

**Michelle DeBose - DSTF Issues Matrix**

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**Date:** 05/23/2006 10:59 AM  
**Subject:** DSTF Issues Matrix

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Meraj,

Attached is the 5-20-06 dry storage task force issues matrix updated to reflect our March meeting and the recent issuance of ISG-22 (that's why I was waiting). A few things to note:

1. Item 1a pertaining to 72.124(c) remains open. While we appreciate the feedback in the March meeting that area gamma monitors can be used to comply, this still puts a burden on industry to comply (in some cases costing money to obtain portable monitors) with a rule we believe to be slightly broken. If it is truly NRC's intent not to require criticality monitoring for fuel in dry storage casks at any point in the loading process, the rule should be changed to reflect this intent. Please discuss with your management and let me know.
2. I have added a tracking item for the security assessment for casks. We understand that the Commission is reviewing SFPO's recommendations and we won't know what, if any, action will be required in the future until the Commission decides. We just want to keep that on our radar.
3. Lastly, we are working internally with industry to determine which of the issues we want to have a focused meeting on (moderator exclusion, burnup measurements, or some other topic). I will let you know.

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# 10 CFR 71/72 DSTF ISSUES MATRIX

ISSUE NO.	PRIORITY	STATUS	ISSUE DESCRIPTION	REMARKS	ACTION	DSTF LEAD
1	H	Open (Tracking)	<b>Criticality Control (RIS 2005-05):</b> Part 50 and Part 72 requirements apply during cask loading in pool. Requirements overlap and NRC (NRR and SFPO) burnup credit methods are not consistent. NRC requesting LARs from all affected plants as interim compliance measure.	Meeting held 11/10/05 between NRC and industry. Industry requested NRC to re-look at interim solutions involving no TS or enforcement discretion.	50.68 rulemaking in progress. Expect FR notice for direct-final rule 9/06.	Gutherman
1a	M	Open	<b>Criticality Accident Requirements: §72.124(c):</b> Regulations provide exemptions from monitoring when fuel is under water and in "storage configuration" During cask preparation (out of pool but before in "storage configuration"), no exemption applies and monitoring is required.	Appears rule change is necessary to clarify. See NRC letter to Holtec dated 8/1/00 for additional information. NRC accepted Southern Co. approach to use area gamma radiation monitors. Refer to presentation material from 3/14/06 meeting and Southern exemption response.	Rule still appears to require a change to fix permanently.	Gutherman
2	H	Open (Tracking)	<b>Burnup Credit:</b> ISG-8 does not allow fission product credit, making BUC methodology limited. SFPO method is different than NRR. Except for geometry, methods should be the same.	Acquire and evaluate French data to expand ISG-8 guidance. In parallel, evaluate Part 50 and SFPO criticality analysis and BUC methods and assumptions for differences. Resolve differences and recommend single criticality/BUC analysis method. (EPRI input)	Revise ISG-8.	

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2a	H	Open	<b>Burnup Measurements:</b> ISG-8 recommends measuring burnup on a sampling basis to increase confidence in reactor records. Industry does not believe this is necessary.	Evaluate safety benefit of BU measurements and recommend guidance change, as appropriate (EPRI input)	Continue discussion and determine industry path of action. Need separate meeting with NRC.	
3	H	Open	<b>Damaged Fuel:</b> Definition in ISG-1, Rev. 1 is very broad and difficult to implement. Need a definition generated with industry participation before implementation. RG may be more appropriate than ISG. Need to ensure fuel previously loaded as intact for storage can be transported without re-packaging.	Determine damaged fuel criteria for storage and transportation. Issue RG or add as defined term in the rules. CoCs will need to be revised to reflect new guidance and/or rule. (EPRI input)	Revise ISG-1	
4	H	Open	<b>Control of Cask Licensing Basis:</b> a) backfit of changes to ongoing TS (cask surveillance) to previously deployed casks. b) Backward and forward compatibility of hardware. c) Removal of information from SAR/CoC that applies to previously deployed casks and/or site-specific licensee who incorporated the information by reference.	Licensees, CoC holders, and NRC may have different views on these issues. Need mutually agreeable position.	DSTF internal. FAQ issue	Sides

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5	M	Open	<b>Regulatory Process:</b> Certain issues are being addressed outside of recognized regulatory processes and should be addressed in a more structured process, such as a Regulatory Guide, rulemaking, or other formal generic communication (i.e., GL), to allow front-end industry participation and independent backfit evaluation by NRC (CRGR). Examples: ISGs, cask Technical Specifications, RIS 2005-05, fuel-air issue.	Process feedback issue in 2/8/05 workshop. Work with NRC as topics arise to determine appropriate process to use.	Discuss between NEI and NRC senior management	Gutherman
6	M	Closed	<b>CoC Noncompliance:</b> What process governs if licensee discovers noncompliance with CoC after cask is in storage? There is no NOED process in Part 72.	GL 91-18 (or successor) can be used for degraded conditions not involving noncompliance with CoC. May need NOED process for CoC noncompliance.	None. Use plant corrective action program. NOED process not needed.	
7	L	Open	<b>Moderator Exclusion:</b> 71.55(b) does not permit moderator exclusion by design for normal conditions outside of limited exceptions (i.e., entire cask designs cannot be excepted from moderator intrusion). Regulations (per ISG-19) permit moderator exclusion for accident conditions. Seems contradictory. See EPRI Report 1011815.	Work with NRC on regulatory issues associated with a rule change. Rule change may have broad (i.e., YM EIS) implications (EPRI input)	Continue discussion to determine path forward. Need separate meeting with NRC.	Gutherman
8	M	Open	<b>High Burnup Fuel:</b> ISG-11, Rev 3 does not provide guidance for transportation of HBU fuel.	Tracking item. Determine criteria for review of transport requirements for high burnup fuel. (EPRI input)	Revise ISG-11	

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9	L	Open	<b>Cask Technical Specifications (NUREG-1745):</b> Level of detail in cask TS and CoCs (e.g., fuel parameters) is not commensurate with risk. Fuel parameter change process in NUREG-1745 is not consistent with regulations.	Work with NRC to make risk-based rule change to TS inclusion criteria and revise NUREG-1745. Need cask loading PRA issued.	Need separate meeting with NRC to discuss criteria for TS similar to Part 50.	
10	M	Open	<b>Risk Informed regulations and review guidance:</b> Cask loading PRA needs to be issued.	Tracking item.	NRC needs to finish the PRA.	N/A
11	L	Closed	<b>Part 71 QA Program (RIS 2004-18):</b> Some Part 50 licensees who use Part 71-certified packages under a previously approved QA program (i.e., their Appendix B program) are required to have their Part 50 QA programs separately approved under Part 71. NRC issues a Form 311 indicating their approval under Part 71. The Part 50 QA program can be modified by the licensee under 10 CFR 50.54 without prior NRC approval provided the commitments in the program are not reduced. There is no such provision in Part 71 and renewal is required every 5 (now 10) years. These rules appear to conflict.	Work with NRC to clarify whether a Form 311 for Part 50 licensees to use a previously approved program under Part 71 is necessary. If so, how do QA program changes get implemented, given the authority of 50.54?	None. NRC working.	
12	L	Open	<b>72.48 Guidance:</b> Based on experience since 4/01, NEI guidance on malfunctions, consequences, and methods of evaluation may need updating and more customizing for casks. For example, casks do not typically have single failure criteria requirements and often accidents have no offsite dose consequences.	Based on lessons learned, issue FAQs to clarify implementation of 72.48.	DSTF internal. FAQ issue.	

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13	L	Open	<b>Licensee 72.48 Processing:</b> a) What are GL obligations (i.e., timing, actions) for processing CoC holder 72.48s? b) What's required if GL does not adopt? c) What is effective date for CoC holder-issued 72.48s on GLs (e.g., operating changes)? d) What is CoC holder 72.48 deletes or modifies information incorporated by reference by an SL and SL does not want to change?	FAQs and/or other communication vehicle to establish industry consensus.	DSTF internal. FAQ issue.	Sides
14	M	Closed	<b>Computational Modeling Software (ISG-21):</b> Proposed ISG defines information to be submitted for cask licensing to permit NRC to review use of computer modeling software.	Industry believes the ISG over-reaches into QA and is not necessary. Comment letter sent to NRC 8/11/05	Industry commented 8-05. ISG-21 issued 4-06	
15	M	Closed	<b>Retrievability:</b> NRC was though to be developing an ISG on this issue.	ISG-2 will not be revised	None	
16	New	Closed	<b>Amendment Applications:</b> There are a variety of difference formats for amendment applications (i.e., with or without SAR markups). Should industry develop guidance?	Is there a consensus for developing a standard template for amendment requests?	None. Each CoC holder has a process.	
17	L	Open (Tracking)	<b>SRP Updates:</b> NRC needs to update SRPs to incorporate ISGs.	Contract in place to begin this effort	NRC action. Industry to review and comment on proposed revisions	Gutherman
18	L	Open (Tracking)	<b>Reg Guide Updates:</b> NRC needs to update RGs 3.48, 3.61 and 3.62 to match SRP format.	Need to discuss plan with NRC. Currently using SRPs where RGs are the correct guidance for industry	No current plans to update these RGs.	Gutherman

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19	New	Closed	<b>Review Schedules:</b> Include front and back end activities in total review schedule.	NRC has provided some information. Emailed info to DSTF 2/15/05.	Complete	
20	L	Closed	<b>Part 72 License Renewal:</b> Modify rule to extend license renewal period beyond 20 years.	SECY 04-0175	NRC working. Industry to comment on proposed rule	
21	New	Closed	<b>Use of RG 1.91 for ISFSI Licensing:</b> The 1 psig overpressure value for missiles may not be appropriate for use in ISFSI licensing.	Revise guidance specific for ISFSI licensing	None. Industry does not believe this is a generic concern.	
22	L	Open	<b>CoC Amendments:</b> Rulemaking is required for all Part 72 CoC amendments. This is an unnecessarily burdensome process. Results in exemptions as a normal licensing process.	NWPA uses term "by rule" for cask amendments	DSTF internal. Industry to consider possible approaches given previous denial.	Gutherman
23	L	Closed	<b>GSI-196, BORAL Degradation:</b> NRC recently identified BORAL blistering as a generic safety issue. What effects, if any, does the blistering have on the design function of the BORAL?	Tracking item. NRC Research is gathering data at this point. Support, with EPRI as necessary.	None. Re-open as necessary per results of GSI research.	NA
24	H	Open	<b>Fuel Cladding Integrity Analysis:</b> Cask designers have not historically analyzed fuel cladding integrity. Fuel material data is limited. Guidance in ISG-12 only addresses buckling.	Broaden licensing guidance in SRP.	Revise ISG-12	
25	L	Open (Tracking)	<b>DOE Standardized Canister:</b> DOE proposes to use a standard Transportation, Aging, and Disposal (TAD) fuel canister that will be compatible with the waste package at YM.	Working with DOE to develop performance spec.	None.	Gutherman



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26	L	Open	<b>10CFR72.13:</b> Some sections may not be appropriately listed.	Review and make suggestions to NRC for rule change	Industry to consider petition.	Sides
27	M	Open	<b>Tornado Missiles:</b> How do general licensees compare site-specific missiles against generic missiles? By spectrum or missile by missile comparison?	Develop industry consensus.	DSTF internal. FAQ issue	
28	H	Open	<b>Fuel-in-Air:</b> ISG-22 addresses air coming into contact with fuel and potential fuel rod splitting due to oxidation.	NRC issued draft ISG-22 11/15/05. Industry comments submitted 12/29/05. DOE also submitted comments.	Final ISG issued 5/8/06.	
29	Low	Open	<b>RIS 2005-31, Security Sensitive Information:</b> SFPO would like industry's input on developing procedures for the treatment of sensitive information in incoming documents.		Need clarification of NRC expectations for implementation	
30	Low	Open	<b>Correcting CoC Errors:</b> SFPO is considering how to correct errors in an existing CoC.		NRC to engage stakeholders.	
31	Medium	Open	<b>Repetitive RAIs:</b> Similar RAIs issued by staff on applications submitted by different licensees or vendors.		NRC to follow up	
32	Low	Closed	<b>NRC's plan and schedule for casework:</b> Industry provide "look-ahead" schedule for application submittals. NRC would provide timeliness goals and general scheduling criteria available to public.	See RIS 2005-27.	Industry had no comments	

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33	TBD	Open	<b>Neutron absorber material:</b> The staff would like to engage industry on how to treat neutron absorber material process controls (how the material is manufactured and tested) in dry storage cask applications. In recent applications these process controls have been captured in technical specifications.	The staff is considering generic guidance in this area. The staff would like to engage industry on whether neutron absorber material process control guidance should be developed, and if it is to be developed, how that guidance should be captured. Need priority. NRC believes it is "high."		
34	TBD	Open	<b>Canister leakage testing (ISG-18):</b> The NRC staff is considering revising ISG-18 to capture lessons learned from recent reviews and to make the guidance more clear.	The NRC staff is targeting issuing a draft of the revised guidance in the Winter of 2006. (This date is subject to change based on staff priorities.)	Industry will comment on the draft ISG revision when issued. Need priority. NRC believes it is "high."	
35	TBD	Open	<b>Beyond Design Basis Threats:</b> SFPO has made recommendations to the Commission based on Sandia work that could result in new design standards for casks.	After Commission action, need to meet with SFPO to determine specific actions required, if any, and implementation plan.	Commission to rule on SFPO recommendations	