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W3F1-2004-0107

Timothy G. Mitchell
Director, Engineering
Waterford 3

October 29, 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 May 7, 2004, "Supplement to Amendment Request NPF-38-249 Extended Power Uprate"
3. Entergy Letter dated October 29, 2004, "Supplement to Amendment Request NPF-38-249 Extended Power Uprate"
4. 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.

As committed to in Reference 1 and mentioned in Reference 2, Entergy performed confirmatory testing of the emergency Diesel Generator (DG) fuel oil consumption rate to validate the consumption rate assumed in the analysis supporting the Extended Power Uprate (EPU). During reviews of these test results, Entergy discovered that instrument uncertainties had not been adequately addressed in the supporting analysis and therefore the assumptions used in support of the EPU were non-conservative. As a result, a revised basis for showing that acceptable fuel oil inventories are available in support of the EPU based on the existing licensing basis has been provided for NRC staff review in Reference 3. Therefore, the information in Reference 3 supersedes information regarding the use of a DG fuel oil consumption rate less than that provided by the vendor previously submitted in Reference 1 (i.e., portions of Section 2.5.8.1 in Attachment 5) and Reference 2 (i.e., the response to Question 10 in Attachment 1).

A001

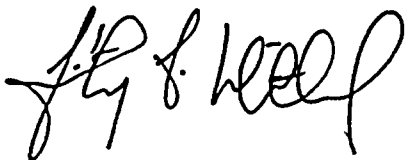
Post-EPU DG load summaries are attached to this letter providing updated information and supercede the load summaries previously provided in Reference 2. For comparison, the pre-EPU DG load summaries are located in Final Safety Analysis Report Table 8.3-1.

The no significant hazards consideration included in Reference 4 is not affected by any information contained in this letter. There are no new commitments contained in this letter.

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 29, 2004.

Sincerely,

A handwritten signature in black ink, appearing to read 'TGM/dbm', written in a cursive style.

TGM/dbm

Attachment: Updated Emergency Diesel Generator Load Summaries

cc: Dr. Bruce S. Mallett
U. S. Nuclear Regulatory Commission
Region IV
611 Ryan Plaza Drive, Suite 400
Arlington, TX 76011

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

U.S. Nuclear Regulatory Commission
Attn: Mr. Nageswaran Kalyanam MS O-7D1
Washington, DC 20555-0001

Wise, Carter, Child & Caraway
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Louisiana Department of Environmental Quality
Office of Environmental Compliance
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P. O. Box 4312
Baton Rouge, LA 70821-4312

American Nuclear Insurers
Attn: Library
Town Center Suite 300S
29th S. Main Street
West Hartford, CT 06107-2445

Attachment

To

W3F1-2004-0107

Updated Emergency Diesel Generator Load Summaries

EMERGENCY DIESEL GENERATOR A LOADING SEQUENCE (STEADY STATE)

| EQUIPMENT | NOTES | RATED | RUNNING | SKVA | TIME | LOAD WITH LOSS OF OFFSITE POWER | | | | | |
|-----------------------------|-------|-------|---------|------|------|---------------------------------|---------|----------|---------|---------|---------|
| | | | | | | LOCA | MSLB | SHUTDOWN | | | |
| | | | | | | KW | KVAR | KW | KVAR | KW | KVAR |
| LOAD SUMMARY: | | | | | | | | | | | |
| 0-10s :Generator Starts | | | | | | | | | | | |
| 10-10.5s:Load Block 1a | | | | | | 336.66 | 274.56 | 336.66 | 274.56 | 322.24 | 260.14 |
| 10.5-11s:Load Block 1b | | | | | | 336.66 | 274.56 | 336.66 | 274.56 | 327.19 | 260.14 |
| 11-11.5s:Load Block 1c | | | | | | 363.13 | 321.89 | 363.13 | 321.89 | 353.68 | 307.46 |
| 11.5-15s:Load Block 1d | | | | | | 1017.07 | 628.23 | 1017.07 | 628.23 | 353.66 | 307.46 |
| 15-17s :Load Block 2a | | | | | | 1062.58 | 664.11 | 1062.58 | 664.11 | 399.17 | 343.34 |
| 17-27s :Load Block 2b | | | | | | 1884.36 | 1222.28 | 1884.36 | 1222.28 | 1205.90 | 856.21 |
| 27-39s :Load Block 3 | | | | | | 2538.69 | 1604.38 | 2538.69 | 1604.38 | 1549.26 | 1075.52 |
| 39-51s :Load Block 4 | | | | | | 2755.99 | 1695.03 | 2755.99 | 1695.03 | 1717.89 | 1138.28 |
| 51-60s :Load Block 5a | | | | | | 3417.75 | 2065.23 | 3417.75 | 2065.23 | 2379.65 | 1508.48 |
| 60-120s :MOVs Deenergize | | | | | | 3402.00 | 2049.47 | 3402.00 | 2049.47 | 2378.32 | 1507.15 |
| 120-178s:Load Block 5b | | | | | | 3475.48 | 2064.86 | 3475.48 | 2064.86 | 2451.80 | 1522.54 |
| 178-201s:Load Block 6a | | | | | | 3495.86 | 2082.38 | 3495.86 | 2082.38 | 2472.19 | 1540.06 |
| 201-210s:Load Block 6b | | | | | | 3496.56 | 2083.24 | 3496.56 | 2083.24 | 2472.88 | 1540.92 |
| 210-229s:Load Block 6c | | | | | | 3536.43 | 2112.32 | 3536.43 | 2112.32 | 2512.75 | 1570.00 |
| 229s-30m:Load Block 6d | | | | | | 3952.80 | 2370.44 | 3952.80 | 2370.44 | 2892.06 | 1805.13 |
| 30m-30m25s:Auto Load Bloc | | | | | | 4122.14 | 2500.46 | 4122.14 | 2500.46 | 3440.19 | 2080.34 |
| 30m25s-75m:Manual Loading | | | | | | 4121.44 | 2499.76 | 4121.44 | 2499.76 | 3440.19 | 2080.34 |
| 75-90m :LPSI Deenergizes | | | | | | 3774.38 | 2321.72 | 3774.38 | 2321.72 | 3440.19 | 2080.34 |
| 90m-2h:Turb Aux Deenergize | | | | | | 3718.42 | 2283.44 | 3718.42 | 2283.44 | 3384.23 | 2042.06 |
| 2h-2h50s: Manual MOV | | | | | | 3719.08 | 2284.10 | 3718.42 | 2283.44 | 3384.23 | 2042.06 |
| 2h50s-4h:MOV Deenergize | | | | | | 3718.42 | 2283.44 | 3718.42 | 2283.44 | 3384.23 | 2042.06 |
| 4-6h :EFW Deenergize | | | | | | 3413.58 | 2095.29 | 3413.58 | 2095.29 | 3276.37 | 2030.99 |
| 6-8h : SFP Pump Start | | | | | | 3454.29 | 2121.61 | 3454.29 | 2121.61 | 3317.08 | 2057.31 |
| 8-10h : BA Pumps Deenergize | | | | | | 3427.83 | 2108.85 | 3427.83 | 2108.85 | 3290.62 | 2044.55 |
| 10-14h : Chrg Deenergize | | | | | | 3362.37 | 2064.09 | 3362.37 | 2064.09 | 3290.62 | 2044.55 |
| 14-17h : CCW Makeup | | | | | | 3335.73 | 2041.39 | 3335.73 | 2041.39 | 3263.98 | 2021.85 |
| 17-4d : de EDG Xfer pump | | | | | | 3314.29 | 2025.11 | 3314.29 | 2025.11 | 3242.55 | 2005.56 |
| 4-7d :WCT fans 5-8 de | | | | | | 3218.59 | 1969.08 | 2917.49 | 1847.90 | 3242.55 | 2005.56 |

EMERGENCY DIESEL GENERATOR B LOADING SEQUENCE (STEADY STATE)

| EQUIPMENT | NOTES | RATED | RUNNING | SKVA | TIME | LOAD WITH LOSS OF OFFSITE POWER | | | | | |
|-----------------------------|-------|-------|---------|------|------|---------------------------------|---------|----------|---------|---------|---------|
| | | | | | | LOCA | MSLB | SHUTDOWN | | | |
| | | | | | | KW | KVAR | KW | KVAR | KW | KVAR |
| LOAD SUMMARY: | | | | | | | | | | | |
| 0-10s :Generator Starts | | | | | | | | | | | |
| 10-10.5s:Load Block 1a | | | | | | 320.81 | 265.49 | 320.81 | 265.49 | 304.67 | 249.35 |
| 10.5-11s:Load Block 1b | | | | | | 320.81 | 265.49 | 320.81 | 265.49 | 309.52 | 249.35 |
| 11-11.5s:Load Block 1c | | | | | | 346.92 | 312.60 | 346.92 | 312.60 | 335.64 | 296.46 |
| 11.5-15s:Load Block 1d | | | | | | 1000.69 | 618.90 | 1000.69 | 618.90 | 335.64 | 296.46 |
| 15-17s :Load Block 2a | | | | | | 1046.20 | 654.78 | 1046.20 | 654.78 | 381.15 | 332.35 |
| 17-27s :Load Block 2b | | | | | | 1864.60 | 1212.24 | 1864.60 | 1212.24 | 1184.65 | 844.42 |
| 27-39s :Load Block 3 | | | | | | 2536.48 | 1593.94 | 2536.48 | 1593.94 | 1546.26 | 1083.26 |
| 39-51s :Load Block 4 | | | | | | 2753.70 | 1684.52 | 2753.70 | 1684.52 | 1714.90 | 1145.97 |
| 51-60s :Load Block 5a | | | | | | 3415.56 | 2053.57 | 3415.56 | 2053.57 | 2376.75 | 1515.02 |
| 60-120s :MOVs Deenergize | | | | | | 3398.09 | 2036.10 | 3398.09 | 2036.10 | 2375.42 | 1513.69 |
| 120-178s:Load Block 5b | | | | | | 3464.22 | 2051.34 | 3464.22 | 2051.34 | 2441.54 | 1528.93 |
| 178-201s:Load Block 6a | | | | | | 3485.59 | 2072.50 | 3485.59 | 2072.50 | 2462.91 | 1550.10 |
| 201-210s:Load Block 6b | | | | | | 3486.28 | 2073.37 | 3486.28 | 2073.37 | 2463.60 | 1550.96 |
| 210-229s:Load Block 6c | | | | | | 3512.99 | 2096.09 | 3512.99 | 2096.09 | 2490.32 | 1573.69 |
| 229s-30m:Load Block 6d | | | | | | 3929.30 | 2354.16 | 3929.30 | 2354.16 | 2869.57 | 1808.78 |
| 30m-30m25s:Auto Load Bloc | | | | | | 4098.96 | 2480.30 | 4098.96 | 2480.30 | 3421.22 | 2079.96 |
| 30m25s-75m:Manual Loading | | | | | | 4098.26 | 2479.60 | 4098.26 | 2479.60 | 3421.22 | 2079.96 |
| 75-90m :LPSI Deenergizes | | | | | | 3751.92 | 2321.52 | 3751.92 | 2321.52 | 3421.22 | 2079.96 |
| 90m-2h:Turb Aux Deenergize | | | | | | 3695.97 | 2283.27 | 3695.97 | 2283.27 | 3365.27 | 2041.71 |
| 2h-2h50s: Manual MOV | | | | | | 3696.63 | 2283.93 | 3695.97 | 2283.27 | 3365.27 | 2041.71 |
| 2h50s-4h:MOV Deenergize | | | | | | 3695.97 | 2283.27 | 3695.97 | 2283.27 | 3365.27 | 2041.71 |
| 4-6h :EFW Deenergize | | | | | | 3391.13 | 2095.11 | 3391.13 | 2095.11 | 3256.69 | 2010.69 |
| 6-8h : SFP Pump Start | | | | | | 3431.84 | 2121.44 | 3431.84 | 2121.44 | 3297.39 | 2037.01 |
| 8-10h : BA Pumps Deenergize | | | | | | 3431.84 | 2121.44 | 3431.84 | 2121.44 | 3297.39 | 2037.01 |
| 10-14h : Chrg Deenergize | | | | | | 3366.44 | 2076.71 | 3366.44 | 2076.71 | 3297.39 | 2037.01 |
| 14-17h : CCW Makeup | | | | | | 3339.73 | 2053.98 | 3339.73 | 2053.98 | 3270.67 | 2014.28 |
| 17-4d : de EDG Xfer pump | | | | | | 3318.41 | 2037.71 | 3318.41 | 2037.71 | 3249.35 | 1998.01 |
| 4-7d :WCT fans 5-8 de | | | | | | 3221.69 | 1965.80 | 2919.87 | 1824.67 | 3249.35 | 1998.01 |