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OFFICE OF SECRETARY
RULEMAKINGS AND
ADJUDICATIONS STAFF

Secretary,
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001
Attn.: Rulemaking and Adjudications Staff

Subject: Proposed Revision of 10CFR.50.55a, Industry Codes and Standards, Federal Register Vol. 62, No. 232, dated Wednesday, December 3, 1997

Ladies and Gentlemen:

The Nuclear Industry Check Valve Group (NIC) is endorsing the Letter prepared by the Nuclear Energy Institute (NEI) on the NRC Proposed Revision of 10CFR.50.55a, Industry Codes and Standards (62 Fed. Reg. 63892 dated December 3, 1997 and 63 Fed. Reg. 3673, dated January 26, 1998). The following is provided as additional explanation and clarification to Nuclear Energy Institute's letter.

Over the past several years, an exemplary cooperative effort between the ASME Operations & Maintenance Code Committee, the Nuclear Industry Check (NIC) Valve Group, and the Nuclear Regulatory Commission took on the task of improving the requirements for inservice testing of check valves. This effort resulted in the publication of the performance-based Appendix II, Check Valve Condition Monitoring program in the 1996 Addenda (OMa-1996) to the ASME OM CODE-1995 Edition. This program changed the current prescriptive code requirements for check valves to a new approach which could allow a controlled method to both monitor check valve condition and offer opportunity for improved techniques and savings of man-hour/dose.

The efforts of the ASME, NIC and NRC have not solely concentrated on the ASME code development, but have worked on support and guidance to the industry for the "condition monitoring" option, when it becomes available. An orderly transition of the trending and maintenance of industry performance database from the NRC (i.e. NUREG/CR5944) to NIC for it's updating has occurred. Definitive uses/approaches to this industry data to improve check valve performance are progressing. Easy access to this industry database via the INPO EPIX system is being planned, so that sites can perform detailed comparison of their particular valve experience against industry data, to insure that their performance agrees with that of industry, or if differences exist, they can be further investigated. Development work is proceeding on the specific check valve component templates to provide industry guidance and experience on check valve knowledge for a specific manufacturer or model. A workshop to discuss the implementation and requirements of "condition monitoring" is planned to coincide with the Summer 1998 NIC Meeting.
Throughout these joint efforts the trend in check valve problems have continued to decline. To gain further improvement in this area would be difficult with the current prescriptive nature inherent in current check valve code language.

A. Relief Requests have already requested approval for use of the ASME OM CODE-1995

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Edition, OMa-1996 Addenda, Appendix II, Check Valve Condition Monitoring and additional requests will most likely be forthcoming.

"Condition Monitoring" offers the Nuclear Industry a new approach to inservice testing which allows for increased use of performance testing verses operability testing, which is better able to detect degradations prior to failure.

The proposed rule, or portions of the proposed rule, relating to OMa-1996 Addenda, Appendix II, Check Valve Condition Monitoring should be expeditiously endorsed by the Rule Making Process. If other portions of the rule have substantial comments that could delay publication of the final rule, then the other parts of the rule should be separated to permit expeditious use of these provisions. This would minimize both the regulator's and owner's time spent obtaining site-specific relief requests.

Recommended Correction or Action

The proposed rule, or portions of the proposed rule, relating to OMa-1996 Addenda, Appendix II, Check Valve Condition Monitoring snould be expeditiously endorsed by the Rule Making Process.

B. 2.5.3.2 Appendix II, Interval/Interval Extensions,
50.55a(b)(3)(iv)(B) adds an inappropriate modification to the Appendix II, Check Valve Condition Monitoring Program (Reference ASME O&M Code 1996 Edition, OMa-1996 Addenda) that should be deleted for the following reasons discussed in the NEI Letter, or revised as discussed below.

Owners have groups of check valves whose performance would justify a maximum interval that would exceed the 10 year limit proposed in the rule. This would create numerous relief requests, thereby adding to the regulatory burden. Rule making should reduce the regulator's burden.

We have an additional concern with the apparent inconsistency between check valves and motor-operated valve intervals . As noted in the NRC's endorsement of ASME Code documents (Code Case OMN-1 for Motor Operated Valves is endorsed by Generic Letter 96-05 and is also proposed in this proposed rule 50.55a(b)(3)(ii) and (iii) sections) the provision. "If insufficient data exists to determine the inservice test frequency...." is not included in the check valve 50.55a(b)(3)(iv)(B) modification.

Recommended Correction or Action

The proposed modification should be deleted. If the proposed modification is not deleted but is retained then the following text is recommended to remove this inconsistency,

50.55a(b)(3)(iv)(B)

If insufficient data exist to determine the intervals for condition monitoring activities, then the initial interval for tests and associated examinations shall not exceed two fuel cycles or 3 years, whichever is longer; any extension of this interval shall not exceed one fuel cycle per extension with the maximum interval not to exceed 10 years; trending and evaluation of existing data shall be used to reduce or to extend the interval time between activities.

If sufficient data exists to determine the intervals for condition monitoring activities, then the initial interval for tests and associated examinations shall not exceed two fuel cycles or 3 years or current allowed testing interval, whichever is longer; any extension of this interval shall not exceed one fuel cycle per extension per sample of group; trending and evaluation of existing data shall be used to reduce or to extend the interval time between activities.

Reason for the Revision

This proposed modification is not based on performance.

This proposed modification does not acknowledge the Appendix II corrective maintenance measure that requires re-evaluation of the intervals and the activities used after each activity is performed.

These interval restrictions do not acknowledge the on-going industry efforts to improve check valve performance.

The 10 year restriction is not fair for 4 Loop PWR plants and BWR plants on 24 month fuel cycles. These plants would typically have groups of 4 check valves. For cases where disassembly is the only significant activity that can be performed, the 10 year maximum interval does not provide any significant relief given the amount of information that is known about these valves. Their performance, as documented during the repeated disassembly activities that have been performed, justify a longer interval. Owners would be forced to generate relief requests to seek this extension. The intent of Condition Monitoring was to have technically justified intervals and activities. This maximum interval limit negates the main purpose of Condition Monitoring.

2.5.3.2 Appendix II Bi-directional Testing of Check Valves 50.55a(b)(3)(iv)(A) adds inappropriate modification to the Appendix II, Check Valve Condition Monitoring Program (Reference ASME O&M Code 1996 Edition, OMa-1996 Addenda) that should be deleted. This modification appears to require bi-directional testing of check valve regardless of the experience/history of the particular check valve, it's application/design/service or the results of the condition monitoring evaluation. With regard to this modification the following specific comments are made:

1. Based on the difficulty to perform safety direction testing due to plant design, the inability to test in the opposite direction will lead to additional "relief requests". The modification provides no relief if testing is not possible.

2. The requirement for open/closed testing was a prescriptive approach to improve fault detection. Other approaches which may not directly provide for bi-directional testing may provide a superior test. (i.e. leak rate testing of simple swing checks whose only safety function is to close). The cost and effort for bi-directional testing as mandated in the modification will stifle efforts to develop improved testing.

3. The increased improvement provided by bi-directional testing verse the cost and impact on plant operation, has not been definitively documented. The bi-directional test only provides assurance of past operability, and does not predict or assure future performance as "condition monitoring" will.

Recommended Correction or Action

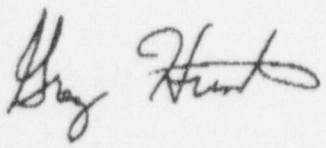
The proposed modification for bi-directional testing should be deleted from the rule. If the concept of bi-directional is retained the modification should be rephrased to include wording which either

1. requires that during the "condition monitoring" evaluation that both the open and close function of the check valve be included.

or

2. explicitly states that the condition for both open/close of the valve must be known before the optimization feature of Appendix II can be applied.

Thank you for allowing us to make these comments.



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