Entergy

Entergy Operations, Inc.
17265 River Road
Killona, LA 70057-3093
Tel 504-739-6715
Fax 504-739-6698
jkowale@entergy.com

Joseph A. Kowalewski
Vice President, Operations
Waterford 3

W3F1-2009-0024

October 19, 2009

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

SUBJECT: License Amendment Request
Technical Specification Change to Relocate Steam Generator High Level Trip Function
Waterford Steam Electric Station, Unit 3
Docket No. 50-382
License No. NPF-38

Dear Sir or Madam:

Pursuant to 10 CFR 50.90, Entergy Operations, Inc. (Entergy) hereby requests a license amendment to the Waterford Steam Electric Station, Unit 3 (Waterford 3) Technical Specifications (TS). The proposed amendment will relocate the Waterford 3 Steam Generator Level - High trip requirements in TS Sections 2.2 and 3/4.3.1 to the Technical Requirements Manual (TRM). A reactor trip due to high steam generator water level acts to protect the main turbine from moisture carryover. However, the Steam Generator Level - High trip is not credited in any accident analysis and does not protect a TS Safety Limit. Therefore, this trip function does not represent a safety function for the Reactor Protection System. Since protection of the main turbine does not significantly impact the health and safety of the public, the Steam Generator Level - High trip does not meet the criterion of 10 CFR 50.36(c)(2)(ii) for retention in the Waterford 3 TSs and relocation of this trip function to the Waterford 3 TRM is appropriate. Revisions to the setpoints and values associated with this trip function will be controlled within the provisions of 10 CFR 50.59. This relocation of the Steam Generator Level – High trip is consistent with Technical Specification Task Force (TSTF) 410-A, "Relocation of Steam Generator Level – High Trip to the TRM" and Revision 3 of NUREG-1432, "Standard Technical Specifications Combustion Engineering Plants."

A description of the proposed change is provided in Attachment 1. A markup of the affected TS pages is contained in Attachment 2. Associated changes to the TS Bases being controlled under the Waterford 3 TS Bases Control Program are provided for information in Attachment 3.

The proposed change has been evaluated in accordance with 10 CFR 50.91(a)(1) using criteria in 10 CFR 50.92(c) and it has been determined that the changes involve no significant hazards consideration.

The proposed change involves one new commitment as described in Attachment 4.

A047
NRR

Entergy requests approval of the proposed amendment by October 19, 2010. Once approved, the amendment shall be implemented within 90 days.

Please contact Robert Murillo, Manager, Licensing at 504-739-6715 if there are any comments regarding this submittal.

I declare under penalty of perjury that the foregoing is true and correct. Executed on October 19, 2009.

Sincerely,

JAK/sab/wjs

Attachments:
1. Analysis of Proposed Technical Specification Change
2. Proposed Technical Specification Changes (mark-up)
3. Proposed Technical Specification Bases Changes (mark-up for information only)
4. List of Regulatory Commitments

cc: Mr. Elmo E. Collins, Jr.
Regional Administrator
U. S. Nuclear Regulatory Commission
Region IV
612 E. Lamar Blvd., , Suite 400
Arlington, TX 76011-8064

NRC Senior Resident Inspector
Waterford Steam Electric Station, Unit 3
P.O. Box 822
Killona, LA 70066-0751

U.S. Nuclear Regulatory Commission
Attn: Mr. N. Kalyanam
MS O-07 D1
Washington, DC 20555-0001

Louisiana Department of Environmental Quality
Office of Environmental Compliance
Surveillance Division
P. O. Box 4312
Baton Rouge, LA 70821-4312

American Nuclear Insurers
Attn: Library
95 Glastonbury Blvd.
Suite 300
Glastonbury, CT 06033-4443

Wise, Carter, Child & Caraway
Attn: J. Smith
P.O. Box 651
Jackson, MS 39205

Winston & Strawn
Attn: N.S. Reynolds
1700 K Street, NW
Washington, DC 20006-3817

Morgan, Lewis & Bockius LLP
Attn: T. C. Poindexter
1111 Pennsylvania Avenue, NW
Washington, DC 20004

Attachment 1 to

W3F1-2009-0024

Analysis of Proposed Technical Specification Change

1.0 DESCRIPTION

This letter is a request to amend Operating License NPF-38 for the Waterford Steam Electric Station, Unit 3 (Waterford 3). Currently, Technical Specification (TS) Sections 2.2 and 3/4.3.1 contain the requirements for Waterford 3 Steam Generator Level - High trip. This trip does not perform a safety function in accordance with the criterion of 10 CFR 50.36(c)(2)(ii) and does not need to be retained in the TSs. Entergy proposes to relocate this requirement to the Waterford 3 Technical Requirements Manual (TRM). The relocation of the Steam Generator Level – High trip is consistent with Technical Specification Task Force (TSTF) 410-A, "Relocation of Steam Generator Level – High Trip to the TRM" (Reference 1) as approved by the NRC on August 29, 2002 (Reference 2). This trip function has been subsequently removed from the technical specification content in Revision 3 of NUREG-1432, "Standard Technical Specifications Combustion Engineering Plants" (Reference 3).

2.0 PROPOSED CHANGE

The relocation of the Steam Generator Level - High trip from the Waterford 3 TSs to the TRM is desired to eliminate unnecessary burden on Entergy and the NRC for setpoint revisions and for consistency with the requirements of 10 CFR 50.36(c)(2)(ii). The following changes are being proposed which are contained in Attachment 2 of this submittal:

- Relocate the trip setpoints and allowable values for Functional Unit 11, "Steam Generator Level – High" from TS Table 2.2-1 to the Waterford 3 TRM.
- Table 2.2-1, Table Notation (4), will be retained in the TSs, but will be copied to the Waterford 3 TRM (not shown in TS page markup of Attachment 2).
- Relocate the Steam Generator Level – High functional unit requirements of TS Table 3.3-1 to the Waterford 3 TRM.
- Relocate Note (g) in Table 3.3-1 (regarding steam generator high level trip bypass) to the Waterford 3 TRM.
- Relocate references to the Steam Generator Level – High functional units from Actions 2 and 3 of TS Table 3.3-1 to the Waterford 3 TRM.
- Relocate the Steam Generator Level – High functional unit surveillance requirements of TS Table 4.3-1 to the Waterford 3 TRM.
- Relocate references to the Steam Generator Level – High functional units from Actions 19 and 20 of TS Table 3.3-3 to the Waterford 3 TRM.

The following change is being proposed to the TS Bases as reflected in Attachment 3. Since TS Bases changes are controlled by the Waterford 3 TS Bases Control Program, it is provided for information only:

- Relocate the TS Bases in Section 2.2.1 for Steam Generator Level – High trip setpoint to the Waterford 3 TRM.

3.0 BACKGROUND

The Steam Generator Level – High trip contained in TS 2.2 and 3/4.3.1 is associated with the Waterford 3 Reactor Protection System (RPS). The purpose of the RPS is to initiate a reactor trip to protect against violating the core specified acceptable fuel design limits and breaching the reactor coolant pressure boundary during anticipated operational occurrences. However, the steam generator high level trip function does not act to protect the core or the health and safety of the public. As discussed in Waterford 3 Final Safety Analysis Report (FSAR) section 7.2.2.2.10 and the Bases to TS Section 2.2.1, the purpose for this reactor trip is a supplemental action to protect the turbine from excessive moisture carryover from the steam generators. During a feedwater malfunction, steam generator level may rise to the point that excessive moisture entering the steam line could cause potential damage to components within the main turbine and failure of the turbine itself. However, tripping the reactor due to high steam generator water level does not provide reactor protection.

The NRC issued Generic Letter (GL) 89-19 regarding Steam Generator Overfill Protection (Reference 4), to request licensees to respond to the concern of steam generator overfill events becoming potentially significant transients. In response to this generic letter, the Combustion Engineering Owners Group (CEOG) provided an assessment which addressed the concerns raised in the generic letter regarding the likelihood of occurrence of this event. The NRC determined in a Safety Evaluation Report (SER) dated September 13, 1994 (Reference 5) that given appropriate operator training and procedural guidance, this concern was adequately addressed. Entergy confirmed that the CEOG report was applicable to Waterford 3 and that operator training and procedures were addressed as discussed in letter dated November 22, 1994 (Reference 6). Therefore, excessive moisture carryover and overfill issues were resolved consistent with the NRC SER at Waterford 3.

Although elimination of the Steam Generator Level – High trip would not have a significant impact on protecting the reactor or the public safety, it does provide supporting protection to the main turbine. Automatic closure of the feedwater regulating valves on high SG level also provides protection to the main turbine at a level below the reactor trip function. Therefore, Waterford 3 will continue to maintain the Steam Generator Level – High trip function.

4.0 TECHNICAL ANALYSIS

The Steam Generator Level – High trip function is not credited in any accident analysis and does not correspond to any safety limit. As discussed in the previous section, concerns of steam generator overfill have been adequately addressed, without reliance on the steam generator high level trip. In addition, damage to the main turbine from excessive moisture carryover, does not provide a significant impact on the health and safety of the public. The SG high level trip does play a supplemental role in protecting the main turbine due to excessive moisture carryover. Therefore, the Steam Generator Level – High trip will be retained in the Waterford 3 TRM.

However, the steam generator high level trip does not meet NRC guidelines for inclusion in Waterford 3's TSs. In order for a structure, system, or component to be governed by the TSs, it must meet one or more of the four criterion established in 10 CFR 50.36(c)(2)(ii). The following provides comparisons of these four criterions in comparison with the basis for the steam generator high level trip function.

Criterion 1: The steam generator high level trip does not provide control room instrumentation that is used to detect a significant degradation of the reactor coolant pressure boundary. Based on the Waterford 3 response to GL 89-19 (Reference 4), appropriate provisions have been met and maintained which adequately address the concerns of GL 89-19 without the reliance on the steam generator high level trip function.

Criterion 2: The steam generator high level trip is not a process variable, design feature, or operating restriction that is an initial condition of a design basis accident or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. The high-level trip function supports main turbine protection and is not credited in any accident analyses nor does it correspond to any safety limit.

Criterion 3: The steam generator high level trip is not a structure, system, or component that is part of the primary success path which functions or actuates to mitigate a design basis accident or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. This function provides secondary side equipment protection and is not analyzed to mitigate the consequences of a design basis accident that threatens the integrity of a fission product barrier.

Criterion 4: The steam generator high level trip is not a structure, system, or component which operating experience or probabilistic risk assessment has shown to be significant to public health and safety. This trip function provides supporting protection for the main turbine. Operating experience and probabilistic safety assessments have also indicated that failure of the main turbine does not result in a significant risk to the health and safety of the public.

Based on the criteria of 10 CFR 50.36(c)(2)(ii) described above, the relocation of requirements, values, and setpoints associated with the steam generator high level trip function to the Waterford 3 TRM is appropriate.

5.0 REGULATORY ANALYSIS

5.1 Applicable Regulatory Requirements/Criteria

Entergy Operations, Inc. (Entergy) proposes to relocate the Steam Generator Level - High trip function for the Waterford Steam Electric Station, Unit 3 (Waterford 3) contained in Technical Specification (TS) 2.2 and 3/4.3.1 to the Waterford 3 Technical Requirements Manual (TRM). This trip provides supportive protection for the main turbine and does not perform a safety function in accordance with the criterion of 10 CFR 50.36(c)(2)(ii) and does not need to be retained in the TSs. Relocation of this trip setpoint is consistent with Technical Specification Task Force (TSTF) 410-A, "Relocation of Steam Generator Level – High Trip to the TRM" previously approved by the NRC and Revision 3 of NUREG-1432, "Standard Technical Specifications Combustion Engineering Plants."

In conclusion, Entergy has determined that the proposed change does not require any exemptions or relief from regulatory requirements, other than the TS, and does not affect systems, structures, and components described in the Waterford 3 Final Safety Analysis Report (FSAR).

5.2 No Significant Hazards Consideration

Entergy Operations, Inc. has evaluated whether or not a significant hazards consideration is involved with the proposed amendment by focusing on the three standards set forth in 10 CFR 50.92, "Issuance of amendment," as discussed below:

1. Does the proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?

   Response: No.

   The proposed change relocates the Steam Generator Level - High Trip to a licensee-controlled document. The Steam Generator (SG) Level - High trip function is not credited in any DBA or transient analysis and is not an initiator to any accident analysis. As a result, neither the probability nor the consequences of an accident previously evaluated are significantly increased by this change.

   Therefore, this change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the proposed change create the possibility of a new or different kind of accident from any accident previously evaluated?

   Response: No.

   The proposed change relocates the Steam Generator Level - High trip function to a licensee-controlled document. The proposed change does not involve a physical alteration of the plant (no new or different type of equipment will be installed) or a change in the methods governing normal plant operation.

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

3. Does the proposed change involve a significant reduction in a margin of safety?

   Response: No.

   The proposed change relocates the Steam Generator Level - High trip function to a licensee-controlled document. This will allow changes to the Steam Generator Level - High Trip requirements currently in the Technical Specifications to be performed in accordance with the requirements of 10 CFR 50.59. As the Steam Generator Level - High trip function has been determined to not meet the definition of Technical Specifications or the criteria in 10 CFR 50.36 (c)(2)(ii), lack of NRC review and approval prior to implementation for changes that are not determined to be a significant hazard will not lead to a significant reduction in the margin of safety.

   Therefore, the proposed change does not involve a significant reduction in a margin of safety.

Based on the above, Entergy concludes that the proposed amendment presents no significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and, accordingly, a finding of "no significant hazards consideration" is justified.

5.3 Environmental Considerations

The proposed amendment does not involve (i) a significant hazards consideration, (ii) a significant change in the types or significant increase in the amounts of any effluent that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed amendment meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed amendment.

6.0 PRECEDENCE

The NRC has approved a similar request dated May 18, 2000 for Arkansas Nuclear One, Unit 2 (Reference 7).

7.0 REFERENCES

1. Technical Specification Task Force (TSTF) 410-A, "Relocation of Steam Generator Level – High Trip to the TRM" dated August 3, 2003.

2. NRC letter to Mr. Anthony Pietrangelo of NEI [untitled] approving TSTF-410, dated August 29, 2002" (ADAMS Accession No. ML022410363).

3. NUREG-1432, Revision 3, Standard Technical Specifications Combustion Engineering Plants, June 2004.

4. Generic Letter 89-19, Request for Action Related to Resolution of Unresolved Safety Issue A-47 "Safety Implication of Control Systems in LWR Nuclear Power Plants" Pursuant to 10 CFR 50.54(f), dated September 20, 1989.

5. NRC Response to CE Owners Group entitled "NRC Generic Letter 89-19, CEOG Concerns Regarding Steam Generator Overfill Protection (SGOP)", dated September 13, 1994.

6. Entergy letter W3F1-94-0166, Generic Letter 89-19, "Safety Implication of Control Systems in LWR Nuclear Power Plants."

7. NRC letter to Craig Anderson of Entergy entitled Arkansas Nuclear One, Unit No. 2 – Issuance of Amendment Re: Relocation of High Steam Generator Level Trip Function to the Technical Requirements Manual (ADAMS Accession No. ML003718712).

Attachment 2 to

W3F1-2009-0024

Proposed Technical Specification Changes (mark-up)

TABLE 2.2-1
REACTOR PROTECTIVE INSTRUMENTATION TRIP SETPOINT LIMITS

FUNCTIONAL UNIT	TRIP SETPOINT	ALLOWABLE VALUES
1. Manual Reactor Trip	Not Applicable	Not Applicable
2. Linear Power Level - High		
Four Reactor Coolant Pumps Operating	≤ 108% of RATED THERMAL POWER	≤ 108.76% of RATED THERMAL POWER
3. Logarithmic Power Level - High (1)	≤ 0.257% of RATED THERMAL POWER (6)	≤ 0.280% of RATED THERMAL POWER (6)
4. Pressurizer Pressure - High	≤ 2350 psia	≤ 2359 psia
5. Pressurizer Pressure - Low	≥ 1684 psia (2)	≥ 1649.7 psia (2)
6. Containment Pressure - High	≤ 17.1 psia	≤ 17.4 psia
7. Steam Generator Pressure - Low	≥ 666 psia (3)	≥ 652.4 psia (3)
8. Steam Generator Level - Low	≥ 27.4% (4)	≥ 26.48% (4)
9. Local Power Density - High	≤ 21.0 kW/ft (5)	≤ 21.0 kW/ft (5)
10. DNBR - Low	≥ 1.26 (5)	≥ 1.26 (5)
11. ~~Steam Generator Level - High~~ DELETED	~~≤ 87.7% (4)~~	~~≤ 88.62% (4)~~
12. Reactor Protection System Logic	Not Applicable	Not Applicable
13. Reactor Trip Breakers	Not Applicable	Not Applicable
14. Core Protection Calculators	Not Applicable	Not Applicable
15. CEA Calculators	Not Applicable	Not Applicable
16. Reactor Coolant Flow - Low	≥ 19.00 psid (7)	≥ 18.47 psid (7)

TABLE 3.3-1

REACTOR PROTECTIVE INSTRUMENTATION

FUNCTIONAL UNIT	TOTAL NO. OF CHANNELS	CHANNELS TO TRIP	MINIMUM CHANNELS OPERABLE	APPLICABLE MODES	ACTION
1. Manual Reactor Trip	2 sets of 2 2 sets of 2	1 set of 2 1 set of 2	2 sets of 2 2 sets of 2	1, 2 3*, 4*, 5*	1 8
2. Linear Power Level - High	4	2	3	1, 2	2#, 3#
3. Logarithmic Power Level-High					
a. Startup and Operating	4 4	2(a)(d) 2	3 3	2** 3*, 4*, 5*	2#, 3# 8
b. Shutdown	4	0	2	3, 4, 5	4
4. Pressurizer Pressure - High	4	2	3	1, 2	2#, 3#
5. Pressurizer Pressure - Low	4	2(b)	3	1, 2	2#, 3#
6. Containment Pressure - High	4	2	3	1, 2	2#, 3#
7. Steam Generator Pressure - Low	4/SG	2/SG	3/SG	1, 2	2#, 3#
8. Steam Generator Level - Low	4/SG	2/SG	3/SG	1, 2	2#, 3#
9. Local Power Density - High	4	2(c)(d)	3	1, 2	2#, 3#
10. DNBR - Low	4	2(c)(d)	3	1, 2	2#, 3#
11. ~~Steam Generator Level - High~~ DELETED	~~4/SG~~	~~2/SG(g)~~	~~3/SG~~	~~1, 2~~	~~2#, 3#~~
12. Reactor Protection System Logic	4	2	3	1, 2 3*, 4*, 5*	5 8
13. Reactor Trip Breakers	4	2(f)	4	1, 2 3*, 4*, 5*	5 8
14. Core Protection Calculators	4	2(c)(d)	3	1, 2	2#, 3# and 7
15. CEA Calculators	2	1	2(e)	1, 2	6 and 7
16. Reactor Coolant Flow - Low	4/SG	2/SG(c)	3/SG	1, 2	2#, 3#

TABLE 3.3-1 (Continued)

TABLE NOTATION

*With the protective system trip breakers in the closed position, the CEA drive system capable of CEA withdrawal, and fuel in the reactor vessel.

#The provisions of Specification 3.0.4 are not applicable.

**Not applicable above 10^{-4}% RATED THERMAL POWER.[1]

(a) Trip may be manually bypassed above 10^{-4}% of RATED THERMAL POWER[1]; bypass shall be automatically removed when THERMAL POWER[1] is less than or equal to the reset point of the bistable. The reset point shall be within 3.0×10^{-4}% of RATED THERMAL POWER[1] below the bistable setpoint which is nominally 10^{-4}% of RATED THERMAL POWER[1]. This accounts for the deadband of the bistable.

(b) Trip may be manually bypassed below 400 psia; bypass shall be automatically removed whenever pressurizer pressure is greater than or equal to 500 psia.

(c) Trip may be manually bypassed below 10^{-4}% of RATED THERMAL POWER[1]; bypass shall be automatically removed when THERMAL POWER[1] is greater than or equal to 10^{-4}% of RATED THERMAL POWER[1]. During testing pursuant to Special Test Exception 3.10.3, trip may be manually bypassed below 5% of RATED THERMAL POWER; bypass shall be automatically removed when THERMAL POWER is greater than or equal to 5% of RATED THERMAL POWER.

(d) Trip may be bypassed during testing pursuant to Special Test Exception 3.10.3.

(e) See Special Test Exception 3.10.2.

(f) Each channel shall be comprised of two trip breakers; actual trip logic shall be one-out-of-two taken twice.

(g) High steam generator level trip may be manually bypassed in Modes 1 and 2, at 20% power and below. Delete

[1] As measured by the Logarithmic Power Channels.

TABLE 3.3-1 (Continued)

ACTION STATEMENTS

With a channel process measurement circuit that affects multiple functional units inoperable or in test, bypass or trip all associated functional units as listed below:

Process Measurement Circuit	Functional Unit Bypassed/Tripped
1. Linear Power (Subchannel or Linear)	Linear Power Level - High Local Power Density - High DNBR - Low
2. Pressurizer Pressure - High	Pressurizer Pressure - High Local Power Density - High DNBR - Low
3. Containment Pressure - High	Containment Pressure - High (RPS) Containment Pressure - High (ESF)
4. Steam Generator Pressure - Low	Steam Generator Pressure - Low Steam Generator ΔP 1 and 2 (EFAS 1 and 2)
5. Steam Generator Level	~~Steam Generator Level - Low~~ ~~Steam Generator Level - High~~ Delete Steam Generator ΔP (EFAS)
6. Core Protection Calculator	Local Power Density - High DNBR - Low

ACTION 3 - With the number of channels OPERABLE one less than the Minimum Channels OPERABLE requirement, STARTUP and/or POWER OPERATION may continue provided the following conditions are satisfied:

a. Verify that one of the inoperable channels has been bypassed and place the other channel in the tripped condition within 1 hour, and

b. All functional units affected by the bypassed/tripped channel shall also be placed in the bypassed/tripped condition as listed below:

Process Measurement Circuit	Functional Unit Bypassed/Tripped
1. Linear Power (Subchannel or Linear)	Linear Power Level - High Local Power Density - High DNBR - Low

TABLE 3.3-1 (Continued)

ACTION STATEMENTS

2.	Pressurizer Pressure - High	Pressurizer Pressure - High Local Power Density - High DNBR - Low
3.	Containment Pressure - (RPS) High	Containment Pressure - High Containment Pressure - High (ESF)
4.	Steam Generator Pressure - Low	Steam Generator Pressure - Low Steam Generator ΔP 1 and 2 (EFAS 1 and 2)
5.	Steam Generator Level	Steam Generator Level - Low Steam Generator Level - High Delete Steam Generator ΔP (EFAS)
6.	Core Protection Calculator	Local Power Density - High DNBR - Low

STARTUP and/or POWER OPERATION may continue until the performance of the next required CHANNEL FUNCTIONAL TEST. Subsequent STARTUP and/or POWER OPERATION may continue if one channel is restored to OPERABLE status and the provisions of ACTION 2 are satisfied.

ACTION 4 - With the number of channels OPERABLE one less than required by the Minimum Channels OPERABLE requirement, suspend all operations involving positive reactivity changes. *

ACTION 5 - With the number of channels OPERABLE one less those required by the Minimum Channels OPERABLE requirement, STARTUP and/or POWER OPERATION may continue provided the reactor trip breakers of the inoperable channel are placed in the tripped condition within 1 hour; otherwise, be in at least HOT STANDBY within 6 hours; however, one channel may be bypassed for up to 1 hour for surveillance testing per Specification 4.3.1.1.

ACTION 6 - a. With one CEAC inoperable, operation may continue for up to 7 days provided that at least once per 4 hours, each CEA is verified to be within 7 inches (indicated position) of all other CEAs in its group.

* Limited plant cooldown or boron dilution is allowed provided the change is accounted for in the calculated SHUTDOWN MARGIN.

TABLE 4.3-1

REACTOR PROTECTIVE INSTRUMENTATION SURVEILLANCE REQUIREMENTS

FUNCTIONAL UNIT	CHANNEL CHECK	CHANNEL CALIBRATION	CHANNEL FUNCTIONAL TEST	MODES FOR WHICH SURVEILLANCE IS REQUIRED
1. Manual Reactor Trip	N.A.	N.A.	R and S/U(1)	1, 2, 3*, 4*, 5*
2. Linear Power Level - High	S	D(2,4),M(3,4), Q(4)	Q	1, 2
3. Logarithmic Power Level - High	S	R(4)	Q and S/U(1)	2#, 3, 4, 5
4. Pressurizer Pressure - High	S	R	Q	1, 2
5. Pressurizer Pressure - Low	S	R	Q	1, 2
6. Containment Pressure - High	S	R	Q	1, 2
7. Steam Generator Pressure - Low	S	R	Q	1, 2
8. Steam Generator Level - Low	S	R	Q	1, 2
9. Local Power Density - High	S	D(2,4), R(4,5)	Q, R(6)	1, 2
10. DNBR - Low	S	S(7), D(2,4), M(8), R(4,5)	Q, R(6)	1, 2
11. DELETED ~~Steam Generator Level - High~~	~~S~~	~~R~~	~~Q~~	~~1, 2~~
12. Reactor Protection System Logic	N.A.	N.A.	Q(11) and S/U(1)	1, 2, 3*, 4*, 5*

TABLE 3.3-3 (Continued)

TABLE NOTATION

	Process Measurement Circuit	Functional Unit Bypassed/Tripped
1.	Steam Generator Pressure - Low	Steam Generator Pressure - Low Steam Generator ΔP 1 and 2 (EFAS)
2.	Steam Generator Level	Steam Generator Level - Low Steam Generator Level - High Delete Steam Generator ΔP (EFAS)

ACTION 20 - With the number of channels OPERABLE one less than the Minimum Channels OPERABLE, STARTUP and/or POWER OPERATION and/or operation in the other applicable MODE(S) may continue provided the following conditions are satisfied:

a. Verify that one of the inoperable channels has been bypassed and place the other inoperable channel in the tripped condition within 1 hour. With a channel process measurement circuit that affects multiple functional units inoperable or in test, bypass or trip all associated functional units as listed below:

	Process Measurement Circuit	Functional Unit Bypassed/Tripped
1.	Steam Generator Pressure - Low	Steam Generator Pressure - Low Steam Generator ΔP 1 and 2 (EFAS)
2.	Steam Generator Level	Steam Generator Level - Low Steam Generator Level - High Delete Steam Generator ΔP (EFAS)

b. Restore at least one of the inoperable channels to OPERABLE status within 48 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. Subsequent operation in the applicable MODE(S) may continue if one channel is restored to OPERABLE status and the provisions of ACTION 19 are satisfied.

Attachment 3 to

W3F1-2009-0024

Proposed Technical Specification Bases Changes
(Mark-up provided for information only)

BASES

Steam Generator Level - High

The Steam Generator Level - High trip is provided to protect the turbine from excessive moisture carry over. Since the turbine is automatically tripped when the reactor is tripped, this trip provides a reliable means for providing protection to the turbine from excessive moisture carry over. This trip's setpoint does not correspond to a Safety Limit and no credit was taken in the safety analyses for operation of this trip. Its functional capability at the specified trip setting is required to enhance the overall reliability of the Reactor Protection System.

Delete

Reactor Coolant Flow - Low

→(DRN 03-6, Ch. 20)

The Reactor Coolant Flow - Low trip provides protection against a reactor coolant pump sheared shaft event and a steam line break event with a loss-of-offsite power. A trip is initiated when the pressure differential across the primary side of either steam generator decreases below a nominal setpoint of 19.00 psid. The specified setpoint ensures that a reactor trip occurs to prevent violation of local power density or DNBR safety limits under the stated conditions.
←(DRN 03-6, Ch. 20)

Attachment 4 to

W3F1-2009-0024

List of Regulatory Commitments

LIST OF REGULATORY COMMITMENTS

This table identifies actions discussed in this letter for which Entergy commits to perform. Any other actions discussed in this submittal are described for the NRC's information and are not commitments.

COMMITMENT	TYPE (Check one)		SCHEDULED COMPLETION DATE (If Required)
	ONE-TIME ACTION	CONTINUING COMPLIANCE	
Upon NRC approval of the proposed TS change, Entergy will relocate the Waterford 3 Steam Generator Level – High trip function to the Waterford Technical Requirements Manual	X		Within 90 days of NRC approval