February 22, 2011

NRC 2011-0025
10 CFR 50.90

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

Point Beach Nuclear Plant, Units 1 and 2
Dockets 50-266 and 50-301
Renewed License Nos. DPR-24 and DPR-27

License Amendment Request 261
Extended Power Uprate
Response to Request for Additional Information

References: (1) FPL Energy Point Beach, LLC letter to NRC, dated April 7, 2009, License Amendment Request 261, Extended Power Uprate (ML091250564)

NextEra Energy Point Beach, LLC (NextEra) submitted License Amendment Request (LAR) 261 (Reference 1) to the NRC pursuant to 10 CFR 50.90. The proposed amendment would increase each unit's licensed thermal power level from 1540 megawatts thermal (MWt) to 1800 MWt, and revise the Technical Specifications to support operation at the increased thermal power level.

During a telephone conference with the NRC on February 17, 2011, NextEra was informed that Westinghouse had informed another licensee of issues with their loss of coolant accident (LOCA) mass and energy (M&E) release analyses, which are utilized as input to the LOCA containment integrity analysis. The NRC staff requested additional information on whether these issues were applicable to the Point Beach Nuclear Plant (PBNP) extended power uprate (EPU) and the potential effect of these issues. Enclosure 1 provides the NextEra response to the NRC staff's request for additional information.

This letter contains no new Regulatory Commitments and no revisions to existing Regulatory Commitments.

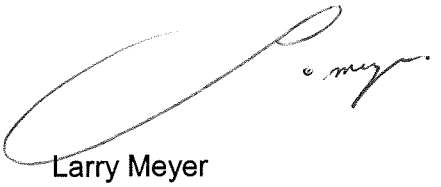
The information contained in this letter does not alter the no significant hazards consideration contained in Reference (1) and continues to satisfy the criteria of 10 CFR 51.22 for categorical exclusion from the requirements of an environmental assessment.

In accordance with 10 CFR 50.91, a copy of this letter is being provided to the designated Wisconsin Official.

I declare under penalty of perjury that the foregoing is true and correct.
Executed on February 22, 2011.

Very truly yours,

NextEra Energy Point Beach, LLC



Larry Meyer
Site Vice President

Enclosure

cc: Administrator, Region III, USNRC
Project Manager, Point Beach Nuclear Plant, USNRC
Resident Inspector, Point Beach Nuclear Plant, USNRC
PSCW

ENCLOSURE 1

NEXTERA ENERGY POINT BEACH, LLC
POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2

LICENSE AMENDMENT REQUEST 261
EXTENDED POWER UPRATE
RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

During a telephone conference with the NRC on February 17, 2011, NextEra Energy Point Beach, LLC (NextEra) was informed that Westinghouse had informed another licensee of issues with their loss of coolant accident (LOCA) mass and energy (M&E) release analyses, which are utilized as input to the LOCA containment integrity analysis. The NRC staff requested additional information on whether these issues were applicable to the LOCA M&E release and containment integrity analyses performed by Westinghouse for the Point Beach Nuclear Plant (PBNP) extended power uprate (EPU) and the potential effect of these issues. This information will enable the Containment and Ventilation Branch to complete the review of License Amendment Request (LAR) 261 (Reference 1). The following information is provided by NextEra in response to the NRC staff's request for additional information.

Westinghouse identified six potential issues associated with another licensee's LOCA M&E analysis. Only four of these issues are applicable to the PBNP LOCA M&E release analysis for the EPU. These four issues are associated with the following:

1. Input Modification Program (IMP) Vessel Metal Mass
2. Barrel/Baffle Metal Mass Modeling
3. Steam Generator Secondary Pressure in the Performance Capability Working Group (PCWG) Data Sheets
4. EPITOME computer code that calculates the post-reflood mass and energy release

The LOCA M&E release analysis and associated containment integrity analysis were revised to address the specific issues identified above. The revised LOCA containment integrity analysis results as compared to the analyses and evaluations documented in Reference (1) are provided below:

1. Peak LOCA containment temperature increased by 2°F to 281.9°F
2. Peak LOCA containment pressure increased by 0.34 psi to 70.39 psia
3. Peak LOCA containment sump temperature at initiation of recirculation increased by 3.5°F to 237.5°F
4. Maximum component cooling water (CCW) heat exchanger outlet temperatures during post-LOCA emergency core cooling system (ECCS) recirculation increased by 1.1°F
5. Maximum RHR heat exchanger outlet temperature increased by 2.1°F
6. Maximum RHR heat exchanger CCW outlet temperature increased by 2°F
7. Maximum containment fan cooler (CFC) cooling water outlet temperature increased by 1.1°F

The following License Report (LR) sections from Attachment 5 of Reference (1) were potentially affected by the changes. The evaluation results for each LR section associated with the revised LOCA containment integrity analysis are documented below:

1. LR 2.6.1, Primary Containment Functional Design: The peak LOCA containment response results for temperature and pressure at EPU conditions shown in Table 2.6.1-9 of Reference (1) are increased as indicated in the revised analysis results items 1 and 2. The limiting peak containment results are associated with the main steam line break (MSLB) results shown in Table 2.6.1-9, which are not affected by the LOCA mass and energy analysis issues. In addition, the peak LOCA containment pressure and temperature values are still well below the containment design values of 74.7 psia and 286°F. The previous and revised LOCA containment pressure and temperature profiles for the double ended hot leg break (DEHL) and double ended pump suction break with minimum safety injection (DEPSMINSI) cases are shown in Attachment A, Figures 1 to 4. These figures correspond to Figures 2.6.1-1 to 4 in Reference (1).

2. LR 2.2.4, Safety-Related Valves and Pumps: The EPU evaluations for tests that measure containment isolation valve leakage rates (Type C tests) were performed at containment design pressure. Since the revised LOCA containment peak pressure remains below the design pressure, the results of this evaluation are not affected.

3. LR 2.1.7, Protective Coatings: The EPU evaluations for protective containment coatings were performed at a containment design temperature of 286°F. Since the revised LOCA containment peak temperature results remain below the design temperature, the results are not affected.

4. LR 2.3.1, Environmental Qualification (EQ) of Electrical Equipment: The increased LOCA temperature and pressure profiles did not affect the required margins for EQ of electrical equipment inside containment. Comparison of the previous and revised containment LOCA EPU temperature and pressure profiles to the composite containment EQ profiles are shown in Attachment A, Figures 5 and 6. These figures correspond to Figures 1 and 2 in the NextEra Response to NRC RAI EEEB-5 (Reference 2). The electrical equipment remains qualified with applicable margins as recommended by IEEE-323-1974.

5. LR 2.6.5, Containment Heat Removal: The containment heat removal margins for EPU were based upon containment design conditions of 74.7 psia (60 psig) and 286°F. Since the revised LOCA containment peak pressure and temperature remain below the design values, the results are not affected.

6. LR 2.5.4.2, Service Water (GL 96-06): The effect of the Generic Letter (GL) 96-06 evaluations on containment penetrations and two-phase flow is bounded by the EPU evaluations performed at a containment design temperature of 286°F. The effect of water hammer was reevaluated for the 2°F higher peak LOCA temperature and the results reported in the NextEra Response to SBPB RAI 2.5-5 (Reference 3) remain valid.

7. LR 2.5.4.3, Reactor Plant Component Cooling Water (CCW): The increase in the CCW and associated RHR and containment spray system temperatures are bounded by the existing design temperatures. Therefore, the revised LOCA containment results for EPU do not affect these systems.

8. LR 2.2.2.2, Balance of Plant Piping, Components, and Supports: The increased system temperatures identified for the revised EPU LOCA containment analysis are bounded by the existing design temperatures for the balance of plant piping, components and supports, therefore, these systems are not affected.

In conclusion, the LOCA containment integrity analysis was revised to address the applicable issues associated with the LOCA mass and energy release analysis identified by Westinghouse and the effect of the revised LOCA containment results was evaluated against the previous EPU evaluations submitted in Reference (1). NextEra has determined that the previous EPU evaluations remain valid. Therefore, the proposed EPU remains acceptable with the revised EPU LOCA containment analysis.

References

(1) FPL Energy Point Beach, LLC letter to NRC, dated April 7, 2009, License Amendment Request 261, Extended Power Uprate (ML091250564)

(2) NextEra Energy Point Beach, LLC letter to NRC, dated April 28, 2010, License Amendment Request 261, Extended Power Uprate, Response to Request for Additional Information (ML101190081)

(3) NextEra Energy Point Beach, LLC letter to NRC, dated June 24, 2010, License Amendment Request 261, Extended Power Uprate, Response to Request for Additional Information (ML101760119)

ATTACHMENT A

NEXTERA ENERGY POINT BEACH, LLC
POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2

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RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

REVISED EPU LOCA CONTAINMENT ANALYSIS

3 pages follow

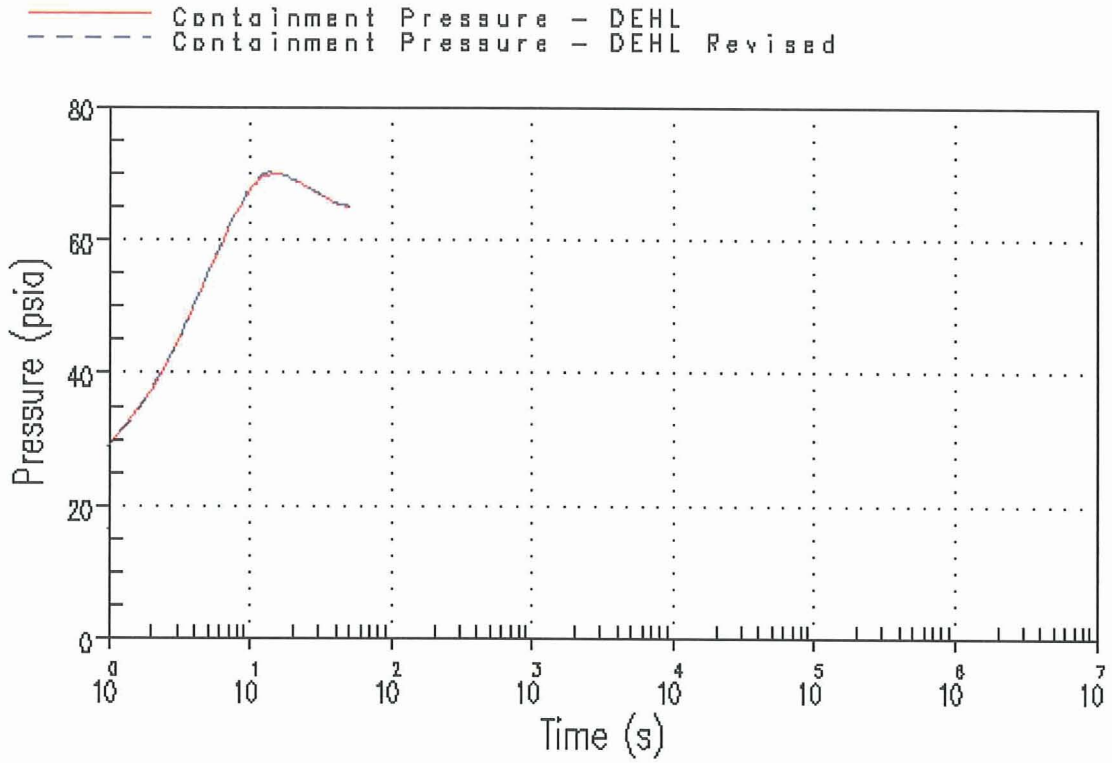

Figure 1: Point Beach Units 1 and 2 Containment Pressure Comparison for DEHL Case

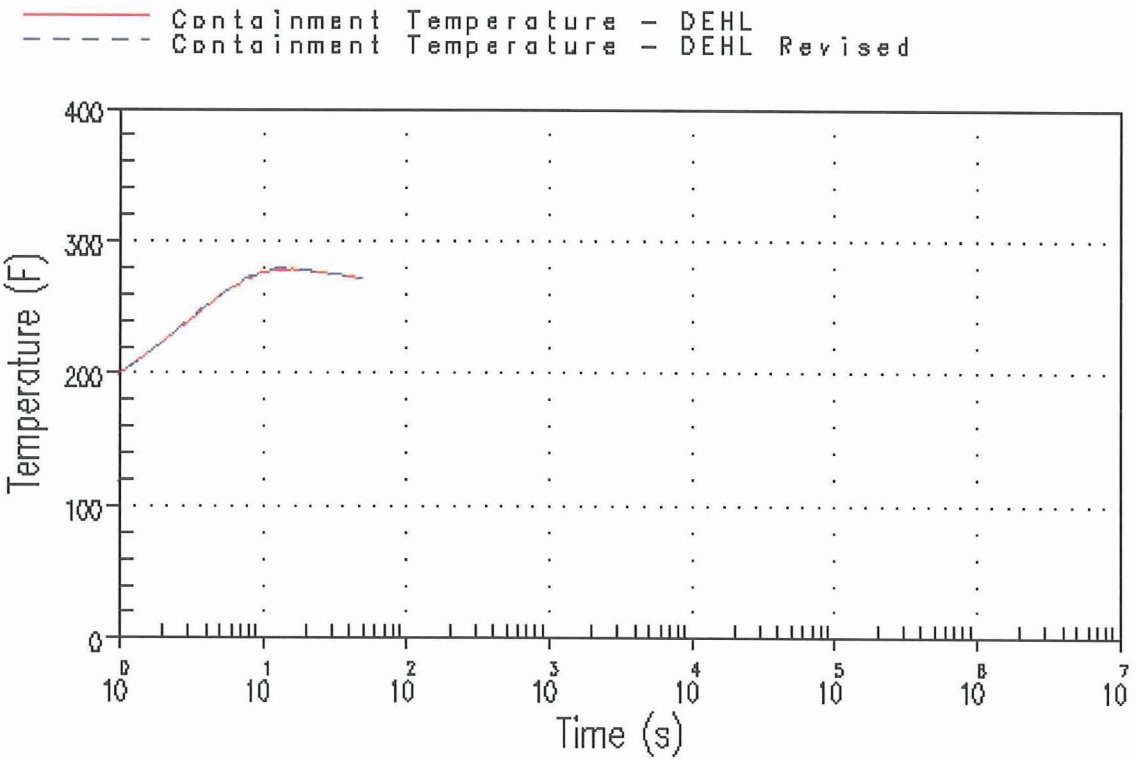

Figure 2: Point Beach Units 1 and 2 Containment Temperature Comparison for DEHL Case

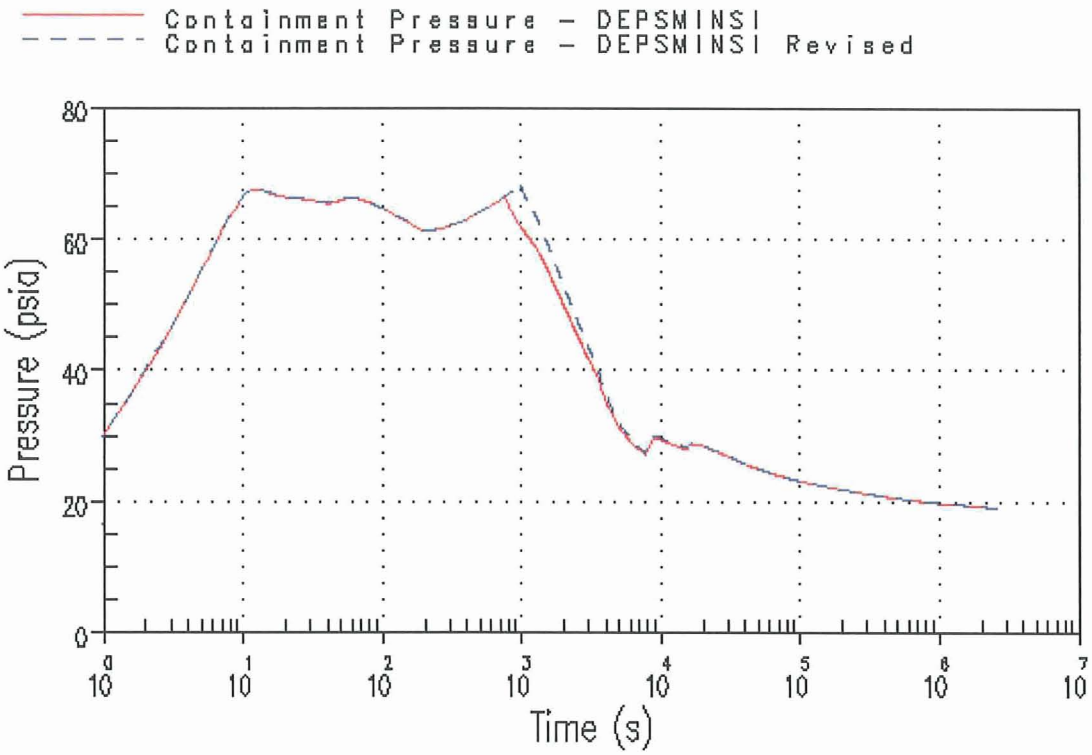

Figure 3: Point Beach Units 1 and 2 Containment Pressure Comparison for DEPS MINSI Case

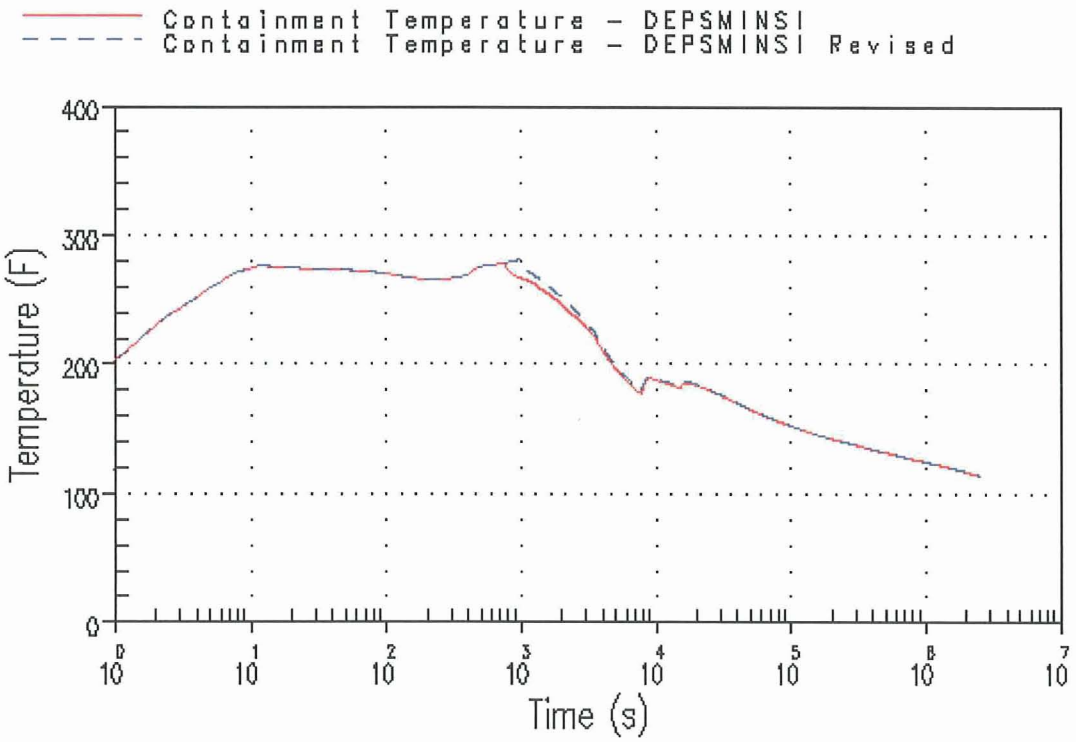

Figure 4: Point Beach Units 1 and 2 Containment Temperature Comparison for DEPS MINSI Case

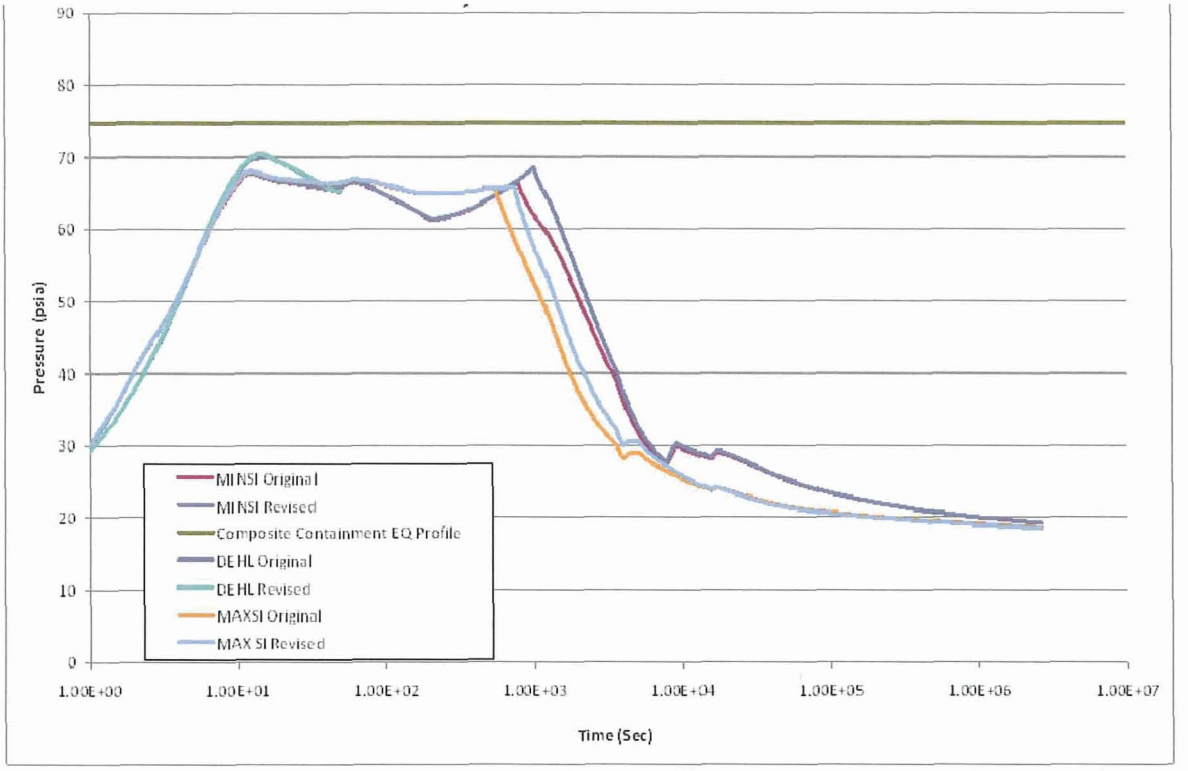

Figure 5: EPU LOCA Pressure Response Curves DEHL, MINSI & MAXISI Events

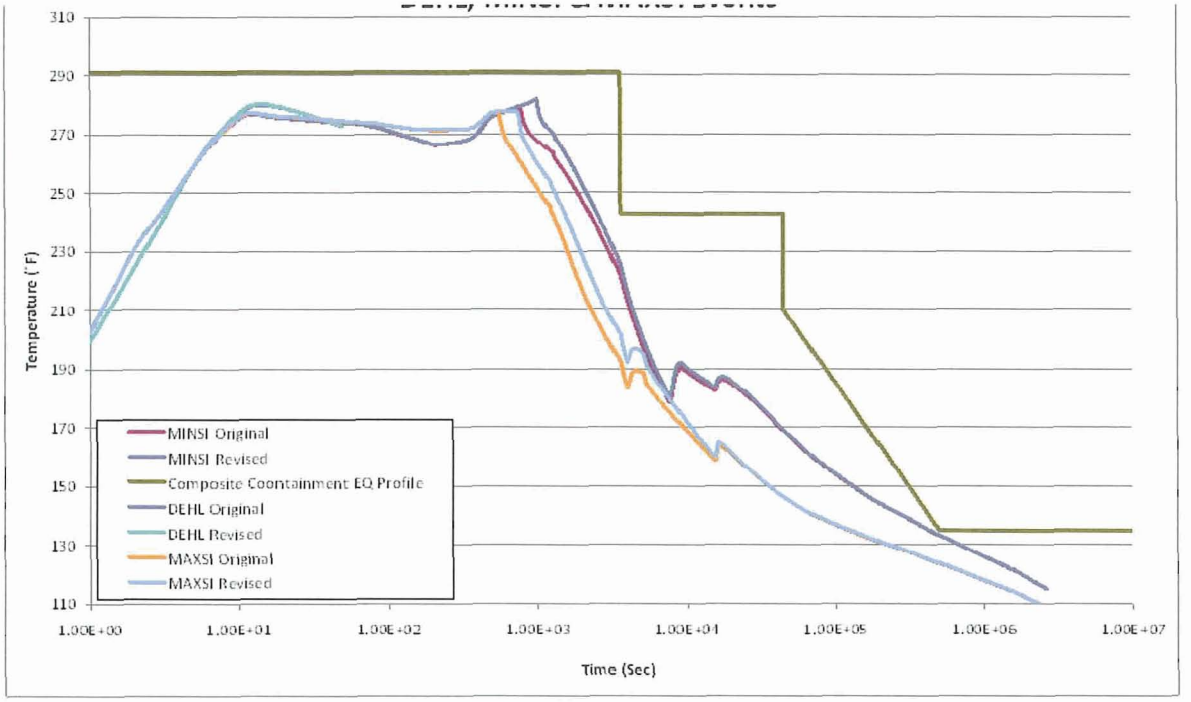

Figure 6: EPU LOCA Temperature Response Curves DEHL, MINSI & MAXSI Events