

**Levy Nuclear Plant Units 1 and 2 (LNP)
Updated Response to NRC Request for Additional Information Letter 126 Related to
Standard Review Plan Sections 6.4, Control Room Habitability and 16, Technical
Specifications, dated May 13, 2015**

<u>NRC RAI #</u>	<u>Duke Energy RAI #</u>	<u>Duke Energy Response</u>
06.04-5	L-1164 & L-1167	NPD-NRC-2015-049 dated November 12, 2015 and Updated Response enclosed – see following pages

NRC Letter No.: LNP-RAI-LTR-126

NRC Letter Date: May 13, 2015

NRC Review of Final Safety Analysis Report

NRC RAI NUMBER: 06.04-5

Text of NRC RAI:

Table 16.3.2 of the FSAR specifies Short Term Availability Controls (AC) 2.6 for long term cooling of the main control room (MCR). AC 2.6 specifies availability controls and surveillance requirements for the non-safety related MCR ancillary fans. As discussed in the Bases for the AC, the MCR ancillary fans are used to circulate ambient air through the MCR to provide cooling after 3 days following an accident. On page 8 of Enclosure 4 with your letter dated March 26, 2015 (Serial No. NPD-NRC-2015-003) you propose adding a new section (9.4.1.2.3.1) to the FSAR which states that the limits on temperature and humidity for which MCR ancillary fans must operate are shown in Figure 3D.5-1. Currently, Figure 3D.5-1 is incorporated into the FSAR by reference to the certified AP1000 design with no departures or supplements. However, it is stated on page 3 of Enclosure 4 with your letter dated March 26, 2015 (Serial No. NPD-NRC-2015-003) that FSAR Appendix 3D will be revised to add a departure from the certified design in which Figure 3D.5-1 is replaced by Figure 3D-201 (provided in Enclosure 4 to the above referenced letter) that contains revised limits on temperature and humidity for which MCR ancillary fans must operate. These two proposed changes to the FSAR are not consistent.

Please clarify the temperature and humidity limits you are proposing for the MCR ancillary fans (those in Figure 3D.5-1 or those in Figure 3D-201).

The limits shown in Figure 3D-201 suggest that MCR conditions in the Post-72 period following an accident could reach 115°F dry bulb temperature with 35% relative humidity (RH). In this regard, please provide the following and include a reference to this information:

1. The analysis which shows maximum expected temperature and RH conditions in the MCR in the Post-72 period following an accident, including the assumed heat load and a description of the calculational model (including methods and assumptions)
2. The estimated stay time in the control room for operators to perform light work for the bounding temperature and humidity conditions and the technical bases for the estimate.

DEF RAI ID#: L-1167

DEF Updated Response to NRC RAI:

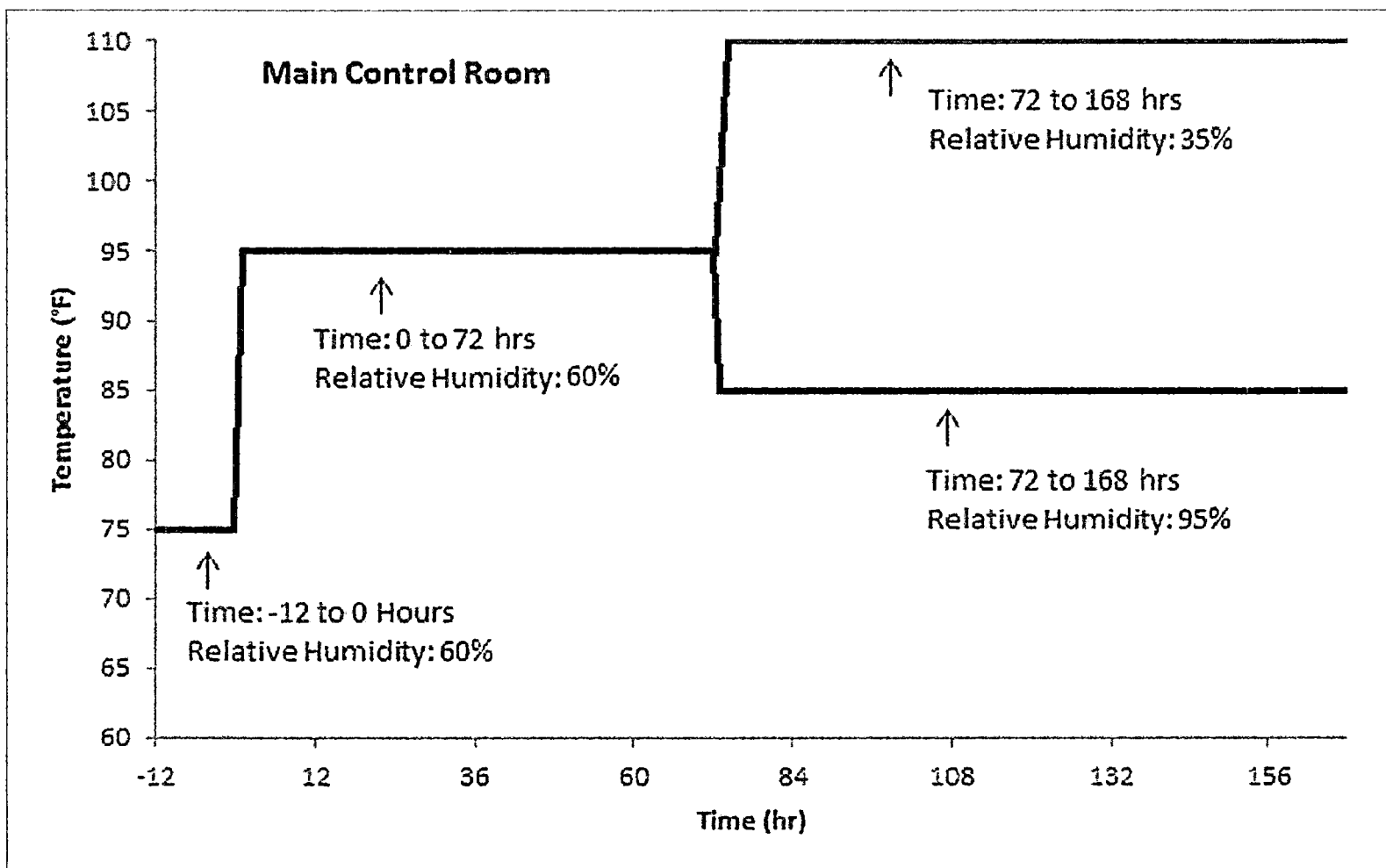
Figure 3D-201 of the previous response to NRC question 06.04-5 contained an error. This updated response replaces the original Figure 3D-201 provided in COLA change number 2 (Enclosure 1, page 4 of 7) in DEF Letter Serial NPD-NRC-2015-049, submitted to the NRC on November 12, 2015.

This updated response also replaces the original Figures 1 and 3 provided in DEF Letter Serial NPD-NRC-2015-049 (Attachment B of Enclosure 1, pages 4 of 16 and 6 of 16), submitted to the NRC on November 12, 2015.

All other information provided by the initial response in DEF Letter Serial NPD-NRC-2015-049 remains valid.

Associated LNP COL Application Revision:

1. COLA Part 2, FSAR Appendix 3D, will be revised to add a departure from DCD Figure 3D.5-1, Typical Abnormal Environmental Test Profile: Main Control Room, Sheet 1 of 3, as new FSAR Figure 3D-201 with a LMA of LNP DEP 6.4-2. This Figure shall also be added to the list of figures in Chapter 3. Figure 3D-201 is shown below.



LNP DEP 6.4-2

Figure 3D-201, Typical Abnormal Environmental Test Profile:
Main Control Room

Attachments to Response to NRC:

A. Revised Figures 1 and 3 for Response to NRC RAI Question 06.04-5 (Proprietary)