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W3F1-2001-0071
A4.05
PR

July 23, 2001

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D.C. 20555

Subject: Waterford 3 SES
Docket No. 50-382
License No. NPF-38
Technical Specification Change Request NPF-38-237
Relaxation of Fuel Handling Building Ventilation System Filtration Requirements

Gentlemen:

In accordance with 10CFR50.90, Entergy is hereby requesting approval of changes to the surveillance requirements associated with the Fuel Handling Building (FHB) Ventilation System. The proposed change is to delete TS 3.9.12, "Fuel Handling Building Ventilation System" and the TS 3.3.3.1 requirements for the Fuel Storage Pool area radiation monitors. The attached description and safety analysis support this proposed change to the Waterford 3 Technical Specifications. This change is requested on a similar basis to that of an earlier request (NPF-38-226, approved in Amendment 169). That change permitted the containment hatch to remain open during the refueling outage and was based on an evaluation of the dose consequences of an unfiltered release from a Fuel Handling Accident (FHA) inside containment. An analysis of the FHA in the FHB demonstrates that acceptable dose results are obtained assuming no isolation or filtration functions. This change, then, maintains the protection of the public health and safety but also enables significant cost savings over the life of the plant. It will enable Waterford 3 to eliminate the need for charcoal replacement.

The affected Technical Specification requirements were also recently revised in Amendment 170 to address Generic Letter 99-02. In that change, Waterford 3 implemented the new recommended test methodology and simply retained our existing design basis requirements for filter efficiency. As noted above, a re-analysis

A001

of the FHA in the FHB demonstrates that the charcoal efficiency considered in the original design basis may be eliminated.

This proposed change has been evaluated in accordance with 10CFR50.91(a)(1), using the criteria in 10CFR50.92(c), and it has been determined that this request involves no significant hazards consideration.

The circumstances surrounding this change do not meet the NRC Staff criteria for exigent or emergency review; however, in order to optimize the benefit of this change approval is being requested by December 1, 2001. This change would provide for considerable cost savings by allowing the elimination of the need for charcoal replacement in the FHB Ventilation System.

Entergy requests the effective date for this TS change to be within 60 days of approval.

All of the commitments contained in this submittal are identified on the attached Commitment Identification/Voluntary Enhancement Form. Should you have any questions or comments concerning this request, please contact Jerry Burford at (601) 368-5755.

Pursuant to 28 U.S.C.A. Section 1746, I declare under penalty of perjury that the foregoing is true and correct. Executed on July 23, 2001.

Very truly yours,

for

J. T. Herron
Vice President, Operations
Waterford 3

JTH/FGB/cbh
Attachments: 1. NPF-38-237, Technical Specification Change Request
2. NPF-38-237, Proposed Marked-Up Specifications
3. Commitment Summary

cc: E.W. Merschoff, NRC Region IV
N. Kalyanam, NRC-NRR
J. Smith
N.S. Reynolds
NRC Resident Inspectors Office
Administrator Radiation Protection Division
(State of Louisiana)
American Nuclear Insurers

ATTACHMENT 1

TO

W3F1-2001-0071

PROPOSED TECHNICAL SPECIFICATION

AND

RESPECTIVE SAFETY ANALYSES

IN THE MATTER OF AMENDING

LICENSE NO. NPF-38

ENTERGY OPERATIONS, INC.

DOCKET NO. 50-382

DESCRIPTION OF PROPOSED CHANGES

The proposed change deletes the requirements of Technical Specification (TS) 3.9.12, "Fuel Handling Building Ventilation System." An analysis of the fuel handling accident in the Fuel Handling Building demonstrates that the isolation and filtration functions of the system are not required safety functions. At this time, Waterford 3 does not plan to implement modifications to physically remove the filters or charcoal adsorbers from the system design. Waterford 3 will transfer the system operability requirement into the Technical Requirements Manual (TRM). In this transfer, the filtration surveillance requirements will be dropped; the TRM will continue to require the surveillances of 4.9.12.a, 4.9.12.d.2 and 4.9.12.d.3. This will assure a conservative defense in depth position by testing the isolation and drawdown functions of the system. See Attachment 2 for proposed marked-up specifications.

The deletion of TS 3.9.12 also affects TS 3.3.3.1, "Radiation Monitoring Instrumentation." The Fuel Storage Pool area radiation monitor (ARM) provides for the automatic isolation of the FHB Ventilation System. As noted above, this is no longer a required safety function. Waterford 3 will move the operability requirement for this ARM into the TRM.

The deletion of TS 3.9.12 will also affect the index page IX. This page will reflect that specification 3/4.9.12 as deleted. Markups of the affected TS pages are provided in Attachment 2.

BACKGROUND

The Fuel Handling Building Ventilation System (FHBVS) maintains a suitable environment for equipment operation and personnel access. It is also designed to mitigate the consequences of a release of radioactivity during normal operation and anticipated transients. On this basis, the system is currently classified and designed as an ESF air cleanup system. The system distributes air throughout the building from areas of low potential radioactivity to areas of higher potential activity. The design basis accident of interest for this system is the fuel handling accident in the Fuel Handling Building. During fuel handling operations, a controlled space in the spent fuel pool area is maintained by closing the doors of the building. Area radiation monitors will isolate the normal ventilation system and automatically initiate the filtration flowpath upon detection of radioactivity released from a dropped fuel assembly.

Waterford 3 received approval of changes to the Technical Specifications to address the testing recommendations of Generic Letter 99-02 in Amendment 170. That change incorporated a new test standard, ASTM D3803-1989, for testing the charcoal of the Engineered Safety Features (ESF) ventilation systems, including the FHBVS. Waterford 3 has implemented that change and has conducted charcoal testing to the new standard. The charcoal samples from the Fuel Handling Building Ventilation

System have not passed the tests. The charcoal in these filters is old compared to that in other Waterford 3 ESF filter systems. Upon recognition of the unacceptable test results, Waterford 3 began an evaluation of alternatives, including replacement of the charcoal.

Waterford 3 also recently received NRC approval of a TS change that would permit the containment penetrations to remain open during a refueling outage (Amendment 169, October 2, 2000). These penetrations were originally required in TS 3.9.4 to be closed during CORE ALTERATIONS and fuel movement inside the Reactor Containment Building (RCB). The RCB and these penetrations provide a barrier to contain fission product activity that may be released from the reactor core following an accident. The accident of concern during a refueling outage is the Fuel Handling Accident (FHA). The acceptance criteria are ensuring that offsite radiation exposures are maintained well within the requirements of 10CFR100 and that doses to the control room operator are maintained with the limits of 10CFR50, Appendix A, GDC 19.

During core alterations or movement of irradiated fuel assemblies within containment, the most severe radiological consequences result from a FHA. The FHA is a postulated event that involves damage to irradiated fuel. The FHA analysis in the Final Safety Analysis Report (FSAR) includes the dropping a single irradiated fuel assembly or dropping a heavy object onto other irradiated fuel assemblies. The acceptance limits for a FHA are contained in Standard Review Plan (SRP) Section 15.7.4 and are defined as "well within" 10CFR100 limits for offsite radiation exposure. The "well within" 10CFR100 limits are generally interpreted to be 25% of the 10CFR100 values, or 75 rem thyroid and 6 rem whole body.

The original TS 3.9.4 limited the consequences of a FHA inside containment by limiting the potential escape paths for fission product radioactivity released. However, in support of the requested changes that were approved in Amendment 169, EOI performed an analysis of the FHA inside containment that assumed the containment equipment hatch, personnel airlock (PAL) and equipment airlock (EAL) doors, and penetrations are open at the time of the accident. It was demonstrated that, even leaving those penetrations open during the event, the acceptance limits for offsite radiation exposure would still be met.

The scope of this change request is supported by the same accident analysis. That is, the analysis performed for the FHA in containment is also applicable to the FHA in the Fuel Handling Building.

BASIS FOR PROPOSED CHANGE

The proposed change deletes the requirements of Technical Specification (TS) 3.9.12, "Fuel Handling Building Ventilation System." Waterford 3 will implement a Technical Requirements Manual change to maintain the operability requirements for the system.

The required surveillances will include the current requirements to test the system operation, automatic isolation on high radiation, and the ability to draw a negative pressure condition in the FHB. Testing of the charcoal adsorbers and the HEPA filters will be deleted. In addition, changes to TS 3.3.3.1 and to an index page are also proposed based on the deletion of TS 3.9.12.

The TS Bases for this Specification will also be deleted. As Waterford 3 has a Technical Specification Bases change control program, and because this proposed change is straightforward (i.e., deletion of the entire section), a markup of the affected Bases page is not provided.

The analysis of the FHA in containment assumed the containment equipment hatch, personnel airlock and equipment airlock doors, and penetrations are open at the time of the accident. To be conservative, the analysis assumed that all of the activity released to the containment building is immediately released to the environment without crediting filtration or hold-up time in the building. The results of that FHA analysis demonstrated that it is not necessary to have containment closure in order to keep site boundary and control room doses within the acceptance limits following a FHA. Similarly, the FHA in the FHB involves the same event assumptions. The analysis results of the event in either building demonstrate acceptable doses assuming a release with no filtration.

The evaluation for the offsite and control room radiological consequences of a FHA in the FHB used the TRANSACT computer code, which is an enhancement of the NRC Staff approved TACT V code. This code is the same as used for other licensing basis offsite and control room dose calculations in the FSAR. The model for calculating the radiological consequences of a FHA incorporated the appropriate conservative assumptions in RG 1.25 and used the same atmospheric dispersion factors as specified in the FSAR.

The total number of failed fuel rods used in the analysis is based on the Waterford 3 design basis fuel handling accident in the Fuel Handling Building described in the Waterford 3 FSAR Section 15.7.3.4. This design basis analysis establishes that the worst case FHA is the failure of fuel rods in four rows parallel to one assembly face i.e., 60 fuel rods. This analysis employs the conservative assumption that the dropped fuel assembly at impact has reached its terminal velocity in water. The analysis assumes that all of the kinetic energy of the fuel assembly at impact is absorbed only by the fuel rods at a single line of contact. With this assumption, no more than four rows, 60 fuel rods, will undergo failure. Since the fuel assembly is travelling at its terminal velocity in water at the time of impact, the number of failed fuel rods is independent of the distance through which the fuel assembly is assumed to drop.

RG 1.25, section C.1.d, states that all of the gap activity in the damaged rods is released and consists of 10% of the total noble gases other than Kr-85, 30% of the Kr-85, and 10% of the total radioactive iodine in the rods at the time of the accident.

The assumptions used in generating the fuel rod gap inventories are consistent with RG 1.25 with the exception that the release fraction for Iodine-131 is increased by 20% (i.e., from 10% to 12%) in accordance with NUREG/CR-5009. The gap inventory used in this FHA analysis is the same as used for the Waterford 3 Spent Fuel Pool storage capacity increase analyses approved by the NRC Staff in Amendment 144 as well as that for the FHA in containment analysis approved by the NRC Staff in Amendment 169. This inventory is conservatively based on an anticipated power uprate condition of 108% plus an additional 5% power (1.08*3390*1.05 = 3844.3 MWt or 3844.3/3390 = 113.4 % of rated core power).

RG 1.25, section C.1.i, states that the radioactive material that escapes from the pool to the building is released from the building over a two-hour time period. The Waterford 3 calculation assumes that the noble gases and radioiodine from the gap of the broken fuel rods are instantaneously released to the atmosphere. This assumption is overly conservative, since for all practical purposes, it ignores the existence of the FHB and its ventilation system.

The offsite and control room dose consequences (rem) calculated for the FHA inside the FHB are presented in the table below. These results are the same as those approved in Amendment 169:

Dose (rem)	Thyroid		Whole Body		Skin	
	Analysis	Limit	Analysis	Limit	Analysis	Limit
2 hr Exclusion Area Boundary	53.70	75	0.176	6	N/A	N/A
2 hr Low Population Zone Boundary	6.05	75	0.02	6	N/A	N/A
30 day Control Room	0.932	30	0.015	5	0.623	30

Per SRP, Section 15.7.4, Rev. 1, the radiological consequences of a FHA must be within the acceptance limits of 75 rem for the thyroid and 6 rem for the whole body. In addition, 10CFR50 Appendix A, General Design Criterion (GDC) 19, specifies that adequate radiation protection is to be provided to permit access and occupancy of the control room under accident conditions. This is met by ensuring calculated personnel exposures remain under 5 rem whole body or its equivalent to any part of the body for the duration of the accident. The above table of analysis results demonstrates that the offsite and control room doses due to an FHA in the FHB are well within the noted acceptance criteria.

Conclusion

The analysis of the FHA in the Fuel Handling Building demonstrates the FHBVS does not perform a safety function required to mitigate the consequences of the accident. Offsite and control room doses are within the allowable limits with no isolation or filtration functions credited. On this basis the classification of the system as an ESF air cleanup system may be downgraded. Further, the requirements for these functions need not be included in the Technical Specifications.

The proposed change is to delete TS 3.9.12. Associated with the deletion of TS 3.9.12, the requirements of TS 3.3.3.1 for the fuel storage pool area radiation monitor is also proposed for deletion. The proposed revision is justified by the revised analysis of the FHA in the FHB. This analysis demonstrates that doses will remain within the acceptance criteria with no credit for isolation or filtration (either charcoal or HEPA). Waterford 3 will implement a new Technical Requirements Manual change to maintain a requirement for the operability of the Fuel Handling Building Ventilation System and for the fuel storage pool area radiation monitor.

DETERMINATION OF NO SIGNIFICANT HAZARDS CONSIDERATION

Entergy Operations, Inc. is proposing that the Waterford Steam Electric Station, Unit 3 Operating License be amended to remove the Technical Specification requirements for the Fuel Handling Building ventilation system and for the fuel storage pool area radiation monitor. This change affects Technical Specification 3.9.12 and 3.3.3.1 requirements that are applicable "whenever irradiated fuel is in the spent fuel pool." The changes have been evaluated in accordance with 10 CFR 50.92(c).

An evaluation of the proposed changes has been performed in accordance with 10CFR50.91(a)(1) regarding no significant hazards considerations using the standards in 10CFR50.92(c). A discussion of these standards as they relate to this amendment request follows:

1 - Does Not Involve a Significant Increase in the Probability or Consequences of an Accident Previously Evaluated.

The FHBVS is not involved in the initiation of any accidents. The system is not credited with providing any supplemental filtration of any releases from an accident occurring in the containment building. It was designed to provide an accident mitigation function by isolating the system and filtering the radioiodines that may be released from a damaged fuel assembly in the event of a Fuel Handling Accident (FHA). The charcoal adsorber was the primary component that supported this filtration function. However, based on a revised analysis of the dose consequences of the FHA, it has been demonstrated that doses due to the FHA, to both the public and the control room operator, remain well within regulatory acceptance limits even assuming no credit for either isolation or filtration. The charcoal filtration function is not required and need not be tested. Thus, there is no required safety function in the event of a fuel handling accident provided by either the ventilation system or the area radiation monitor.

Therefore, the proposed changes do not involve a significant increase in the probability or consequences of any accident previously evaluated.

2 - Does Not Create the Possibility of a New or Different Kind of Accident from any Previously Evaluated.

The FHBVS is not involved in the initiation of any accidents. It was designed to provide an accident mitigation function by isolating the system and filtering the radioiodines that may be released from a damaged fuel assembly in the event of a Fuel Handling Accident (FHA). Recent analyses show that the isolation and filtration functions are no longer required. The charcoal adsorber can not influence any accident initiators. Further, it has been demonstrated that the charcoal is not needed to support the normal function of the system or plant

operation. The deletion of the technical specification requirements does not impact this conclusion and does not influence any new potential accident scenarios in any way.

Therefore, the proposed changes do not create the possibility of a new or different kind of accident from any previously evaluated.

3 - **Does Not Involve a Significant Reduction in the Margin of Safety.**

The FHBVS was designed to provide an accident mitigation function by filtering the radioiodines that may be released from a damaged fuel assembly in the event of a Fuel Handling Accident (FHA). Charcoal adsorbers had been provided for this function. Recent analysis of the FHA in the Fuel Handling Building demonstrate that the isolation function and the charcoal adsorber are not required to satisfy the margin of safety provided by the Technical Specification requirements. Based on a revision to the dose consequence analysis of the FHA, it has been determined that doses remain well within the regulatory allowable for exposure even assuming no credit for charcoal filtration. The margin of safety, as defined by SRP 15.7.4 Rev 1, and General Design Criterion 19, has not been significantly reduced.

Therefore, the proposed changes do not significantly reduce the margin to safety.

Therefore, based on the reasoning presented above, Entergy Operations, Inc. has determined that the requested changes do not involve a significant hazards consideration.

ENVIRONMENTAL IMPACT EVALUATION

Pursuant to 10CFR51.22(b), an evaluation of the proposed amendment has determined that it meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(9). The basis for this determination is as follows:

1. The proposed license amendment does not involve a significant hazards consideration as described previously in the evaluation.

2. As discussed in the significant hazards evaluation, the proposed license amendment does not result in a significant change or significant increase in the radiological doses for any Design Bases Accident. The proposed license amendment does not result in any significant change in the types or the amounts of effluents that may be released off-site.

3. The proposed license amendment does not result in a significant increase to the individual or cumulative occupational radiation exposure because this change does not modify the method of operation of systems and components necessary to prevent a radioactive release.

ATTACHMENT 2

TO

W3F1-2001-0071

MARKUP OF CURRENT TECHNICAL SPECIFICATIONS

IN THE MATTER OF AMENDING

LICENSE NO. NPF-38

ENTERGY OPERATIONS, INC.

DOCKET NO. 50-382

INDEX

BASES

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 Fuel Handling Building Ventilation System Isolation (Deleted)	2	*	≤ 100 mR/h	10^{-1} - 10^{4} mR/h	24
b.	Containment - Purge & Exhaust Isolation	1/train	1, 2, 3, 4 & **	40 mR/h or ≤ 2x background whichever is Higher	20 - $5x10^{5}$ mR/h	25
2.	PROCESS MONITORS					
a.	Containment Atmosphere					
	1) Gaseous Activity RCS Leakage Detection	1	1, 2, 3, & 4	Not Applicable	10^{-6} - 10^{-1} µCi/cc	23
	2) Particulate Activity RCS Leakage Detection	1	1, 2, 3, & 4	Not Applicable	10^{-11} - 10^{-6} µCi/cc	23
b.	Control Room Intake Monitors	1/intake	ALL MODES & ***	≤ $5.45x10^{-6}$ µCi/cc	10^{-8} - 10^{-2} µCi/cc	26
c.	Steam Generator Blowdown Monitor	1	1, 2, 3, & 4	≤ 10^{-3} µCi/cc	10^{-6} - 10^{-1} µCi/cc	28
d.	Component Cooling Water Monitors A&B	1/line	ALL MODES	≤ 10^{-4} µCi/cc	10^{-7} - 10^{-2} µCi/cc	28
e.	Component Cooling Water Monitor A/B	1	1, 2, 3, & 4	≤ 10^{-4} µCi/cc	10^{-7} - 10^{-2} µCi/cc	28

*With irradiated fuel in the storage pool.
**During CORE ALTERATIONS or movement of irradiated fuel within the containment.
***During movement of irradiated fuel.

TABLE 3.3-6 (Continued)

ACTION STATEMENTS

ACTION 23 - With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, comply with the ACTION requirements of Specification 3.4.5.1.

ACTION 24 - With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, comply with the ACTION requirements of Specification 3.9.12.

ACTION 25 - With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, comply with the ACTION requirements of Specification 3.9.9.

ACTION 26 - With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, within 1 hour initiate and maintain operation of the control room emergency ventilation system in the recirculation mode of operation.

ACTION 27 - With the number of OPERABLE Channels less than required by the Minimum Channels OPERABLE requirement, either restore the inoperable Channel(s) to OPERABLE status within 72 hours, or:

1. Initiate the preplanned alternate method of monitoring the appropriate parameter(s), and

2. If the monitor is not restored to OPERABLE status within 7 days after the failure, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within 14 days following the event outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the system to OPERABLE status.

ACTION 28 - With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirements, operation of the plant may continue for up to 30 days provided grab samples are taken once per 8 hours and these samples are analyzed for gross activity within 24 hours.

If the monitor is not restored to OPERABLE status within 30 days after the failure, continue sampling and prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within 14 days outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the system to OPERABLE status.

RADIATION MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

INSTRUMENT	CHANNEL CHECK	CHANNEL CALIBRATION	CHANNEL FUNCTIONAL TEST	MODES FOR WHICH SURVEILLANCE IS REQUIRED
1. AREA MONITORS				
a. ~~Fuel Storage Pool Area~~ Deleted Fuel Handling Building Ventilation System Isolation	S	R	Q	*
b. Containment - Purge & Exhaust Isolation	S	R	Q	1, 2, 3, 4 & **
2. PROCESS MONITORS				
a. Containment Atmosphere				
1) Gaseous Activity - RCS Leakage Detection	S	R	Q	1, 2, 3, & 4
2) Particulate Activity - RCS Leakage Detection	S	R	Q	1, 2, 3, & 4
b. Control Room Intake Monitors	S	R	Q	ALL MODES & ***
c. Steam Generator Blowdown	S	R	Q	1, 2, 3, & 4
d. Component Cooling Water Monitors A&B	S	R	Q	ALL MODES
e. Component Cooling Water Monitor A/B	S	R	Q	1, 2, 3, & 4

*With irradiated fuel in the storage pool.
**During CORE ALTERATIONS or movement of irradiated fuel within the containment.
***During movement of irradiated fuel.

REFUELING OPERATIONS

3/4.9.12 FUEL HANDLING BUILDING VENTILATION SYSTEM

LIMITING CONDITION FOR OPERATION

3.9.12 Two independent fuel handling building ventilation systems shall be OPERABLE.

APPLICABILITY: Whenever irradiated fuel is in the spent fuel pool.

ACTION:

a. With one fuel handling building ventilation system inoperable, fuel movement within the spent fuel pool or crane operation with loads over the spent fuel pool may proceed provided the OPERABLE fuel handling building ventilation system is capable of being powered from an OPERABLE emergency power source and is in operation and discharging through at least one train of HEPA filters and charcoal adsorbers.

b. With no fuel handling building ventilation system OPERABLE, suspend all operations involving movement of fuel within the spent fuel pool or crane operation with loads over the spent fuel pool until at least one fuel handling building ventilation system is restored to OPERABLE status.

c. The provisions of Specification 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.9.12 The above required fuel handling building ventilation systems shall be demonstrated OPERABLE:

a. At least once per 31 days on a STAGGERED TEST BASIS by initiating, from the control room, flow through the HEPA filters and charcoal adsorbers and verifying that the system operates for at least 10 hours continuous with the heaters on.

b. At least once per 18 months or (1) after any structural maintenance on the HEPA filter or charcoal adsorber housings, or (2) following painting, fire or chemical release in any ventilation zone communicating with the system by:

Pages 3/4 9-14 through 3/4 9-16 are deleted.

SURVEILLANCE REQUIREMENTS (Continued)

1. Verifying that the ventilation system satisfies the in-place testing acceptance criteria and uses the test procedures of Regulatory Positions C.5.a, C.5.c, and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, and the system flow rate is 4000 cfm ± 10%.

2. Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, shows the methyl iodide penetration less than 0.5% when tested in accordance with ASTM D3803-1989 at a temperature of 30°C and a relative humidity of 70%.

3. Verifying a system flow rate of 4000 cfm ± 10% during system operation when tested in accordance with ANSI N510-1975.

c. After every 720 hours of charcoal adsorber operation by verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, shows the methyl iodide penetration less than 0.5% when tested in accordance with ASTM D3803-1989 at a temperature of 30°C and a relative humidity of 70%.

d. At least once per 18 months by:

1. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is less than 7.8 inches water gauge while operating the system at a flow rate of 4000 cfm ± 10%.

2. Verifying that on a high radiation test signal, the system automatically starts (unless already operating) and draws flow through the HEPA filters and charcoal adsorber banks.

3. Verifying that the system maintains the spent fuel pool area at a negative pressure of greater than or equal to 1/2-inch water gauge relative to the outside atmosphere during system operation.

4. Verifying that the filter cooling bypass valves can be manually cycled.

5. Verifying that the heaters dissipate 25 + 1.3, -2.5 kW when tested in accordance with ANSI N510-1975.

SURVEILLANCE REQUIREMENTS (Continued)

e. After each complete or partial replacement of a HEPA filter bank by verifying that the HEPA filter banks remove greater than or equal to 99.95% of the DOP when they are tested in-place in accordance with ANSI N510-1975 while operating the system at a flow rate of 4000 cfm ± 10%.

f. After each complete or partial replacement of a charcoal adsorber bank by verifying that the charcoal adsorbers remove greater than or equal to 99.95% of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with ANSI N510-1975 while operating the system at a flow rate of 4000 cfm ± 10%.

DELETED

ATTACHMENT 3

TO

W3F1-2001-0071

MARKUP OF CURRENT TECHNICAL SPECIFICATIONS

IN THE MATTER OF AMENDING

LICENSE NO. NPF-38

ENTERGY OPERATIONS, INC.

DOCKET NO. 50-382

COMMITMENT	TYPE		SCHEDULED COMPLETION DATE (If Required)
	ONE-TIME ACTION	CONTINUING COMPLIANCE	
Waterford 3 will transfer the FHBVS operability requirement into the Technical Requirements Manual (TRM). In this transfer, the filtration surveillance requirements will be dropped; the TRM will continue to require the surveillances of 4.9.12.a, 4.9.12.d.2 and 4.9.12.d.3.	X		within 60 days of approval
Waterford 3 will move the operability requirement for the spent fuel storage pool area radiation monitor (ARM) into the TRM.	X		within 60 days of approval