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## Duke Energy DOCUMENT TRANSMITTAL FORM

Facility: **MCGUIRE NUCLEAR STATION**

SUBJECT

**Tech Spec 3.1.3 - Pg 2 of TS 3.1.3 updated - Amend. # 278/258**Date: **7/22/2015**Document Transmittal #: **TR-NUC-MC-000282**Purpose: **Issue**

Released By:

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Document ID	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
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Remarks: **For simplicity, you can distribute the entire TS 3.1.3 if wanted. It is a very small section.---Reference TR-NUC-MC-000272---FOR DISTRIBUTION ENTITIES**A001  
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## 3.1 REACTIVITY CONTROL SYSTEMS

## 3.1.3 Moderator Temperature Coefficient (MTC)

LCO 3.1.3      The MTC shall be maintained within the limits specified in the COLR. The maximum upper limit shall be that specified in Figure 3.1.3-1.

APPLICABILITY:    MODE 1 and MODE 2 with  $k_{\text{eff}} \geq 1.0$  for the upper MTC limit, MODES 1, 2, and 3 for the lower MTC limit.

## ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A.    MTC not within upper limit.	A.1    Establish administrative withdrawal limits for control banks to maintain MTC within limit.	24 hours
B.    Required Action and associated Completion Time of Condition A not met.	B.1    Be in MODE 2 with $k_{\text{eff}} < 1.0$ .	6 hours
C.    MTC not within lower limit.	C.1    Be in MODE 4.	12 hours

# **SURVEILLANCE REQUIREMENTS**

SURVEILLANCE	FREQUENCY
SR 3.1.3.1    Verify MTC is within upper limit.	Once prior to entering MODE 1 after each refueling
<div data-bbox="228 525 1159 1249"> <p>SR 3.1.3.2    -----NOTES-----</p> <ol style="list-style-type: none"> <li>Not required to be performed until 7 effective full power days (EFPD) after reaching the equivalent of an equilibrium RTP all rods out (ARO) boron concentration of 300 ppm. Measurement of the MTC may be suspended provided the benchmark criteria specified in DPC-NE-1007-PA, and the Revised MTC Prediction specified in the COLR are satisfied.</li> <li>If the MTC is more negative than the 300 ppm Surveillance limit (not LCO limit) specified in the COLR, SR 3.1.3.2 shall be repeated once per 14 EFPD during the remainder of the fuel cycle.</li> <li>SR 3.1.3.2 need not be repeated if the MTC measured at the equivalent of equilibrium RTP-ARO boron concentration of <math>\leq 60</math> ppm is less negative than the 60 ppm Surveillance limit specified in the COLR.</li> </ol> </div> <div data-bbox="228 1249 1159 1354"> <p>Verify MTC is within lower limit.</p> </div>	Once each cycle

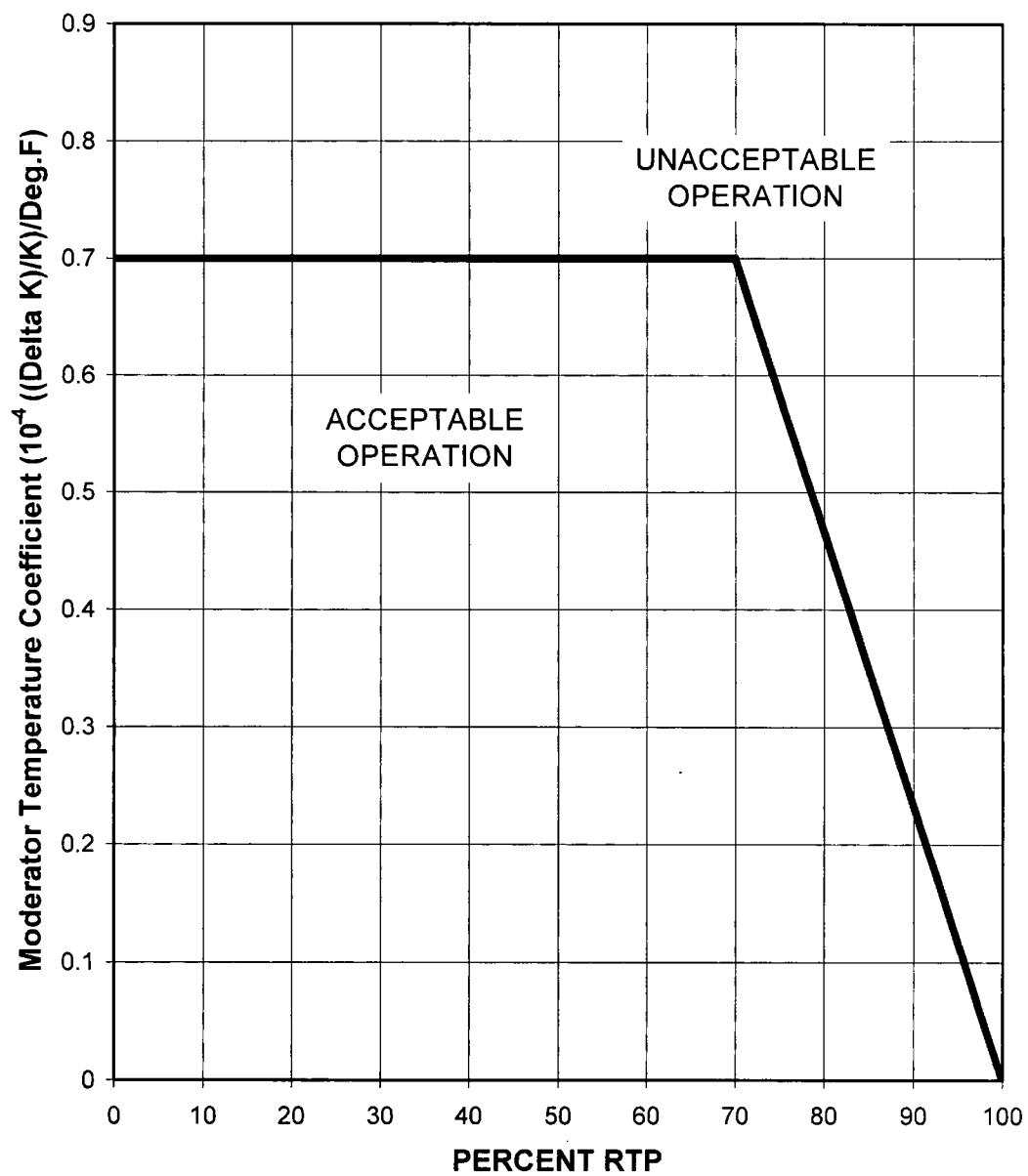


Figure 3.1.3-1 (page 1 of 1)  
Moderator Temperature Coefficient vs. Power Level