	FREQUENCY
S	At least once per 12 hours.
D	At least once per 24 hours.
W	At least once per 7 days.
4/M*	At least 4 per month at intervals of no greater than 9 days and a minimum of 48 per year.
M	At least once per 31 days.
Q	At least once per 92 days.
SA	At least once per 184 days.
R	At least once per 18 months.
S/U	Prior to each reactor startup.
p**	Completed prior to each release.
N.A.	Not applicable.

SFCP → In accordance with the Surveillance Frequency Control Program

* For Radioactive Effluent Sampling.

** For Radioactive Batch Release only.

Amendment No.

TABLE 3.3-6

RADIATION MONITORING INSTRUMENTATION

	INSTRUMENT	MINIMUM CHANNELS OPERABLE	APPLICABLE MODES	ALARM/TRIP SETPOINT	MEASUREMENT RANGE	ACTION
1.	AREA MONITORS					
	a. Fuel Storage Pool Area					
	i. Criticality and Ventilation System Isolation Monitor	4	*	$\leq$ 20 mR/hr	$10^{-1} - 10^{4}$ mR/hr	22
	b. Containment Isolation	3	****	$\leq$ 90 mR/hr	$1 - 10^{7}$ mR/hr	25
	c. Containment Area – Hi Range	1	1, 2, 3 & 4	Not Applicable	$1 - 10^{7}$ R/hr	27
	d. Control Room Isolation	1 per intake	ALL MODES	$\leq$ 320 cpm	$10^{-7} - 10^{-2}$ µCi/cc	26
2.	PROCESS MONITORS					
	a. Fuel Storage Pool Area Ventilation System					
	i. Gaseous Activity	1	**	***	$10^{-7} - 10^{-2}$ µCi/cc	24
	ii. Particulate Activity	1	**	***	$1 - 10^{6}$ cpm	24
	b. Containment					
	i. Gaseous Activity RCS Leakage Detection	1	1, 2, 3 & 4	Not Applicable	$10^{-7} - 10^{-2}$ µCi/cc	23
	ii. Particulate Activity RCS Leakage Detection	1	1, 2, 3 & 4	Not Applicable	$1 - 10^{6}$ cpm	23

INSERT 1

* With fuel in the storage pool or building.

** ~~During~~ movement of recently irradiated fuel assemblies or during crane operations with loads over recently irradiated fuel assemblies in the spent fuel storage pool.

*** The Alarm/Trip Setpoints are determined and set in accordance with requirements of the Offsite Dose Calculation Manual.

**** During movement of recently irradiated fuel assemblies within containment.

TABLE 4.4-3

REACTOR COOLANT SYSTEM

CHEMISTRY LIMITS SURVEILLANCE REQUIREMENTS

PARAMETER	MINIMUM SAMPLING FREQUENCIES	MAXIMUM TIME BETWEEN SAMPLES
DISSOLVED OXYGEN	~~3 times per 7 days~~SFCP*	72 hours
CHLORIDE	~~3 times per 7 days~~SFCP	72 hours
FLUORIDE	~~3 times per 7 days~~SFCP	72 hours

* Not required with T_{avg} ~~less then or equal to~~ ≤ 250°F

Amendment No.