

November 13, 1986

Docket No.: 50-382

Mr. J. G. Dewease
Senior Vice President - Nuclear Operations
Louisiana Power and Light Company
317 Baronne Street, Mail Unit 17
New Orleans, Louisiana 70160

Dear Mr. Dewease:

Subject: Issuance of Amendment No. 8 to Facility Operating License No. NPF-38
for Waterford 3

The Commission has issued the enclosed Amendment No. 8 to Facility Operating License No. NPF-38 for the Waterford Steam Electric Station, Unit 3. The amendment consists of changes to the Technical Specifications in response to your application transmitted by letter dated May 23, 1986, as supplemented by letters dated August 29, 1986 and October 1, 1986.

The amendment revises the Appendix A Technical Specifications by deleting a surveillance requirement for trisodium phosphate aggregation, revising a surveillance requirement for the diesel fire pump batteries, deleting the requirement to shut the plant down when coolant activity levels are exceeded for 800 hours in a 12-month period and reducing the reporting requirements for iodine spiking.

A copy of the Safety Evaluation supporting the amendment is also enclosed.

Sincerely,

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James H. Wilson, Project Manager
PWR Project Directorate No. 7
Division of PWR Licensing-B

Enclosures:

- 1. Amendment No. 8 to NPF-38
- 2. Safety Evaluation

cc: See next page

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Waterford 3

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November 13, 1986

ISSUANCE OF AMENDMENT NO. 8 TO FACILITY OPERATING
LICENSE NP. NPF-38 FOR WATERFORD 3

DISTRIBUTION

✓ Docket File 50-382

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

LOUISIANA POWER AND LIGHT COMPANY

DOCKET NO. 50-382

WATERFORD STEAM ELECTRIC STATION, UNIT 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 8
License No. NPF-38

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment, dated May 23, 1986, as supplemented by letters dated August 29, 1986 and October 1, 1986, by Louisiana Power and Light Company (licensee), complies with standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public;
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C(2) of Facility Operating License No. NPF-38 is hereby amended to read as follows:

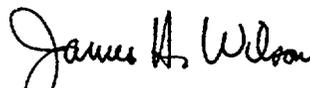
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(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 8, and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in this license. LP&L shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. The license amendment is effective as of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



James H. Wilson, Project Manager
PWR Project Directorate No. 7
Division of PWR Licensing-B

Attachment:
Changes to the Technical
Specifications

Date of Issuance: November 13, 1986

ATTACHMENT TO LICENSE AMENDMENT NO. 8
TO FACILITY OPERATING LICENSE NO. NPF-38
DOCKET NO. 50-382

Replace the following pages of the Appendix A Technical Specifications with the enclosed pages. The revised pages are identified by Amendment number and contain vertical lines indicating the area of change. Also to be replaced are the following overleaf pages to the amended pages.

<u>Amendment Pages</u>	<u>Overleaf Pages</u>
3/4 4-24	3/4 4-23
3/4 4-25	3/4 4-26
3/4 5-5	3/4 5-6
3/4 7-31	3/4 7-32
B 3/4 4-5	B 3/4 4-6
6-17	-
6-17a	-

Page 6-18 is reissued without change.

TABLE 4.4-3

REACTOR COOLANT SYSTEM

CHEMISTRY LIMITS SURVEILLANCE REQUIREMENTS

<u>PARAMETER</u>	<u>SAMPLE AND ANALYSIS FREQUENCY</u>
DISSOLVED OXYGEN*	At least once per 72 hours
CHLORIDE	At least once per 72 hours
FLUORIDE	At least once per 72 hours

*Not required with \bar{T}_{avg} less than or equal to 250°F

REACTOR COOLANT SYSTEM

3/4.4.7 SPECIFIC ACTIVITY

LIMITING CONDITION FOR OPERATION

3.4.7 The specific activity of the primary coolant shall be limited to:

- a. Less than or equal to 1.0 microcurie/gram DOSE EQUIVALENT I-131, and
- b. Less than or equal to $100/\bar{E}$ microcuries/gram.

APPLICABILITY: MODES 1, 2, 3, 4, and 5.

ACTION:

MODES 1, 2, and 3*:

- a. With the specific activity of the primary coolant greater than 1.0 microcurie/gram DOSE EQUIVALENT I-131 for more than 48 hours during one continuous time interval or exceeding the limit line shown on Figure 3.4-1, be in at least HOT STANDBY with T_{avg} less than 500°F within 6 hours.
- b. With the specific activity of the primary coolant greater than $100/\bar{E}$ microcuries/gram, be in at least HOT STANDBY with T_{avg} less than 500°F within 6 hours.

* With T_{avg} greater than or equal to 500°F.

REACTOR COOLANT SYSTEM

LIMITING CONDITION FOR OPERATION (Continued)

ACTION: (Continued)

MODES 1, 2, 3, 4, and 5:

- c. With the specific activity of the primary coolant greater than 1.0 microcurie/gram DOSE EQUIVALENT I-131 or greater than $100/\bar{E}$ microcuries/gram, perform the sampling and analysis requirements of item 4 a) of Table 4.4-4 until the specific activity of the primary coolant is restored to within its limits.

SURVEILLANCE REQUIREMENTS

4.4.7 The specific activity of the primary coolant shall be determined to be within the limits by performance of the sampling and analysis program of Table 4.4-4.

TABLE 4.4-4
PRIMARY COOLANT SPECIFIC ACTIVITY SAMPLE
AND ANALYSIS PROGRAM

<u>TYPE OF MEASUREMENT AND ANALYSIS</u>	<u>SAMPLE AND ANALYSIS FREQUENCY</u>	<u>MODES IN WHICH SAMPLE AND ANALYSIS REQUIRED</u>
1. Gross Activity Determination	At least once per 72 hours	1, 2, 3, 4
2. Isotopic Analysis for DOSE EQUIVALENT I-131 Concentration	1 per 14 days	1
3. Radiochemical for \bar{E} Determination	1 per 6 months*	1
4. Isotopic Analysis for Iodine Including I-131, I-133, and I-135	a) Once per 4 hours, whenever the specific activity exceeds 1.0 $\mu\text{Ci}/\text{gram}$, DOSE EQUIVALENT I-131 or $100/\bar{E}$ $\mu\text{Ci}/\text{gram}$, and	1#, 2#, 3#, 4#, 5#
	b) One sample between 2 and 6 hours following a THERMAL POWER change exceeding 15 % of the RATED THERMAL POWER within a 1-hour period.	1, 2, 3

* Sample to be taken after a minimum of 2 EFPD and 20 days of POWER OPERATION have elapsed since reactor was last subcritical for 48 hours or longer.

Until the specific activity of the primary coolant system is restored within its limits.

EMERGENCY CORE COOLING SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

2. A visual inspection of the safety injection system sump and verifying that the subsystem suction inlets are not restricted by debris and that the sump components (trash racks, screens, etc.) show no evidence of structural distress or corrosion.
 3. Verifying that a minimum total of 97.5 cubic feet of solid trisodium phosphate dodecahydrate (TSP) is contained within the TSP storage baskets.
 4. Verifying that when a representative sample of 4 ± 0.01 grams of TSP from a TSP storage basket is submerged, without agitation, in 4 ± 0.1 liters of 120 ± 10 °F water borated within RWSP boron concentration limits, the pH of the mixed solution is raised to greater than or equal to 7 within 3 hours.
- e. At least once per 18 months, during shutdown, by:
1. Verifying that each automatic valve in the flow path actuates to its correct position on SIAS and RAS test signals.
 2. Verifying that each of the following pumps start automatically upon receipt of a safety injection actuation test signal:
 - a. High pressure safety injection pump.
 - b. Low pressure safety injection pump.
 3. Verifying that on a recirculation actuation test signal, the low pressure safety injection pumps stop, the safety injection system sump isolation valves open.
- f. By verifying that each of the following pumps required to be OPERABLE performs as indicated on recirculation flow when tested pursuant to Specification 4.0.5:
1. High pressure safety injection pumps develop a total head of greater than or equal to 1400 psid for pump A, 1431 psid for pump B and 1429 psid for pump A/B.
 2. Low pressure safety injection pump discharge pressure greater than or equal to 177 psig.

EMERGENCY CORE COOLING SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- g. By verifying the correct position of each electrical and/or mechanical position stop for the following ECCS throttle valves by verifying that each ECCS throttle valve opens to the proper throttled position each time the valve is cycled:

<u>HPSI System</u>		<u>LPSI System</u>	
<u>Valve Number</u>		<u>Valve Number</u>	
a.	SI-225A	e.	SI-227A
b.	SI-225B	f.	SI-227B
c.	SI-226A	g.	SI-228A
d.	SI-226B	h.	SI-228B
		a.	SI-138A
		b.	SI-138B
		c.	SI-139A
		d.	SI-139B

- h. By performing a flow balance test, during shutdown, following completion of modifications to the ECCS subsystems that alter the subsystem flow characteristics and verifying the following flow characteristics:

HPSI System - Single Pump (Cold leg injection mode)

The sum of the injection lines flow rates, excluding the highest flow rate, is greater than or equal to 658 gpm for HPSI Pump A running, 665 gpm for HPSI Pump B running, and 650 gpm for HPSI Pump A/B running, with a maximum differential pressure of less than or equal to 528 psid for HPSI Pump A, 472 psid for HPSI Pump B, and 489 psid for HPSI Pump A/B.

HPSI SYSTEM - Single Pump (Hot/cold leg injection mode)

With the system operating in the hot/cold leg injection mode, the hot leg flow must be greater than or equal to 436 gpm and within $\pm 10\%$ of the cold leg flow.

LPSI System - Single Pump

Flow for each pump is greater than or equal to 4810 with the total developed head greater than or equal to 268 feet but less than or equal to 292 feet.

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

4.7.10.1.3 Each fire pump diesel starting 12-volt battery bank and charger shall be demonstrated OPERABLE:

- a. At least once per 7 days by verifying that:
 1. The electrolyte level of each battery is above the plates, and
 2. The overall battery voltage is greater than or equal to 12 volts.
- b. At least once per 92 days by verifying that the specific gravity is appropriate for continued service of the battery.
- c. At least once per 18 months by verifying that:
 1. The batteries and battery racks show no visual indication of physical damage or abnormal deterioration, and
 2. The battery-to-battery and terminal connections are clean, tight, free of corrosion, and coated with anticorrosion material.

PLANT SYSTEMS

SPRAY AND/OR SPRINKLER SYSTEMS

LIMITING CONDITION FOR OPERATION

3:7.10.2 The following spray and/or sprinkler systems shall be OPERABLE:

<u>Sprinkler No.</u>	<u>Bldg./Elev.</u>	<u>Location</u>
FPM-1	RCB	Reactor Coolant Pumps 1A, 1B
FPM-2	RCB	Reactor Coolant Pump 2A, 2B
FPM-3A	RAB +21, +46	Diesel Generator Area A, Feed Tank Room A
FPM-4B	RAB +21, +46	Diesel Generator Area B, Feed Tank Room B
FPM-11A	RAB -35	Emergency D/G Fuel Oil Tank A
FPM-12B	RAB -35	Emergency D/G Fuel Oil Tank B
FPM-16	FWPH +15	Fire Water Pump House
FPM-17	RAB +35	Cable Vault Area
FPM-18	RAB +35	Electrical Penetration Area 1
FPM-19	RAB +35	Electrical Penetration Area 2
FPM-22	RAB -4	Corridor and Blowdown Tank Rooms
FPM-23	RAB -35	Corridor, Shutdown Heat Exchanger Rooms, EFW Pump Room
FPM-24	RAB +21	Corridors, CCW Area
FPM-25B	RAB +21	North High Voltage Switchgear Room
FPM-26	RAB +46	Ventilation Equipment Rooms
FPM-27	RAB +7	HVAC Rooms
FPM-28	RAB -35	Auxiliary Component Cooling Water Pump Rooms
FPM-29	RAB +35	Relay Room, Corridor
FPM-30A	RAB +21	South High Voltage Switchgear Room

APPLICABILITY: Whenever equipment protected by the spray/sprinkler system is required to be OPERABLE.

ACTION:

- a. With one or more of the above required spray and/or sprinkler systems inoperable, within 1 hour establish a continuous fire watch with backup fire suppression equipment for those areas in which redundant systems or components could be damaged unless the spray and/or sprinkler system(s) is located inside the containment, then inspect that containment area at least once per 8 hours or monitor air temperature at least once per hour at the locations listed in Specification 4.6.1.5; for other areas, establish an hourly fire watch patrol.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

REACTOR COOLANT SYSTEM

BASES

CHEMISTRY (Continued)

the chemistry within the Steady State Limits provides adequate corrosion protection to ensure the structural integrity of the Reactor Coolant System over the life of the plant. The associated effects of exceeding the oxygen, chloride and fluoride limits are time and temperature dependent. Corrosion studies show that operation may be continued with contaminant concentration levels in excess of the Steady State Limits, up to the Transient Limits, for the specified limited time intervals without having a significant effect on the structural integrity of the Reactor Coolant System. The time interval permitting continued operation within the restrictions of the Transient Limits provides time for taking corrective actions to restore the contaminant concentrations to within the Steady State Limits.

The Surveillance Requirements provide adequate assurance that concentrations in excess of the limits will be detected in sufficient time to take corrective action.

3/4.4.7 SPECIFIC ACTIVITY

The limitations on the specific activity of the primary coolant ensure that the resulting 2-hour doses at the site boundary will not exceed an appropriately small fraction of Part 100 limits following a steam generator tube rupture accident in conjunction with an assumed steady-state primary-to-secondary steam generator leakage rate of 1 gpm and a concurrent loss-of-offsite electrical power. The values for the limits on specific activity represent limits based upon a parametric evaluation by the NRC of typical site locations. These values are conservative in that specific site parameters of the Waterford Unit 3 site, such as site boundary location and meteorological conditions, were not considered in this evaluation.

REACTOR COOLANT SYSTEM

BASES

SPECIFIC ACTIVITY (Continued)

Reducing T_{avg} to less than 500°F prevents the release of activity should a steam generator tube rupture since the saturation pressure of the primary coolant is below the lift pressure of the atmospheric steam relief valves. The surveillance requirements provide adequate assurance that excessive specific activity levels in the primary coolant will be detected in sufficient time to take corrective action. Information obtained on iodine spiking will be used to assess the parameters associated with spiking phenomena. A reduction in frequency of isotopic analyses following power changes may be permissible if justified by the data obtained.

3/4.4.8 PRESSURE/TEMPERATURE LIMITS

All components in the Reactor Coolant System are designed to withstand the effects of cyclic loads due to system temperature and pressure changes. These cyclic loads are introduced by normal load transients, reactor trips, and startup and shutdown operations. The various categories of load cycles used for design purposes are provided in Section 3.9.1.1 of the FSAR. During startup and shutdown, the rates of temperature and pressure changes are limited so that the maximum specified heatup and cooldown rates are consistent with the design assumptions and satisfy the stress limits for cyclic operation.

During heatup, the thermal gradients in the reactor vessel wall produce thermal stresses which vary from compressive at the inner wall to tensile at the outer wall. These thermal induced compressive stresses tend to alleviate the tensile stresses induced by the internal pressure. Therefore, a pressure-temperature curve based on steady-state conditions (i.e., no thermal stresses) represents a lower bound of all similar curves for finite heatup rates when the inner wall of the vessel is treated as the governing location.

The heatup analysis also covers the determination of pressure-temperature limitations for the case in which the outer wall of the vessel becomes the controlling location. The thermal gradients established during heatup produce tensile stresses at the outer wall of the vessel. These stresses are additive to the pressure induced tensile stresses which are already present. The thermal induced stresses at the outer wall of the vessel are tensile and are dependent on both the rate of heatup and the time along the heatup ramp; therefore, a lower bound curve similar to that described for the heatup of the inner wall cannot be defined. Consequently, for the cases in which the outer wall of the vessel becomes the stress controlling location, each heatup rate of interest must be analyzed on an individual basis.

ADMINISTRATIVE CONTROLS

6.9 REPORTING REQUIREMENTS

ROUTINE REPORTS

6.9.1 In addition to the applicable reporting requirements of Title 10, Code of Federal Regulations, the following reports shall be submitted to the Regional Administrator of the Regional Office of the NRC unless otherwise noted.

STARTUP REPORT

6.9.1.1 A summary report of plant startup and power escalation testing shall be submitted following (1) receipt of an Operating License, (2) amendment to the license involving a planned increase in power level, (3) installation of fuel that has a different design or has been manufactured by a different fuel supplier, and (4) modifications that may have significantly altered the nuclear, thermal, or hydraulic performance of the plant.

6.9.1.2 The startup report shall address each of the tests identified in the FSAR and shall include a description of the measured values of the operating conditions or characteristics obtained during the test program and a comparison of these values with design predictions and specifications. Any corrective actions that were required to obtain satisfactory operation shall also be described. Any additional specific details required in license conditions based on other commitments shall be included in this report.

6.9.1.3 Startup reports shall be submitted within (1) 90 days following completion of the startup test program, (2) 90 days following resumption or commencement of commercial power operation, or (3) 9 months following initial criticality, whichever is earliest. If the startup report does not cover all three events (i.e., initial criticality, completion of startup test program, and resumption or commencement of commercial operation), supplementary reports shall be submitted at least every 3 months until all three events have been completed.

ANNUAL REPORTS

6.9.1.4 Annual reports covering the activities of the unit as described below for the previous calendar year shall be submitted prior to March 1 of each year. The initial report shall be submitted prior to March 1 of the year following initial criticality.

The results of specific activity analysis in which the primary coolant exceeded the limits of Specification 3.4.7 shall be submitted annually in accordance with the aforementioned time frame. The following information shall be included:

- (1) Reactor power history starting 48 hours prior to the first sample in which the limit was exceeded;
- (2) Results of the last isotopic analysis for radioiodine performed prior to exceeding the limit, results of analysis while limit was exceeded

*This tabulation supplements the requirements of §20.407 of 10 CFR Part 20.

ADMINISTRATIVE CONTROLS

ANNUAL REPORTS (Continued)

and results of one analysis after the radioiodine activity was reduced to less than limit. Each result should include date and time of sampling and the radioiodine concentrations;

- (3) Clean-up system flow history starting 48 hours prior to the first sample in which the limit was exceeded;
- (4) Graph of the I-131 concentration and one other radioiodine isotope concentration in microcuries per gram as a function of time for the duration of the specific activity above steady-state level; and
- (5) The time duration when the specific activity of the primary coolant exceeded the radioiodine limit.

6.9.1.5 Reports required on an annual basis shall include a tabulation on an annual basis of the number of station, utility, and other personnel (including contractors) receiving exposures greater than 100mrem/yr and their associated man-rem exposure according to work and job functions* (e.g., reactor operations and surveillance, inservice inspection, routine maintenance, special maintenance [describe maintenance], waste processing, and refueling). The dose assignments to various duty functions may be estimated based on pocket dosimeter, TLD, or film badge measurements. Small exposures totalling less than 20% of the individual total dose need not be accounted for. In the aggregate, at least 80% of the total whole body dose received from external sources should be assigned to specific major work functions.

ADMINISTRATIVE CONTROLS

MONTHLY OPERATING REPORTS

6.9.1.6 Routine reports of operating statistics and shutdown experience, including documentation of all challenges to the safety valves, shall be submitted on a monthly basis to the Director, Office of Resource Management, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, with a copy to the Regional Administrator of the Regional Office of the NRC, no later than the 15th of each month following the calendar month covered by the report.

ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT

6.9.1.7 Routine Annual Radiological Environmental Operating Reports covering the operation of the unit during the previous calendar year shall be submitted prior to May 1 of each year. The initial report shall be submitted prior to May 1 of the year following initial criticality.

The Annual Radiological Environmental Operating Reports shall include summaries, interpretations, and an analysis of trends of the results of the radiological environmental surveillance activities for the report period, including a comparison with preoperational studies, with operational controls as appropriate, and with previous environmental surveillance reports, and an assessment of the observed impacts of the plant operation on the environment. The reports shall also include the results of land use censuses required by Specification 3.12.2.

The Annual Radiological Environmental Operating Reports shall include the results of analysis of all radiological environmental samples and of all environmental radiation measurements taken during the period pursuant to the locations specified in the Table and Figures in the ODCM, as well as summarized and tabulated results of these analyses and measurements in the format of the table in the Radiological Assessment Branch Technical Position, Revision 1, November 1979. In the event that some individual results are not available for inclusion with the report, the report shall be submitted noting and explaining the reasons for the missing results. The missing data shall be submitted as soon as possible in a supplementary report.

The reports shall also include the following: a summary description of the radiological environmental monitoring program; at least two legible maps* covering all sampling locations keyed to a table giving distances and directions from the centerline of one reactor; the results of licensee participation in the Interlaboratory Comparison Program, required by Specification 3.12.3; discussion of all deviations from the sampling schedule of Table 3.12-1; and discussion of all analyses in which the LLD required by Table 4.12-1 was not achievable.

*One map shall cover stations near the SITE BOUNDARY a second shall include the more distant stations.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. 8 TO FACILITY OPERATING LICENSE NO. NPF-38
LOUISIANA POWER AND LIGHT COMPANY
WATERFORD STEAM ELECTRIC STATION, UNIT 3
DOCKET NO. 50-382

1.0 INTRODUCTION

By letter dated May 23, 1986, as supplemented by letters dated August 29, 1986 and October 1, 1986, Louisiana Power and Light Company (the licensee) requested changes to the Technical Specifications (Appendix A to Facility Operating License No. NPF-38) for the Waterford Steam Electric Station, Unit 3. The proposed changes would: (1) delete a surveillance requirement for trisodium phosphate aggregation; (2) revise a surveillance requirement for the diesel fire pump batteries; and (3) delete the requirement to shut the plant down when coolant activity levels are exceeded for 800 hours in a 12-month period and reduce the reporting requirements for iodine spiking.

2.0 DISCUSSION

The proposed changes to the technical specifications requested by the licensee are in three areas as described below.

2.1 Surveillance for trisodium phosphate aggregation

The proposed change would modify surveillance requirement 4.5.2.d.5 by deleting the requirement for a visual inspection of the trisodium phosphate storage baskets for evidence of aggregation every 18 months and deleting the requirement for mechanical dispersal of any aggregates found.

2.2 Diesel fire pump batteries

The proposed change would revise Technical Specification (TS) surveillance requirement 4.7.10.1.3.c.1 to remove the requirement for inspection of diesel fire pump battery cell plates. TS 4.7.10.1.3 delineates the surveillance requirements for each fire pump diesel starting (12-volt) battery bank and charger. In particular, item c.1 stipulates that the batteries, cell plates and battery racks are to be checked at least once per eighteen (18) months to ensure that there is no visual indication of physical damage or abnormal deterioration. The proposed TS change will delete the requirement for a visual inspection of the cell plates.

2.3 Primary coolant activity

The proposed change would eliminate the requirement to shut the plant down when coolant activity levels are exceeded for 800 hours in a 12-month period and will reduce the reporting requirements for iodine spiking short-term report (Special Report) to an item which is to be submitted annually when the limits of TS 3.4.7 are exceeded. The proposed change would also revise TS Bases Section 3/4.4.7 and Administrative Controls Section 6.9.1.4 to achieve consistency throughout the Technical Specifications.

3.0 EVALUATION

The proposed changes to the Technical Specifications requested by the licensee and described in three areas above, are evaluated below.

3.1 Surveillance for trisodium phosphate aggregation

The licensee has provided information on trisodium phosphate (TSP) aggregation dispersal and dissolution when exposed to the containment spray water. Referring to the experimental work performed by its staff and by Combustion Engineering, the licensee was able to demonstrate that a TSP aggregate greater than 0.5 cubic feet and weighing 24.5 pounds could be dispersed in stagnant water at ambient temperature in about 10 minutes. Higher water temperatures and the presence of turbulence would increase the dispersal and would decrease the time required for dissolution. From these experiments, the licensee concluded that even if the TSP salt became agglomerated in the baskets, the containment spray water would disperse these agglomerates and dissolve the salt in less than the 3 hours required by the Technical Specifications for pH control. Thus, the need for making special inspections and breaking any detected TSP agglomerates found in the baskets is unnecessary.

Also, the racks containing TSP will continue to be periodically inspected for their integrity and to assure that they contain the minimum required amount of TSP in accordance with surveillance requirement 4.5.2.d.3.

Based on the considerations discussed above, the staff concludes that the modification of the surveillance requirements for the containment pH control systems for Waterford 3 proposed by the licensee meets the requirements of General Design Criterion 42 for inspection of containment atmosphere cleanup systems. The staff, therefore, finds the licensee's proposed deletion of the requirement for visual inspection of the TSP storage baskets for evidence of aggregation and mechanical dispersion of aggregates present to be acceptable. However, the licensee will continue to periodically inspect the racks containing TSP for their integrity and to assure that they contain the minimum required amount of TSP in accordance with the existing Technical Specifications.

3.2 Diesel fire pump batteries

The proposed change would remove the surveillance requirement for visual inspection of the diesel fire pump battery cell plates. The present Technical Specification requires that the cell plates are to be checked at least once per 18 months to ensure that there is no visual indication of physical damage or abnormal deterioration.

Since the diesel fire pump batteries at Waterford 3 are housed in black opaque cases, the only way to visually inspect the cell plates is through the small fill caps at the top of the batteries. This type of inspection does not represent a true indication of the cell plates' condition since bridging of the cell plates would most likely occur at the bottom.

The licensee has been unable to find a clear case battery of the size and capacity necessary for the diesel fire pumps, and thus is not able to effectively carry out the inspection required by the Technical Specifications.

However, other Technical Specifications exist which provide adequate assurance of the continued operability of the diesel fire pumps in the absence of the requirement for visual inspection of the battery cell plates. These specifications include checks of battery electrolyte level, voltage and specific gravity and actual starts of the diesel engine fire pumps. Additional assurance of operability is provided by the fact that each diesel engine fire pump has separate and redundant batteries which are replaced on a 40-month interval.

Based on the considerations discussed above, the staff concludes that the licensees' proposal to eliminate the surveillance requirement for visual inspection of the diesel fire pump battery cell plates is acceptable.

3.3 Primary coolant activity

In order to satisfactorily resolve the concerns in Generic Issue No. B-65 related to reporting requirements on primary coolant iodine spike, the staff issued Generic Letter 85-19, dated September 27, 1985, to all licensees and applicants for operating power reactors and holders of construction permits for power reactors.

In Generic Letter 85-19, the staff determined that (1) reporting requirements related to primary coolant activity level, specifically iodine spikes, could be reduced from a short term report (Special Report or Licensee Event Report) to an item to be included in the annual report; and (2) existing shutdown requirements based on exceeding the primary coolant specific activity limits for an accumulated period of over 800 hours were no longer necessary.

The staff's decision is based on an improvement in the quality of nuclear fuel over the past 10 years and the fact that appropriate actions would be initiated long before approaching the limit as currently specified. Generic Letter 85-19 also included model Technical Specifications which reflect these changes.

The staff has reviewed the proposed changes to TS 3/4.4.7 and TS 6.9.1.4 for Waterford 3, which would delete the short term reporting requirements regarding primary coolant activity and no longer require plant shutdown with the primary coolant activity exceeding the TS limit for more than 800 hours. The staff finds that the proposed changes are consistent with the model TS included in Generic Letter 85-19 and concludes that the proposed changes are, therefore, acceptable.

4.0 CONTACT WITH STATE OFFICIAL

The NRC staff has advised the Administrator, Nuclear Energy Division, Department of Environmental Quality, State of Louisiana of the proposed determination of no significant hazards consideration. No comments were received.

5.0 ENVIRONMENTAL CONSIDERATION

This amendment involves changes in the installation or use of facility components located within the restricted area. The staff has determined that the amendment involves no significant increase in the amounts of any effluents that may be released offsite and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued proposed findings that the amendment involves no significant hazards consideration, and there has been no public comment on such findings. Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of this amendment.

6.0 CONCLUSION

Based upon our evaluation of the proposed changes to the Waterford 3 Technical Specifications, we have concluded that: there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and such activities will be conducted in compliance with the Commission's regulations and the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public. We, therefore, conclude that the proposed changes are acceptable, and are hereby incorporated into the Waterford 3 Technical Specifications.

Dated: November 13, 1986