

August 24, 2011

MEMORANDUM TO: John R. Jolicoeur, Chief
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Division of Policy and Rulemaking
Office of Nuclear Reactor Regulation

FROM: Andrew L. Hon, Project Manager **/RA/**
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SUBJECT: SUMMARY OF JULY 28, 2011, PUBLIC MEETING WITH
APPLICANTS ON TOPICAL REPORTS REVIEW PRIORITY AND LIFE
CYCLE MANAGEMENT

On July 28, 2011, a Category 2 public meeting was held between the U.S. Nuclear Regulatory Commission (NRC) staff and representatives of topical report (TR) applicants at NRC Headquarters, One White Flint North, 11555 Rockville Pike, Rockville, Maryland (Agencywide Documents Access and Management System (ADAMS) Accession No. ML111930645). The purpose of the meeting was to provide applicants who submit TRs to the NRC an opportunity to provide input to improve the review priority and life cycle management processes of TRs. A list of attendees is enclosed. Members of the public were not in attendance.

After the introduction, the NRC staff stated that the current flat budget and resource limitations restrict the NRC staff to approximately 20 TRs per year, with the possibility of further reductions to address other higher priority safety issues. The current review backlog and expected submittals rate exceeded available staff resources to support the previous goal of reviewing all TR submittals within two years. Thus, there is a need to prioritize the review effort based on a set of criteria such as gaining efficiencies in licensing actions, relation to Generic Safety Issues, near term implementation scope and certainty, and the review progress. This meeting enabled the applicants to share their perspectives for NRC to consider for developing the prioritization criteria.

The representatives of the TR stakeholders provided the following insights on this topic:

- TR's that improve safety should be given the highest priority.
- The "pilot-plant" application practiced previously should be considered because it has the certainty of at least one licensee to implement immediately after the NRC approval.
- Near term applicant for U.S. plants should receive higher priority. On the other hand, licensees' near term license amendment requests often depend on NRC's approval in order for the licensee to commit to implement the TR, thus it creates a potential "Catch-22" situation.

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- Proven technology from other industries, especially in digital instrumentation & control (I&C), can advance reliability and therefore safety through better technology and should receive priority even though there is no U.S. plant committed to implement the technology. Utilities often see digital I&C as high risk, especially in the absence of NRC's endorsement through a safety evaluation (SE).
- The SE is particularly necessary for non-traditional Nuclear Steam System Supplier (NSSS) vendors to enter the field because licensees usually want to see NRC endorsement before committing to implement the product or methodology. Otherwise, it puts vendors without an SE at a disadvantage, even though they committed the resources in the TR submittal as related research and development.
- Improvements to previously approved TRs (revisions) should get the priority because of added safety value and familiarity by the NRC staff. On the other hand, the process should not favor applicants with previously-approved TRs, therefore acting as an artificial barrier to the introduction of a new applicant's design or methods.
- NRC should place the backlog of current TR applications on its website for stakeholders to see the backlog in a real time fashion. NRC should make the TR backlog and status available to the public so that parties interested in submitted TRs can see the current workload. (A list like this was previously placed on the NRC public website under "Topical Reports" but was recently removed because it was out of date and was too labor intense to maintain. The NRC staff is currently working on putting this list back on its website).
- Dual applicability TR reviews should be coordinated between NRR and NRO.
- Because of the rapid advancements in digital I&C, the related TRs should be written into 3 categories: process, methods, and component. The higher priority should be given to methodology because it is generic and has longer useful life.
- TRs submitted directly by the utilities should be reviewed with the same process.

The second topic of the meeting was the life cycle management of TRs. The NRC staff stated that factors such as regulation updates, technology updates (especially in digital I&C), and inaccuracies identified in previously approved TRs diminish their originally intended regulatory efficiencies. There is the need to consider the best means to "sunset" outdated TRs and to schedule and perform periodic reviews to maintain their usefulness. The stakeholder feedback included:

- Time limit or sunset clause in approved TRs could create licensing basis compliance issues.
- NEI currently has a Licensing Actions Task Force (LATF) industry initiative to evaluate how licensing bases are affected during pre-submittal phase of planned license amendments to ensure referenced TRs are applicable.
- Technology advances in digital I&C can make the previously approved technology quickly obsolete, as well as spare parts upgrades, necessitating the expiration date of the approval.
- Legacy computer models approved decades ago sometimes do not have the documented details as the necessary bases for today's LAR reviews.
- Projects like the Boiling Water Reactor Vessel Internals Project continues to update TRs with new revisions because of the value of incorporating new research data and operating experience. However, the old version TRs and associated SEs are not officially withdrawn by either BWRVIP or the NRC.

- An alternative to a fixed expiration date to TR is to develop a process similar to that of the Title 10 of the *Code of Federal Regulations* (10 CFR) 50.59 that allows the vendor to change the approved TRs under a controlled process. However, this activity at the vendor's level is not inspected under current regulation.
- Vendors need to know the particular issues within an old TR that concern the NRC staff before committing resources to update an approved TR, rather than reviewing all older TRs against current regulations or technology without an apparent driving force. Both NRC and the industry should reach agreement on conditions that a previously approved TR is no longer acceptable for LAR reference.
- If NRC does impose a term period for referencing TRs, there should be measures to ensure these TRs are acceptable to NRC reviewers in applicable LARs during this term.

Before the meeting was adjourned, the NRC staff solicited additional feedback by email or letters to be received in two weeks to be considered. Two feedbacks were received within this period (ADAMS Accession Nos. ML11224A014 and ML112311750) are included in the above summary.

Enclosure:
List of Attendees

cc w/encl: See next page

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CATEGORY 2 PUBLIC MEETING WITH APPLICANTS ON TOPICAL REPORT

REVIEW PRIORITY AND LIFE CYCLE MANAGEMENT

LIST OF ATTENDEES

JULY 28, 2011

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2	Andy Hon	NRC/NRR
3	George Walker	NRC/DOE
4	Seon Smith	Lockheed Martin
5	Joseph Murray	Lockheed Martin
6	Jim Harrison	GE Hitachi
7	Jonathan Rowley	NRC/NRR
8	STEVE PHILPOTT	NRC/NRR
9	Tully Cruz	NRC/NRR
10	Tim Chen	Lockheed Martin/SNPAS
11	Julie Krep	AREVA
12	Jim Anepachuk	(W)
13	Ryan Leshan	(W)
14	Mark Stotko	(W)
15	Charles Brinkman	(W)
16	ANTHONY WISES	NRC/DOE/S&EB
17	Sheldon Stuchell	NRC/NRR
18	ANTHONY MENDIOLA	NRC/NRR/DSS/SNPB
19	Sup Gupta	NRC/DNRL/NRGA
20	Sheryl Burrows	NRC/DNRL/NRGA
21	John Jolicœur	NRC/DPR/PLPB
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22	Leslie Collins	(W)
23	Larry Steiner	EPRI
24	Russ Dwyer	Mitsubishi Nuclear
25	Dana Kenne	Dominion Power
26	Alan Meginnis	AREVA Richland
27	Chad Holderbaum	PWR OG
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