From: Alan Wang
Sent: Monday, November 24, 2008 3:49 PM
To: David Bice
Subject: ANO-1 TS 3.0.8

Dave, here is Carl's RAI. Let me know if you need a call. Alan

REQUEST FOR ADDITIONAL INFORMATION

The NRC staff requests additional information to clarify the ANO-1 technical specification change application (MD9482) for the addition of LCO 3.0.8 on the impact of inoperable snubbers.

Consistent with the staff's approval and inherent in the implementation of TSTF-372 Revision 4, licensees interested in implementing LCO 3.0.8 must, as applicable, operate in accordance with stipulations. Section 3.0, Regulatory Analysis, Subsection 3.2, Verification and Commitments, discusses two conditions for application of TSTF-372 specified in the model Safety Evaluation. Appropriate plant procedures and administrative controls will be used to implement the following Tier 2 Restrictions. Tier 2 restrictions (Conditions) involve the identification of potentially high-risk configurations that could exist if equipment in addition to that associated with the change were to be taken out of service simultaneously, or other risk significant operational factors such as concurrent equipment testing were also involved.

(a) At least one AFW train (including a minimum set of supporting equipment required for its successful operation) not associated with the inoperable snubber(s), must be available when LCO 3.0.8a is used at PWR plants.

(b) At least one AFW train (including a minimum set of supporting equipment required for its successful operation) not associated with the inoperable snubber(s), or some alternative means of core cooling (e.g., F&B, fire water system or "aggressive secondary cooldown" using the steam generators) must be available when LCO 3.0.8b is used at PWR plants.

Regarding Condition 1.a Entergy wrote:
Condition 1(a) assumes the availability of one Emergency Feedwater (EFW) train during application of LCO 3.0.8.a. The TSTF-372 and the model SE specify the application of LCO 3.0.8.a is contingent on the assumption that the redundant train remains available. Even though ANO-1 has a unique EFW system design, the plant TS LCO and ACTION statements will ensure the system remains capable of performing its safety function with various combinations of pumps and flow paths OPERABLE. Although the TS implementation process at ANO-1 may include this restriction in other procedures or administrative processes upon approval of this amendment, Entergy does not believe further action is required to ensure compliance with Condition 1(a) since the TS inherently prevents application of LCO 3.0.8.a due to a snubber-related condition which could render the entire EFW system inoperable.

Regarding Condition 1.b, Entergy wrote:
Condition 1(b) requires either one EFW train or some alternative means of core cooling must be available when one or more snubbers are inoperable that affect both trains of a given system. As described in Condition 1(a) above, there are no instances where the

EFW system or both trains of any system being relied upon as the only core cooling method would be removed from service or any work permitting both at the same time during its associated Modes of Applicability that require these systems. Again, such a plant configuration would result in LCO 3.0.3 entry or plant shutdown, which prevents the utilization of the 12-hour allowance of LCO 3.0.8.b. Although the TS implementation process at may include this restriction in other procedure or administrative processes upon approval of this amendment. Entergy believes the TS LCO and ACTION statements will ensure the system remains capable of performing its safety function with no further action required to ensure compliance with Condition 1 (b).

It is not clear to the staff what these statements mean in terms of taking actions to implement Tier 2 restrictions. Conclusions made by the licensee that would result in exceptions to or deviations from TSTF-372 model SE requirements to establish plant procedures and administrative controls to implement Tier 2 Restrictions need to include an analysis basis for the conclusion. The license application regulatory analysis needs to address this issue for condition 1(a) and 1(b) conclusions.

REGULATORY ANALYSIS BASIS FOR RAI

Regulations

10 CFR 50.36(d)(2)(i),states:
Limiting conditions for operation. (i) Limiting conditions for operation are the lowest functional capability or performance levels of equipment required for safe operation of the facility. When a limiting condition for operation of a nuclear reactor is not met, the licensee shall shut down the reactor or follow any remedial action permitted by the technical specifications until the condition can be met.

LCO 3.0.8 modifies TS requirements on the impact of inoperable snubbers. Under LCO 3.0.8 TS systems would remain operable when required snubbers are not capable of providing their related support function. The licensee stated that the proposed amendment is consistent with staff approved TSTF-372, Rev 4, “Addition of LCO 3.0.8, Inoperability of Snubbers” TSTF-372, Revision 4, documents a risk-informed analysis of the proposed TS change. The risk assessment associated with the proposed delay times for entering the TS actions for the supported equipment was performed following the three-tiered approach recommended in RG 1.177 for evaluating proposed extensions in currently allowed CTs:

The second tier involves the identification of potentially high-risk configurations that could exist if equipment in addition to that associated with the change were to be taken out of service simultaneously, or other risk-significant operational factors such as concurrent equipment testing were also involved. The objective is to ensure that appropriate restrictions are in place to avoid any potential high-risk configurations.

E-mail Properties

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Subject: ANO-1 TS 3.0.8
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Received Date: 11/24/2008 3:49:00 PM
From: Alan Wang

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DBICE@entergy.com (David Bice)
Tracking Status: None

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MESSAGE	16115	11/24/2008

Options
Expiration Date:
Priority: olImportanceNormal
ReplyRequested: False
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