

MEMORANDUM TO: Richard P. Correia, Acting Chief
Quality Assurance, Vendor Inspection and Maintenance Branch
Division of Reactor Controls and Human Factors

THROUGH: Greg C. Cwalina, Acting Chief
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FROM: Peter A. Balmain, Operations Engineer
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SUBJECT: SUMMARY OF DECEMBER 3, 1998 MEETING BETWEEN THE
NUCLEAR REGULATORY COMMISSION (NRC) AND INDUSTRY
REPRESENTATIVES ON MAINTENANCE RULE ISSUES

On December 3, 1998, members from the NRC staff met with industry representatives in a public meeting regarding maintenance rule (MR) issues. A list of attendees is attached. The meeting was held to discuss current maintenance rule issues and activities, and the industry's general observations on the results of NRC maintenance rule baseline inspections conducted at operating plants.

Topics on the agenda for participant discussion included: industry observations from maintenance rule baseline inspection (MRBI) results, industry recommendations and proposals for revising the scope of structures, systems and components (SSCs) within the MR, current NRC inspection and training activities, NRC staff expectations for performing pre-maintenance safety assessments, the need for a standard industry method for tracking unavailability data, efficacy of the maintenance rule, the relationship between NRC baseline inspection results and the licensee's ability to make future MR program changes such as scoping changes, and future public workshops.

The industry representatives presented a discussion of MRBI trends and statistics based on the inspection report results and observed that inspections findings indicated the NRC's focus in the MRBIs shifted from an emphasis on scoping issues during the initial inspections to assessing the adequacy of performance criteria, goals and monitoring, and licensee performance monitoring in latter inspections. As in previous meetings, the industry representatives stated that it was desirable that the NRC continue to maintain oversight of regional maintenance rule inspection programs to assure uniform and consistent inspection and enforcement actions. The NRC staff stated they would continue to actively utilize and maintain oversight processes such as the maintenance rule enforcement panel process for the foreseeable future. The staff also recommended that licensees consider all observations and findings referenced in MRBIs rather than focusing mainly on findings described in violations.

Industry representatives and licensees requested additional guidance in the area of scoping. The licensees stated that they believed that too many low safety significant (LSS) SSCs were required to be in the MR scope which diverted licensee resources from higher safety significant SSCs. The NRC staff responded with areas of possible scope reconsideration including SSCs that are used in emergency operating procedures (EOPs). For LSS SSCs used in EOPs the NRC staff suggested that additional guidance on what constitutes a significant fraction of accident mitigating function an SSC provides may be an area that can be enhanced to assist licensees in scoping determinations. There are examples of SSCs used in EOPs that licensees have placed in the MR scope that function to provide plant equipment preservation or to provide some level of personnel protection for the plant staff but do not contribute to accident mitigation. Experience from MRBIs has shown that some licensees have excluded these SSCs from MR scope and NRC inspections have accepted these determinations when licensees fully and adequately developed the basis and justification to support this conclusion.

As part of the scoping discussion, the NEI representative stated that NEI was submitting comments regarding the current maintenance rulemaking to require (vs. recommend) pre-maintenance safety assessments that would be described in 10 CFR 50.65(a)(4). The NEI comments contain recommendations that the NRC revise the scoping requirements of the maintenance rule to include only high safety significant (HSS) SSCs. In addition to this scoping comment, the NEI representative encouraged the NRC staff to clearly define terms used in the new rulemaking to ensure that future NRC interpretations meet the intent of the new rule and stated that NEI's public comments would also include this recommendation. The NRC staff proposed including additional guidance and clarification on scope determinations in Regulatory Guide 1.160 rather than making additional modifications to the maintenance rule. The NRC staff has proposed to revise the Regulatory Guide during the ongoing rulemaking process to change pre-maintenance safety assessment requirements. The NRC staff also stated that insights gained during the MRBIs could be used to supplement SSC monitoring guidance. For example, MRBI experience revealed that some licensees performed monitoring of only the portions of certain SSCs that provided the specific functions covered under the maintenance rule. The NRC determined that this was an acceptable approach when licensees fully developed appropriate justification.

Another industry concern related to the proposed pre-maintenance assessment MR change was what level of rigor and format of safety assessment would be required prior to taking equipment out of service for maintenance. The NRC staff responded that Regulatory Guide 1.160 would be revised to provide NRC expectations for an acceptable safety assessment. During the meeting the NRC staff discussed the attributes of an acceptable pre-maintenance safety assessment including the following: 1) assessments must be performed prior to the maintenance activity or activities, 2) assessments will include SSCs in the scope of the MR unless a mechanism such as an expert panel determines and justifies that the affected SSCs have little or no impact on plant safety functions, 3) in general the tools needed to perform an acceptable safety assessment are dependent on complexity of the maintenance activity or activities being performed, and 4) assessment tools should have an appropriate level of sophistication to perform the assessment (i.e. licensees can use licensed senior reactor operator informed judgement when taking only one or two SSCs out of service and the use of a online risk monitor would be appropriate when multiple high safety-significant SSCs are being removed.) The NRC stated that there was no intent to require a formal PRA based quantitative assessment for each configuration but rather the assessment must be commensurate with the number of high-safety

significant SSCs taken out of service or combinations of high and low safety-significant SSCs that would increase risk.

NRC staff described the status of inspector training and planned routine maintenance inspection activities in response to licensee questions. The NRC staff continues to perform MR training seminars at regional offices, is working with the NRC's technical training staff to develop a mandatory MR training course for inspectors, and will conduct onsite training for a limited number of resident inspectors in the near future. NRC staff offered to make training materials available when development of these materials is completed and incorporates the latest experience and agency philosophy. Licensee participants asked if NRC envisioned future programmatic maintenance inspections. With the exception of a sample of Commission approved (a)(4) safety assessment inspections, the NRC has no plans to reperform MRBIs or conduct extensive maintenance rule program inspections. However, the inspection program will continue to retain the option of performing a complete or partial MRBI based on individual licensee performance.

Maintenance rule efficacy and regulatory burden reduction were discussed at some length. The meeting participants discussed possible indicators of the efficacy of the MR. In addition, using MR performance monitoring to reducing regulatory burden resulting from other regulations was discussed. Some examples mentioned where the maintenance rule could reduce regulatory burden were license renewal, the proposed shutdown rule and technical specification requirements. The use of MR monitoring results is also being considered in the development of the NRC's revised licensee performance assessment process.

In response to industry questions regarding the relationship between future licensee MR program revisions and MRBI inspection results, the NRC staff stated that licensee MR program revisions would not necessarily nullify the MRBI results or constitute a change in licensee commitments to NRC. Routine inspections would serve as the method of determining the adequacy of licensee's implementation of the MR.

Other miscellaneous topics were discussed including recent NRC inspection results of an event involving the failure of safety related SSCs resulting from flooding caused by a nonsafety related piping failure. As a result of this discussion NRC staff will consider to posting inspection reports with pertinent excerpts from significant MR observations on the MR webpage. The industry representatives also recommended that the NRC staff add the inspection procedure reference from routine inspection reports into the public document key word list to aid in performing public document searches of inspection reports. NRC staff agreed to pursue this enhancement.

The attendees also stated that there was a desire to continue a dialogue on maintenance rule issues. It was generally agreed that there should be a Maintenance Rule Baseline Inspection lessons learned workshop. The NRC staff stated that a MRBI lessons learned NUREG was also being developed.

In conclusion, the meeting discussions were open and will be beneficial in implementing the transition from the maintenance rule baseline inspection program review type process to the more routine performance-based inspection program. The NRC staff also reiterated its desire to maintain open communication with the industry and other stakeholders regarding specific

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