Entergy Operations, Inc.
1448 S.R. 333
Russellville, AR 72802
Tel 479-858-4619

Dale E. James
Manager, Licensing
Arkansas Nuclear One

2CAN010901

January 12, 2009

U. S. Nuclear Regulatory Commission
Attn.: Document Control Desk
Washington, DC 20555-0001

SUBJECT: Supplemental Information Associated With Treatment of Non-Safety Significant Systems Associated with the Request for Alternative ANO2-R&R-004, Revision 1
Arkansas Nuclear One, Unit 2
Docket No. 50-368
License No. NPF-6

REFERENCES:

1. Entergy Letter to NRC dated April 17, 2007, Request for Alternative ANO2-R&R-004, Revision 1 Request to Use Risk-Informed Safety Classification and Treatment for Repair / Replacement Activities in Class 2 and 3 Moderate Energy Systems (CNRO-2007-00015)

2. Entergy Letter to NRC dated August 6, 2007, Request for Alternative ANO2-R&R-004, Revision 1 Response to NRC Request for Additional Information (CNRO-2007-00028)

3. NRC Letter to Entergy dated December 20, 2007, Request for Additional Information re: ANO2-R&R-004, Revision 1, Request to Use Risk-Informed Safety Classification and Treatment for Repair / Replacement Activities in Class 2 and 3 Moderate Energy Systems (TAC NO. MD5250) (2CNA120704)

4. Entergy Letter to NRC dated February 20, 2008, Responses to Request for Additional Information to Request for Alternative ANO2-R&R-004, Revision 1 (2CAN020804)

Dear Sir or Madam:

By letter dated April 17, 2007 (Reference 1), Entergy Operations, Inc. (Entergy) proposed to use a risk-informed safety classification and treatment for repair / replacement activities in Class 2 and 3 moderate energy systems at Arkansas Nuclear One, Unit 2 (ANO-2). In response to the NRC, Entergy provided a test case, an example that demonstrated the process (Reference 2).

Following a meeting with the NRC at the ANO-2 site in November 2007, a Request for Additional Information (RAI) was initiated by the NRC Staff (Reference 3). Entergy's response to the RAI was included in letter dated February 20, 2008 (Reference 4).

In recent weeks, the NRC has indicated that a discussion of treatment of risk-informed repair and replacement activities be described and adopted into plant programs and/or process to ensure treatment of non-risk significant systems would be addressed appropriately. Therefore, Entergy is providing a discussion of the subject treatment, along with a description of plant processes that will be utilized to control these requirements going forward, in Attachment 1 to this letter.

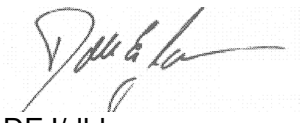
By teleconference on November 4, 2008, the NRC also discussed with Entergy options regarding the previously submitted table which compares the requirements of ASME Code Case N-660, "Risk-Informed Safety Classification for Use in Risk-Informed Repair/Replacement Activities," with Entergy's compliance with and/or deviation from these requirements. The original table provided references to various documents to illustrate compliance. The NRC requested that actual discussion of compliance and/or deviation be included in the table in lieu of, or in addition to, the included references. Therefore, Entergy has revised this comparison table, which is included in Attachment 2 to this letter.

Finally, Entergy's original request was to limit the risk-informed repair/replacement application (RI-RRA) to Class 2 and 3 moderate energy systems because at the time, the NRC and industry discussions relating to large or small pipe break assumption requirements was unresolved. Since Entergy's April 2007 submittal (Reference 1), this position has been finalized and Entergy has committed to conduct the consequence assessment for the spectrum of postulated break sizes (i.e. small to large), as described in Entergy's February 2008 submittal (Reference 4). Because the assessment of large pipe break is now a requirement, Entergy no longer needs to limit the application of this RI-RRA initiative to only Class 2 and 3 moderate energy systems. Therefore, Entergy requests that the NRC completes their review of the ANO2-R&R-004 submittal and associated supplements to apply to Class 2 and 3 moderate and high energy systems.

This letter contains no new commitments. Please note that two commitments were included in Entergy's February 20, 2008 letter, which remain valid for this request.

If you have any questions or require additional information, please contact Dale James at 479-858-4619.

Sincerely,



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Attachments:
1. Supplemental Information Associated With Treatment of Non-Safety Significant Systems Associated with the Request for Alternative ANO2-R&R-004, Revision 1
2. Revised Comparison Table Associated With Risk-informed Safety Classification and Treatment for Repair/Replacement Activities Associated with the Request for Alternative ANO2-R&R-004, Revision 1

cc: Mr. Elmo E. Collins
Regional Administrator
U. S. Nuclear Regulatory Commission
Region IV
612 E. Lamar Blvd., Suite 400
Arlington, TX 76011-4125

NRC Senior Resident Inspector
Arkansas Nuclear One
P.O. Box 310
London, AR 72847

U.S. Nuclear Regulatory Commission
Attn: Mr. Alan B. Wang
11555 Rockville Pike
MS O-7 D1
Rockville, MD 20852

Attachment 1 to

2CAN010901

Supplemental Information Associated With Treatment of Non-Safety Significant Systems Associated with the Request for Alternative ANO2-R&R-004, Revision 1

**Supplemental Information Associated With Treatment of
Non-Safety Significant Systems Associated with the Request for Alternative
ANO2-R&R-004, Revision 1**

In letter dated April 17, 2007 (Reference 1), as supplemented by letter dated August 6, 2008 (Reference 2), Entergy Operations, Inc. (Entergy) requested the use of a risk-informed safety classification (or categorization) process for Class 2 and 3 moderate energy systems at Arkansas Nuclear One, Unit 2 (ANO-2) consistent with ASME Code Case N-660, *Risk-Informed Safety Categorization for Repair/Replacement Activities,* which was developed to support NRC and industry promulgation of 10 CFR 50.69. The processes were founded on EPRI risk-informed ISI (RI-ISI) methodology documented in EPRI Report TR-1 12657. Entergy, through its active participation in EPRI, has been instrumental in the research and development that formed the EPRI methodology as well as its application and use within the industry.

This supplemental to the aforementioned Entergy letters and the information presented in response to an NRC Request for Additional Information (RAI) by letter dated February 20, 2008 (Reference 3), is intended to provide an overview of controls and measures to be established in support of process implementation, once approved by the NRC. In particular, the treatment of low or non-safety significant components is presented below in addition to the summary of controls that will govern the entire implementation of the proposed risk-informed process. Note, however, that the cover letter to this attachment requests that the Entergy request now be applied to both high and moderate energy systems. Therefore, the following information relating to treatment of low or non-safety significant components is applicable to both high and moderate energy systems.

The ANO-2 Safety Analysis Report (SAR) describes various aspects of the Inservice Inspection (ISI) program. Specifically, SAR Section 3.1.1 provides an overview of ISI-related expectations as related to various plant components governed by ASME Section XI and 10 CFR 50.55a requirements. Consistent with the current level of SAR detail, an overview of the proposed risk-informed safety classification for repair/replacement program discussed in the referenced letters will be added to this SAR section. This overview will include a description for the treatment for Safety Related Low Safety Significant (LSS) Systems. The ANO Corrective Action Process will be used to document and track issues relating to repair/replacement activities under this program in accordance with the 10 CFR Part 50 Appendix B Program.

Specific details of the proposed risk-informed safety classification for repair/replacement program, including the categorization process and the treatment of repair/replacement activities for which the program is applied, will be maintained in a high level corporate document or procedure such that application will be consistent for any Entergy site that has gained NRC approval for adoption of the subject alternative. This detail will include guidance such as, but not limited to; Design Controls, Procurement Process, Installation Process, Inspections and Configuration Control.

REFERENCES

1. Entergy Letter to NRC dated April 17, 2007, Request for Alternative ANO2-R&R-004, Revision 1 Request to Use Risk-Informed Safety Classification and Treatment for Repair / Replacement Activities in Class 2 and 3 Moderate Energy Systems (CNRO-2007-00015)

2. Entergy Letter to NRC dated August 6, 2007, Request for Alternative ANO2-R&R-004, Revision 1 Response to NRC Request for Additional Information (CNRO-2007-00028)

3. Entergy Letter to NRC dated February 20, 2008, Responses to Request for Additional Information to Request for Alternative ANO2-R&R-004, Revision 1 (2CAN020804)

Attachment 2 to

2CAN010901

Revised Comparison Table Associated With Risk-Informed Safety Classification and Treatment for Repair/Replacement Activities Associated with the Request for Alternative ANO2-R&R-004, Revision 1

Revised Comparison Table Associated With Risk-Informed Safety Classification and Treatment for Repair / Replacement Activities Associated with the Request for Alternative ANO2-R&R-004, Revision 1

By teleconference on November 4, 2008, the NRC discussed with Entergy options regarding the previously submitted table (see references below) which compares the requirements of ASME Code Case N-660, "Risk-Informed Safety Classification for Use in Risk-Informed Repair/Replacement Activities," with Entergy's compliance with and/or deviation from these requirements. The original table provided references to various documents to illustrate compliance. The NRC requested that actual discussion of compliance and/or deviation be included in the table in lieu, of or in addition to, the included references. Therefore, Entergy has revised this comparison table, which is included in the following pages. Some items intended for deletion are marked with a "strike-through" in order to permit the NRC to note any significant deletions from the original table.

REFERENCES

1. Entergy Letter to NRC dated April 17, 2007, Request for Alternative ANO2-R&R-004, Revision 1 Request to Use Risk-Informed Safety Classification and Treatment for Repair / Replacement Activities in Class 2 and 3 Moderate Energy Systems (CNRO-2007-00015)

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3. Entergy Letter to NRC dated February 20, 2008, Responses to Request for Additional Information to Request for Alternative ANO2-R&R-004, Revision 1 (2CAN020804)

Comparison of ASME Code Case N-660, "Risk-Informed Safety Classification for Use in Risk-Informed Repair/Replacement Activities" and the Proposed Methodology

Section	N660	Proposed Methodology [1] [2]	Basis for Change
Inquiry	What additional classification criteria may be used as a supplement to the group classification criteria of IWA-1320 to determine Risk-Informed Safety Classification for use in risk-informed repair/replacement activities?	As documented in [1], *"Pursuant to 10 CFR 50.55a(a)(3)(i), Entergy Operations, Inc. (Entergy) proposes to use the categorization process contained in Attachment 1 of this request at ANO-2 for components scoped within Class 2 and 3 ~~moderate energy~~ systems. Specifically, this process is used to determine the risk-informed safety classification (RISC) for repair/replacement activities applied to Class 2 and 3 pressure-retaining items or their associated supports (exclusive of Class CC and MC items)~~ in moderate energy systems~~.* *This process shall be applied on a system basis, including pressure-retaining items and their associated supports within the selected systems. Upon completing the categorization process, components are ranked as either high safety significant (HSS) or low safety significant (LSS). Those components that are HSS will continue to meet existing ASME requirements for repair/replacement activities. Those components that are LSS will be exempt from ASME Section XI repair/replacement requirements. This approach is consistent with the process defined in 10 CFR 50.69."*	In addition to defining alternative classification criteria consistent with N660, the proposed methodology also defines treatment requirements for LSS components. In the 7th paragraph of Section IV "Basis for the Proposed Alternative, page 2 of 17, of the relief request) [1]: *Consistent with 10 CFR 50.69, for those components identified as LSS, Entergy will replace the existing Section XI requirements, with owner-defined periodic inspection and testing activities to confirm with reasonable confidence that the LSS item will remain capable of performing its safety-related function(s) under design basis conditions. Conditions that are identified that would prevent a LSS component from performing its safety-related function(s) under design basis conditions will be corrected in a timely manner. For significant conditions adverse to quality that may be identified, measures will be taken via the Appendix B corrective action program to provide reasonable confidence that the cause of the condition is determined and corrective action taken to preclude repetition.*

Section	N660	Proposed Methodology [1] [2]	Basis for Change
Reply	It is the opinion of the Committee that as a supplement to the group classification criteria of IWA-1320, the following requirements may be used to determine the Risk-Informed Safety Classification for risk-informed repair/replacement activities	See above discussion on the "Inquiry"	
1100 Scope	This Case provides a process for determining the Risk-Informed Safety Classification (RISC) for use in risk-informed repair/replacement activities. The RISC process of this Case may be applied to any of Class 1, 2, 3, or non-class pressure-retaining items or their associated supports, except core supports, in accordance with the risk-informed safety classification criteria established by the regulatory authority having jurisdiction at the plant site.	*The proposed methodology will be used to determine the risk-informed safety classification (RISC) for repair/replacement activities applied to Class 2 and 3 pressure-retaining items or their associated supports (exclusive of Class CC and MC items)* ~~*in moderate energy systems*~~*.*	The original relief request [1] was limited to Class 2 and 3 Moderate Energy Systems. The rationale for limiting the scope to Class 2 and 3 moderate energy systems was to provide further confidence in the small leak assumption of proposed I-3.1.1(a). Per response to RAI #6 [2], Entergy is no longer using this assumption. As such, the scope of the proposed methodology and the scope of N660 as approved by the NRC (i.e. Class 2 and 3 high and moderate energy systems) are the same.
1200 Classification (a)	The RISC process is described in Appendix I of this Case. Pressure retaining and component support items shall be classified High Safety Significant (HSS) or Low Safety Significant (LSS). However, because this classification is to be used only for repair/replacement activities, failure potential is conservatively assumed to be 1.0 in determining a consequence category in Appendix I. These classifications might not be directly related to other risk-informed applications.	Similar introductory material is provided in [1].	There are no technical requirements in this section of N660. Assuming a failure probability of 1.0 is part of the consequence assessment process.

Section	N660	Proposed Methodology [1] [2]	Basis for Change
1200 Classification (b)	Discussion of Class 1 items	This is not applicable to the relief request as the relief request only applies to Class 2 and 3 systems.	N/A
1310 Determination of Classification	The responsibilities of the Owner shall include determination of the appropriate classification for the items identified for each risk-informed repair/replacement activity, in accordance with Appendix I of this Case. The Owner shall ensure that core damage frequency (CDF) and large early release frequency (LERF) are included as risk metrics in the RISC process.	Per the discussion above on "Inquiry" Entergy is responsible for implementing the proposed methodology.	N/A
1320 Required Disciplines	Personnel with expertise in the following disciplines shall be included in the classification process. (a) probabilistic risk assessment (PRA) (b) plant operations (c) system design (d) safety or accident analysis Personnel may be experts in more than one discipline, but are not required to be experts in all disciplines.	The proposed methodology does not explicitly call out these disciplines.	While the proposed methodology does not explicitly call out these disciplines, they are necessary to implement the EPRI RI-ISI consequence assessment which is the foundation of the proposed methodology. As such, they have been and will continue to be fundamental to the relief request and its supporting analyses.

Section	N660	Proposed Methodology [1] [2]	Basis for Change
1330 Adequacy of the PRA	The Owner is responsible for demonstrating adequacy of any PRA used as the basis for this process. All deficiencies identified shall be reconciled during the analysis to support the RISC process. The resolution of all PRA issues shall be documented.	Section I-3.0.2 "PRA Scope and Technical Adequacy" of the proposed methodology provides the following: "*The technical adequacy of the PRA used to support the evaluations required by this attachment shall be assessed. The PRA technical adequacy basis for the ANO-2 RI-ISI program application shall be reviewed to confirm it is applicable to the safety significant categorization of this application, including verifying assumptions on equipment reliability for equipment not within the scope of this request.*	Additionally, this is further discussed in reference [2], Responses to RAI #7, #8 and #9.
-9000 Glossary	N660 contains a glossary of terms.	An updated glossary was provided in the November 15, 2006 submittal. [3]	Additions and clarifications.
I-1.0 Introduction	N660 provides an introductory paragraph to the Appendix	No technical change from N660. Reference [1] provides additional clarity and states that the methodology is founded upon EPRI TR-112657. A figure has been added (Figure I-1) illustrating the modified RISC methodology process, including scope identification, consequence evaluation, consequence categorization, classification considerations, and final classification definitions Also, as noted above the relief is being revised to include both high and moderate energy systems.	Editorial
I-2.0 Scope Identification	The Owner shall define the boundaries included in the scope of the RISC evaluation process.	No change	See additional clarifications in Reference [2], RAI responses.

Section	N660	Proposed Methodology [1] [2]	Basis for Change
I-3.0 Consequence Assessment	Piping segments can be grouped based on common conditional consequence (i.e., given failure of the piping segment). To accomplish this grouping, the direct effects, and indirect effects shall be assessed for each piping segment. Additionally, information shall be collected for each piping segment that is not modeled in the PRA, but considered relevant to the classification (e.g., information regarding design basis accidents, shutdown risk, containment isolation, flooding, fires, seismic conditions).	*Pressure-retaining items shall be evaluated by defining piping segments that are grouped based on similar conditional consequences (i.e., given failure of the piping segment). To accomplish this grouping, direct and indirect effects shall be assessed for each piping segment. A consequence category for each piping segment is determined from the failure modes and effects analysis (FMEA) and impact group assessment as defined in Sections I-3.1.1 and I-3.1.2, respectively. The failure consequence can be quantified using the available probabilistic risk assessment(s) (PRA) to support the impact group assessment of Section I-3.1.2. Throughout the evaluations specified in Sections I-3.0, I-3.1, and I-3.2, credit may be taken for plant features and operator actions to the extent these would not be affected by failure of the segment under consideration. When crediting operator action, the likelihood for success and failure will be determined consistent with ANO-2's NRC-approved RI-ISI application (Ref. 4). The scenario that results in the highest consequence ranking shall be used. As an example, to take credit for operator actions, the following features shall be provided:* • *An alarm or other system feature provides clear indication of failure;* • *Equipment activated to recover from the condition must not be affected by the failure;* • *Time duration and resources are sufficient to perform operator action;* • *Plant procedures define operator actions;* • *Operators are trained on the procedures.*	Expanded discussion provided in the proposed methodology including process for crediting operator actions and reference to EPRI TR-122657 which provides the basis for the N660 methodology. Discussion on shutdown and external events moved to new sections I-3.1.2(e) and (f).

Section	N660	Proposed Methodology [1] [2]	Basis for Change
I-3.1.1(a) Pressure Boundary Failure Size	N660 discusses how the consequence assessment shall be performed, including assuming a large pressure boundary failure.	Entergy had originally proposed to allow postulating a small leak when proposed I-3.1.1(a)(1) conditions were met. Per response to RAI #6 [2], Entergy will not use proposed I-3.1.1(a)(1).	Postulated break sizes will be consistent with N660.
I-3.1.1(b) Isolability of the break	A break can be automatically isolated by a check valve, a closed isolation valve, or an isolation valve that closes on a given signal or by operator action.	*A break can be automatically isolated by a check valve, a closed isolation valve, or an isolation valve that closes on a given signal. In lieu of automatic isolation, operator action may be credited consistent with Section I-3.0.1.*	Proposed methodology provides additional clarification consistent with EPRI TR-112657.
I-3.1.1(c) Indirect Effects	N660 states that indirect effects need to be evaluated.	Proposed methodology makes editorial changes only.	N/A
I-3.1.1(d) Initiating Events	N660 states that initiating events need to be evaluated.	Proposed methodology makes editorial changes only	N/A
I-3.1.1(e) System Impact or Recovery	N660 states that system impacts and recovery need to be evaluated.	Proposed methodology makes editorial changes only	N/A
I-3.1.1(f) System Redundancy	N660 states that system redundancy needs to be evaluated.	Proposed methodology makes editorial changes only	N/A
I-3.1.1(g)	N/A	*The consequence evaluation and ranking is organized into four basic consequence impact groups as discussed in Section I-3.1.2. The three corresponding system configurations for these impact groups are defined in Table I-6.*	Added new section to provide clarity and describe applicable configurations for when a failure should be postulated. This table is taken directly from EPRI TR-112657 which is the technical basis for the N660 methodology.
I-3.1.2	Impact Group Assessment	Editorial changes plus added footnote (4) to provide additional technical basis and guidance. *Footnote 4 - Further details on evaluating and ranking the consequence impact groups and configurations are discussed in USNRC Safety Evaluation Report dated October 28, 1999 and EPRI Report TR-112657, Rev B-A.*	Additional basis and guidance.

Section	N660	Proposed Methodology [1] [2]	Basis for Change
I-3.1.2(a)	*Initiating Events (IE) Impact Group Assessment*	Added requirement that *differences in the consequence rank between the use of Table I-1 and I-5 need to be reconciled.*	This is more conservative than what N600 currently requires.
I-3.1.2(b)	*System Impact Group* Assessment	Added requirement that differences *in the consequence rank between the use of Table I-2 and I-5 need to be reconciled. Additionally, for defense in depth purposes added "postulated failures that lead to "zero defense" (i.e. no backup trains) shall be assigned a High consequence.*	This is more conservative than what N600 currently requires.
I-3.1.2(c)	*Combination Impact Group Assessment*	Added requirement that *difference in the consequence rank between the use of Table I-3 and I-5 need to be reconciled.*	This is more conservative than what N600 currently requires.
I-3.1.2(d)	*Containment Performance*	Simplified discussion.	
I-3.1.2(e)	N/A	The proposed methodology contains additional text (see below) which is taken from EPRI TR-112657. <u>*Shutdown Operation Evaluation*</u> *The previously established consequence rank shall be reviewed and adjusted to reflect the pressure boundary failure's impact on plant operation during shutdown.* *If the plant has a shutdown PRA, the important initiators and systems will have already been identified for shutdown operation, and their effect on core damage and containment performance. If a shutdown PRA is not available, the effect of pressure-boundary failures on core damage and containment performance shall be evaluated. The major characteristics to be considered are defined as follows:*	This additional text provides guidance on treating shutdown operation beyond what is approved in N660. N660 simply stated in Section I-3.0 that information related to shutdown risk should be considered.

Section	N660	Proposed Methodology [1] [2]	Basis for Change
I-3.1.2(e) *(continued)*		• *The system operations, safety functions, and success criteria change in different stages of other modes of operation.* • *The exposure time for the majority of the piping associated with shutdown operation is typically less than 10% per year. The exposure time associated with being in a more risk-significant configuration is even shorter, depending on the function or system that is being evaluated.* • *The unavailability of mitigating trains could be higher due to planned maintenance activities. Shutdown guidelines need to be evaluated to assure that sufficient redundancy is protected during different modes of operation.* • *Recovery time may be longer, thus allowing for multiple operator actions.*	
I-3.1.2(f)	N/A	The proposed methodology contains additional text (see text below) which is taken from EPRI TR-112657. *The previously established consequence rank shall be reviewed and adjusted to reflect the pressure boundary failure's impact on the mitigation of external events. The effect of external events on core damage and containment performance shall be evaluated from two perspectives, as follows:* • *External events that can cause a pressure-boundary failure (e.g., seismic events); and*	This additional text provides guidance on treating external events beyond what is approved in N660. N660 simply stated in Section I-3.0 that information related to external events (e.g. fires, seismic conditions) should be considered.

Section	N660	Proposed Methodology [1] [2]	Basis for Change
I-3.1.2(f) *(continued)*		• *External events that do not affect likelihood of pressure-boundary failure, but create demands that might cause pressure-boundary failure and events (e.g., fires).*	
I-3.1.3, I-3.1.4, I-3.1.5	N660 contains discussion and criteria for "Not modeled components, safety margin and defense in depth"	Reworded and moved to I-3.2.2 of the proposed methodology	
I-3.2.1	Final RISC Classification	Editorial changes	
I-3.2.1.1	Classification Definitions	Deleted due to the editorial changes to I-3.2.1	
I-3.2.2(a)	Classification Considerations	Editorial changes	
I-3.2.2(b) Change #1 *(continued)*	N660 uses the Other Relevant Information of sections I-3.1.3, -3.1.4 and -3.1.5 to further assess medium and low consequence segments.	Proposed methodology has revised this section as follows: *Piping segments determined to fall into the MEDIUM, LOW, or NONE (no change to base case) consequence category in any table by the consequence evaluation in Section I-3.1 shall be determined to be HSS or LSS by considering the information in (1) through (10), below.* ~~*Under the same conditions of Section I-3.1.1(a), a large pressure-boundary leak does not need to be assumed.*~~ *Also, credit may be taken for plant features and operator actions to the extent these would not be affected by failure of the segment under consideration. If plant features and operator actions are credited, they shall be consistent with those credited in Section I-3.1. The following conditions shall be evaluated and answered TRUE or FALSE:*	Proposed wording provides better clarity to the assessment process and also requires that operator action can only be credited consistent with the requirements of I-3.1. Also, as noted above, the previously proposed small leak assumption of I-3.1.1(a) is no longer part of this relief request.

Section	N660	Proposed Methodology [1] [2]	Basis for Change
I-3.2.2(b) Change #1 *(continued)*		*(1) Failure of the pressure-retaining function of the segment will not directly or indirectly (e.g., through spatial effects) fail a basic safety function.* *(2) Failure of the pressure-retaining function of the segment will not prevent the plant from reaching or maintaining safe shutdown conditions; the pressure-retaining function is not significant to safety during mode changes or shutdown. Assume that the plant would be unable to reach or maintain safe shutdown conditions if pressure-boundary failure results in the need for actions outside of plant procedures or available backup plant mitigative features.* *(3) The pressure-retaining function of the segment is not called out or relied upon in the plant emergency/abnormal operating procedures or similar guidance as the sole means for successfully performing operator actions required to mitigate an accident or transient.* *(4) The pressure-retaining function of the segment is not called out or relied upon in the plant emergency/abnormal operating procedures or similar guidance as the sole means for assuring long-term containment integrity, monitoring of post-accident conditions, or offsite emergency planning activities.*	

Section	N660	Proposed Methodology [1] [2]	Basis for Change
I-3.2.2(b) Change #1 *(continued)*		*(5) Failure of the pressure-retaining function of the segment will not result in an unintentional release of radioactive material that would result in implementing offsite radiological protective actions.* *The RISC process shall demonstrate that the defense-in-depth philosophy is maintained. Defense-in-depth is maintained if:* *(6) Reasonable balance is preserved among preventing core damage, preventing containment failure or bypass, and mitigating an offsite release.* *(7) There is no over-reliance on programmatic activities and operator actions to compensate for weaknesses in plant design.* *(8) System redundancy, independence, and diversity are preserved commensurate with the expected frequency of challenges, consequences of failure of the system, and associated uncertainties in determining these parameters.* *(9) Potential for common-cause failures is taken into account in the risk analysis categorization.* *(10) Independence of fission-product barriers is not degraded.* *If any of the above ten (10) conditions are answered FALSE, then HSS shall be assigned. Otherwise, LSS may be assigned.*	

Section	N660	Proposed Methodology [1] [2]	Basis for Change
I-3.2.2(b) Change #2	Any piping segment initially determined to be a “Medium” consequence category and that is subject to a known active degradation mechanism shall be classified as HSS.	Wording deleted.	Wording deleted for the following reasons: • The consequence assessment per the proposed methodology [1] as supplemented by the response to RAI #6 [2] evaluates a spectrum of break sizes from small to large. This is done with an assumed failure probability of 1.0. As such, this assessment envelopes any impact that a postulated degradation mechanism could have. • Finally, the treatment requirements of this relief assure that LSS components will continue to reliably perform their safety related functions under design basis conditions.
I-3.2.2(d) Component Supports	A component support or snubber shall have the same classification as the highest-ranked piping segment within the piping analytical model in which the support is included. The Owner may further refine the classification ranking by more extensive application of the process defined in these requirements. These analyses shall be documented.	A component support, hanger, or snubber shall have the same classification as the highest-ranked piping segment within the piping analytical model in which the support is included.	No technical change.

Section	N660	Proposed Methodology [1] [2]	Basis for Change
I-4.0 Re-evaluation of the RISC	Wording associated with updates to the analyses/classifications.	Per section IV of the proposed methodology [1], *"Entergy shall review changes to the plant, operational practices, applicable plant and industry operational experience, and, as appropriate, update the probabilistic risk assessment (PRA) and the categorization and treatment processes. Entergy shall perform this review in a timely manner but no longer than once every two refueling outages."*	This meets the intent of N660. See additional information in Reference [2], RAI responses.
Table I-1	Consequence Categories for IE Impact Group	Editorial changes.	
Table I-2	Guidelines for Assigning Consequence Categories to Failure Resulting in System or Train Loss	Changed AOT to CT for consistency with newer Tech. Specs.	
Table I-3	Consequence Categories for Combination Impact Group	Editorial changes.	
Table I-4	Consequence Categories for Failures Resulting in Increased Potential for an Unisolated LOCA Outside Containment	Editorial changes.	
Table I-5	Quantitative Indices for Consequence Categories	Changes to be consistent with EPRI TR-112657 (e.g. placement of "equal to" bar for CCDP assignment).	
Table I-6	New table	Added new table from EPRI TR-112657 to provide additional clarity / guidance.	

Notes:

[1] CNRO-2007-00015, dated April 17, 2007

[2] 2CANO20804, dated February 20, 2008

[3] CNRO-2006-00050, dated November 15, 2006