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**Ken Peters**  
Director, Nuclear Safety Assurance  
Waterford 3

W3F1-2004-0092

October 8, 2004

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

**SUBJECT:** Supplement to Amendment Request NPF-38-249,  
Extended Power Uprate  
Waterford Steam Electric Station, Unit 3  
Docket No. 50-382  
License No. NPF-38

**REFERENCES:** 1. Entergy Letter dated November 13, 2003, "License Amendment Request NPF-38-249 Extended Power Uprate"  
2. Entergy Letter dated August 25, 2004, "License Amendment Request NPF-38-249 Extended Power Uprate"  
3. Entergy Letter dated July 14, 2004, "Supplement to Amendment Request NPF-38-249 Extended Power Uprate"

Dear Sir or Madam:

By letter (Reference 1), Entergy Operations, Inc. (Entergy) proposed a change to the Waterford Steam Electric Station, Unit 3 (Waterford 3) Operating License and Technical Specifications to increase the unit's rated thermal power level from 3441 megawatts thermal (MWt) to 3716 MWt.

By letter (Reference 2), Entergy informed the NRC staff that the allowable value for the steam generator pressure – low setpoint proposed in Reference 1 required revision, based on the latest calculation, and committed to provide revised marked-up Technical Specification pages to reflect the change in a future supplement. Revised marked-up Technical Specification pages 2-3, 3/4 3-19, and 3/4 3-20 are attached and supersede those previously submitted. The allowable value previously proposed was 647.9 psia and the revised allowable value is 648.4 psia. The proposed steam generator pressure – low trip setpoint of 662 psia remains unchanged as does the analytical limit of 576 psia.

The no significant hazards consideration included in Reference 3 is not affected by any information contained in this supplemental letter. There are no new commitments in this letter.

ADD

If you have any questions or require additional information, please contact D. Bryan Miller at 504-739-6692.

I declare under penalty of perjury that the foregoing is true and correct. Executed on October 8, 2004.

Sincerely,



KJP/DBM/ssf

Attachment: Revised Markup of Technical Specification Pages

cc: Dr. Bruce S. Mallett  
U. S. Nuclear Regulatory Commission  
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Arlington, TX 76011

NRC Senior Resident Inspector  
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U.S. Nuclear Regulatory Commission  
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Louisiana Department of Environmental Quality  
Office of Environmental Compliance  
Surveillance Division  
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American Nuclear Insurers  
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Town Center Suite 300S  
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West Hartford, CT 06107-2445

**Attachment**

**To**

**W3F1-2004-0092**

**Revised Markup of Technical Specification Pages**

**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	≥ 764 psia (3)	≥ 749.9 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	≤ 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)

WATERFORD - UNIT 3

2-3

Amendment No. 12,113,145

TABLE 3.3-4

ENGINEERED SAFETY FEATURES ACTUATION SYSTEM INSTRUMENTATION TRIP VALUES

<u>FUNCTIONAL UNIT</u>	<u>TRIP SETPOINT</u>	<u>ALLOWABLE VALUES</u>
1. SAFETY INJECTION (SIAS)		
a. Manual (Trip Buttons)	Not Applicable	Not Applicable
b. Containment Pressure - High	≤ 17.1 psia	≤ 17.4 psia
c. Pressurizer Pressure - Low	≥ 1684 psia <sup>m</sup>	≥ 1649.7 psia <sup>m</sup>
d. Automatic Actuation Logic	Not Applicable	Not Applicable
2. CONTAINMENT SPRAY (CSAS)		
a. Manual (Trip Buttons)	Not Applicable	Not Applicable
b. Containment Pressure -- High-High	≤ 17.7 psia	≤ 18.0 psia
c. Automatic Actuation Logic	Not Applicable	Not Applicable
3. CONTAINMENT ISOLATION (CIAS)		
a. Manual CIAS (Trip Buttons)	Not Applicable	Not Applicable
b. Containment Pressure - High	≤ 17.1 psia	≤ 17.4 psia
c. Pressurizer Pressure - Low	≥ 1684 psia <sup>m</sup>	≥ 1649.7 psia <sup>m</sup>
d. Automatic Actuation Logic	Not Applicable	Not Applicable
4. MAIN STEAM LINE ISOLATION		
a. Manual (Trip Buttons)	Not Applicable	Not Applicable
b. Steam Generator Pressure - Low	≥ <del>764</del> psia <sup>m</sup> 662	≥ <del>749.9</del> psia <sup>m</sup> 648.4
c. Containment Pressure - High	≤ 17.1 psia	≤ 17.4 psia
d. Automatic Actuation Logic	Not Applicable	Not Applicable

TABLE 1-4 (Continued)

ENGINEERED SAFETY FEATURES ACTUATION SYSTEM INSTRUMENTATION TRIP VALUES

<u>FUNCTIONAL UNIT</u>	<u>TRIP VALUE</u>	<u>ALLOWABLE VALUES</u>
<b>5. SAFETY INJECTION SYSTEM SUMP RECIRCULATION (RAS)</b>		
a. Manual RAS (Trip Buttons)	Not Applicable	Not Applicable
b. Refueling Water Storage Pool - Low	10.0% (57,967 gallons)	9.08% (52,634 gallons)
c. Automatic Actuation Logic	Not Applicable	Not Applicable
<b>6. LOSS OF POWER</b>		
a. 4.16 kV Emergency Bus Undervoltage (Loss of Voltage)	≥ 3245 volts	≥ 3245 volts
b. 480 V Emergency Bus Undervoltage	≥ 372 volts	≥ 354 volts
c. 4.16 kV Emergency Bus Undervoltage (Degraded Voltage)	≥ 3875 volts	≥ 3860 volts
<b>7. EMERGENCY FEEDWATER (EFAS)</b>		
a. Manual (Trip Buttons)	Not Applicable	Not Applicable
b. Steam Generator (1&2) Level - Low	≥ 27.4% <sup>(3) (4)</sup>	≥ 26.48% <sup>(3) (4)</sup>
c. Steam Generator ΔP - High (SG-1 > SG-2)	≤ 123 psid	≤ 134 psid
d. Steam Generator ΔP - High (SG-2 > SG-1)	≤ 123 psid <b>662</b>	≤ 134 psid <b>648.4</b>
e. Steam Generator (1&2) Pressure - Low	≥ <del>764</del> psia <sup>(2)</sup>	≥ <del>749.9</del> psia <sup>(2)</sup>
f. Automatic Actuation Logic	Not Applicable	Not Applicable
g. Control Valve Logic (Wide Range SG Level - Low)	≥ 36.3% <sup>(3) (5)</sup>	≥ 35.3% <sup>(3) (5)</sup>

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3/4 3-20

Amendment No. 19,74,113,136