

From: Leslie Hill *NRR*
To: NRR_INFOREVIEW
Date: Wed, Jan 30, 2002 7:51 AM
Subject: Proposed New Web Page
Place: NRR_INFOREVIEW

Attached are two files. The first is a Proposed New Web Page to share information with the Public regarding the background and the status of the initiatives for the Risk Management Technical Specifications program.

The second file would be a pdf hyperlink inside of the web page.

Please review the information for agency compliance.

This page would be generated from a link on the already existing Technical Specifications Web page.

Due date for this review: 2/22/02

Contact: Leslie Hill, 415-2158

Leslie Hill

CC: jwf; rld; trt

L-128

Risk Management Technical Specifications

Background

The use of risk information and technology has long been a fundamental ingredient in improving technical specifications. In the 1983 publication "Technical Specifications - Enhancing the Safety Impact," (NUREG-1024), the NRC Task Group on Technical Specifications commented on the technical specifications of that era:

"The Task Group recognizes that the times associated with surveillance frequencies, allowable outage times, etc., have been established on a deterministic basis using engineering judgement. The Task Group also believes that engineering judgement must be the primary basis for any changes to the Technical Specifications. However, the Task Group believes that the use of insights from probabilistic risk assessments could be a significant aid in arriving at these judgements."

Technical Specifications have taken advantage of risk technology as experience and capability have increased. Since the mid-1980's, the NRC has been reviewing and granting improvements to technical specifications that are based, at least in part, on probabilistic risk assessment (PRA) insights. In its final policy statement on technical specification improvements of July 22, 1993, the Commission stated that it expects that licensees will utilize any plant specific PRA or risk survey in preparing their technical specification related submittals. The Commission reiterated this point when it issued the revision to 10 CFR 50.36, "Technical Specifications," in July 1995. In August 1995, the NRC adopted a final policy statement on the use of PRA methods in nuclear regulatory activities that encourage greater use of PRA to improve safety decision making and regulatory efficiency. Since that time, the industry and the NRC have been pursuing increased use of PRA in developing improvements to technical specifications.

Adjusting Completion Times and Surveillance Intervals

Guidance documents have been prepared to assist in requesting risk-informed completion time (also called allowed outage time) and surveillance test interval extensions (Regulatory Guide 1.177 and Standard Review Plan Chapter 16.1). These efforts (categorized as "Option 1" in the framework of the Risk Informed Regulatory Improvement Program) have resulted in risk informed amendments at numerous plants, **[this will link to a PDF document, see attached for contents of that file]** and owners groups continued to submit topical reports to support additional applications.

Risk Management Technical Specifications

Consistent with the Commission's policy statement on technical specifications and the use of PRA, the NRC and the industry continue to develop more fundamental risk-informed improvements to the current system of technical specifications. We use the term "risk management technical specifications" to emphasize the goal of constructing technical specifications that reinforce the pro-active management of the total risk presented by the plant configuration and actions that may be needed to respond to emergent conditions. These improvements are intended to maintain or improve safety while reducing unnecessary burden,

and to bring technical specification requirements into congruence with the Commission's other risk-informed regulatory requirements, in particular the maintenance rule.

Issuance of the maintenance rule, 10 CFR 50.65, in July 1991 marked the advent of a regulation with significant implications for the evolution for technical specifications. Prior to 50.65, technical specifications were the primary rules governing operations, including what equipment must normally be in service, how long equipment can be out of service, compensatory actions, and surveillance testing to demonstrate equipment readiness. The goal of these technical specifications is to provide adequate assurance of the availability and reliability of equipment needed to prevent, and if necessary mitigate, accidents and transients. The maintenance rule shares this same goal but operates at a more fundamental level with a dynamic and more comprehensive process.

In addition to specifying a process for monitoring the effectiveness of maintenance, including performance and condition monitoring, and for balancing maintenance unavailability and equipment reliability, the maintenance rule requires licensees to assess and manage plant configuration risk that results from maintenance. The maintenance rule has put in place many of the mechanisms, measures and processes envisioned by staff as needed to enhance the safety impact of technical specifications. Thus, achieving synergy between the static technical specifications and the dynamic maintenance rule is a major aim of the effort to create risk management technical specifications.

Eight proposals for fundamental improvements to the STS are being developed by the industry and discussed with the NRC staff in public meetings [[link to Risk-Informed Tech Spec Publicly Available Meeting Minutes](#)]. They are:

1. Define the preferred end state for technical specification actions (usually Hot Shutdown for PWRs);
2. Increase the time allowed to delay entering required actions when a surveillance is missed;
3. Modify existing mode restraint logic to allow greater flexibility (i.e., use risk assessments for entry into higher mode limiting conditions of operations (LCOs) based on low risk);
4. Replace the current system of fixed completion times with reliance on a configuration risk management program (CRMP);
5. Develop a risk-informed methodology for determining surveillance test intervals in a licensee controlled program;
6. Modify LCO 3.0.3 actions to allow for a risk-informed evaluation to determine whether it is better to shut down or to continue to operate;
7. Define actions to be taken when non-TS support equipment is not operable;
8. Remove/relocate non-safety systems and non-risk significant systems from technical specifications.

Risk Informed Technical Specification (RITS) Licensing Action Database

<i>Plant</i>	<i>System</i>	<i>TS Changes</i>	<i>Approval Date</i>	<i>Adams Number</i>	<i>TAC #</i>	<i>Technical Reference</i>
<i>Arkansas Nuclear One Unit 1</i>						
	EDG	AOT extension	12/23/1998		M95330	
<i>Arkansas Nuclear One Unit 2</i>						
	EDG	AOT extension	12/23/1998		M95331	
	EDG	1 time AOT extension	12/15/1998		M92226	
<i>Braidwood Unit 1</i>						
	EDG	AOT extension	09/01/2000		MA8025	
<i>Braidwood Unit 2</i>						
	EDG	AOT extension	09/01/2000		MA8026	
<i>Browns Ferry Unit 2</i>						
	EDG	AOT extension	08/04/1999		M98205	
<i>Browns Ferry Unit 3</i>						
	EDG	AOT extension	08/04/1999		M98206	
<i>Brunswick Unit 1</i>						
	Electrical Bus	AOT extension	04/18/1999		MA3738	
<i>Brunswick Unit 2</i>						
	Electrical Bus	AOT extension	04/18/1999		MA3739	
<i>Byron Unit 1</i>						
	EDG	AOT extension	09/01/2000		MA8027	

<i>Plant</i>	<i>System</i>	<i>TS Changes</i>	<i>Approval Date</i>	<i>Adams Number</i>	<i>TAC #</i>	<i>Technical Reference</i>
<i>Byron Unit 2</i>						
	EDG	AOT extension	09/01/2000		MA8028	
<i>Commanche Peak Unit 1</i>						
	Charging Pumps	AOT extension	12/29/1998		M97809	
<i>Commanche Peak Unit 2</i>						
	Charging Pumps	AOT extension	12/29/1998		M97810	
<i>Fermi</i>						
	EDG	AOT extension	06/02/1998		M94171	
<i>Fitzpatrick</i>						
	RHR SW	1 time AOT extension	01/28/2000	ML003681555	MA6667	EPRI PSA GUIDE, #b
<i>Fort Calhoun</i>						
	EDG	AOT extension	03/12/1999		M93682	
	LPCI Pumps	AOT extension	03/12/1999		M92801	
	SIT/ACCUM	AOT extension	10/19/1998		M92926	
<i>Indian Point Unit 2</i>						
	RPS & ESFAS	AOT extension	11/30/2000	ML003751975	MA5982	WCAP14333, #a, #b
<i>LaSalle Unit 1</i>						
	EDG	AOT extension			MB1224	#a, #b
<i>LaSalle Unit 2</i>						
	EDG	AOT extension			MB1225	#a, #b

<i>Plant</i>	<i>System</i>	<i>TS Changes</i>	<i>Approval Date</i>	<i>Adams Number</i>	<i>TAC #</i>	<i>Technical Reference</i>
<i>Limerick Unit 1</i>						
	Purge System	Time limit	10/01/1998	ML011560757	M98421	None Cited
<i>Limerick Unit 2</i>						
	Purge System	Time limit	10/01/1998	ML011560757	M98422	None Cited
<i>Millstone Unit 2</i>						
	SIT/ACCUM	AOT extension	09/03/1998	ML012910594	M93362	SCIE-NRC-318.97, SECY-97-095, DG1065
<i>North Anna Unit 1</i>						
	EDG	AOT extension	08/26/1998	ML013510576	M93416	NUREG/CR-4780, #a, #b
	PORV NI ACCUM	AOT extension	03/02/1999		M94071	
<i>North Anna Unit 2</i>						
	EDG	AOT extension	08/26/1998	ML013510576	M93415	NUREG/CR-4780, #a, #b
	PORV NI ACCUM	AOT extension	03/02/1999		M94070	
<i>Oyster Creek</i>						
	EDG	AOT extension	09/08/1998	ML011300420	M94856	#a, #b
<i>Palisades</i>						
	LPSI	AOT extension	10/02/2000		MA9333	
	SIT/ACCUM	AOT extension	10/02/2000		MA9332	
<i>Palo Verde Unit 1</i>						
	LPSI	CT extension	02/01/2000		MA4915	
	SIT/ACCUM	AOT extension	10/02/1998		M93670	

<i>Plant</i>	<i>System</i>	<i>TS Changes</i>	<i>Approval Date</i>	<i>Adams Number</i>	<i>TAC #</i>	<i>Technical Reference</i>
<i>Palo Verde Unit 2</i>						
	LPSI	CT extension	02/01/2000		MA4916	
	SIT/ACCUM	AOT extension	10/02/1998		M92671	
<i>Palo Verde Unit 3</i>						
	LPSI	CT extension	02/01/2000		MA4917	
	SIT/ACCUM	AOT extension	10/02/1998		M92672	
<i>Peach Bottom Unit 2</i>						
	ESW Pumps	1 time AOT extension	04/25/2000	ML003699985	MA8320	#b
<i>Peach Bottom Unit 3</i>						
	ESW Pumps	1 time AOT extension	04/25/2000	ML003699985	MA8322	#b
<i>Perry</i>						
	EDG	AOT extension	02/24/1998		MA3537	
<i>Pilgrim</i>						
	EDG	AOT extension	12/11/1998	ML011920230	M95277	NUREG/CR-4550, IEEE-500, #a, #b
<i>San Onofre Unit 2</i>						
	CIV	CT extension	03/09/2000	ML003691144	MA1549	#a, #b
	CS	AOT extension	09/12/2000		MA8607	
	ECW & CREACUS	AOT extension	10/04/2001	ML012610081	MB2315	TR105396, NUREG2300, (a)(4), RG1.185, *
	EDG	AOT extension	07/02/1998		M93988	
	EDG	AOT extension	09/09/1998		MA2341	
	LPSI	AOT extension	06/19/1998		M94937	
	SIT/ACCUM	AOT extension	06/19/1998		M94934	

<i>Plant</i>	<i>System</i>	<i>TS Changes</i>	<i>Approval Date</i>	<i>Adams Number</i>	<i>TAC #</i>	<i>Technical Reference</i>
<i>San Onofre Unit 3</i>						
	CIV	CT extension	03/09/2000	ML003691144	MA1550	#a, #b
	CS	AOT extension	09/12/2000		MA8608	
	ECW & CREACUS	AOT extension	10/04/2001	ML012610081	MB2316	TR105396, NUREG2300, (a)(4), RG1.185, *
	EDG	AOT extension	07/02/1998		M93989	
	EDG	AOT extension	09/09/1998		MA2341	
	LPSI	AOT extension	06/19/1998		M94936	
	SIT/ACCUM	AOT extension	06/19/1998		M94935	
<i>Sequoyah Unit 1</i>						
	EDG	AOT extension	12/16/1998	ML013320442	M96600	NUREG1150, #a, #b
<i>Sequoyah Unit 2</i>						
	EDG	AOT extension	12/16/1998	ML013320442	M96601	NUREG1150, #a, #b
<i>South Texas Project Unit 1</i>						
	SIT/ACCUM & ECCS	AOT extension		ML013230185	MB2001	WCAP-15049-A, #a, #b
<i>South Texas Project Unit 2</i>						
	SIT/ACCUM & ECCS	AOT extension		ML013230185	MB2002	WCAP-15049-A, #a, #b
<i>St. Lucie Unit 1</i>						
	EDG	AOT extension	01/19/2001		MA7205	
	LPSI	AOT extension	02/15/2000		MA5678	
	SIT/ACCUM	AOT extension	10/16/1998	ML013580176	M93379	SCIE-NRC-318-97, SECY-97-095, GL88-20, #a, *

<i>Plant</i>	<i>System</i>	<i>TS Changes</i>	<i>Approval Date</i>	<i>Adams Number</i>	<i>TAC #</i>	<i>Technical Reference</i>
<i>St. Lucie Unit 2</i>						
	EDG	AOT extension	04/26/2001		MA7206	
	LPSI	AOT extension	02/15/2000		MA5679	
	SIT/ACCUM	AOT extension	10/16/1998	ML013580176	M93380	SCIE-NRC-318-97, SECY-97-095, GL88-20, #a, *
<i>Vogtle Unit 1</i>						
	EDG	AOT extension	05/20/1998	ML012410084	M96769	(a)(4), DG1065
<i>Vogtle Unit 2</i>						
	EDG	AOT extension	05/20/1998	ML012410084	M96770	(a)(4), DG1065
<i>Waterford Unit 3</i>						
	HPSI	AOT extension	04/20/2000		MA6310	
	LPSI	AOT extension	05/25/2000		MA6311	
	SIT/ACCUM	AOT extension	02/07/2000	ML003681761	MA4667	SCIE-NRC-318-97, SECY-97-095, GL88-20, #a, *
<i>Wolf Creek</i>						
	SIT/ACCUM	AOT extension	04/27/1999		MA3942	

Notes: #a = Regulatory Guide 1.174
 #b = Regulatory Guide 1.177
 * = see SE for additional info