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Mr. Samuel J. Chilk  
Secretary  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Attention: Docketing and Service Branch

Subject: Draft Regulatory Guide DG-1001, "Maintenance Programs for Nuclear Power Plants (54FR33988)," Request for Comments

Dear Mr. Chilk:

Yankee Atomic Electric Company (YAEC) appreciates the opportunity to comment on the NRC Draft Regulatory Guide DG-1001, "Maintenance Programs for Nuclear Power Plants," 54 Federal Register 33988 (August 17, 1989). YAEC owns and operates a nuclear power plant in Rowe, Massachusetts. Our Nuclear Services Division also provides engineering and licensing services to other nuclear power plants in the Northeast, including Vermont Yankee, Maine Yankee, and Seabrook.

The announcement of the issuance of the draft Regulatory Guide in the Federal Register requested responses to five specific questions.

Question 1

What level of detail should be included in the Regulatory Guide?

Answer

Our review of the draft Regulatory Guide reinforces our belief that the subject of maintenance is too multifaceted and diverse to be readily molded into one standard program or approach suitable for all nuclear units. Most of what appears in the draft Guide is either so obvious or characterized in such subjective terms that we fail to see how this document provides any substantive guidance to our plant maintenance personnel. We are also concerned that further attempts to amplify this draft will quickly result in an overly prescriptive document. For example, Section 1.2 of the draft

states, "an effective maintenance program need not require extensive documentation." We believe that the entire tenor of the rest of the draft document is completely contrary to this assertion.

Question 2

Is the scope of systems, structures, and components covered by the Regulatory Guide appropriate?

Answer

The proposed scope is not appropriate. The draft Regulatory Guide states: "Maintenance requirements for structures, systems, and components in the Balance of Plant (BOP) whose failure would significantly impact plant safety or security are included." Because there is no commonly agreed upon basis for identifying such BOP structures, systems, and components, the proposed scope is essentially unbounded. The potential for confusion is further emphasized by the draft Regulatory Guide's reference to the proposed maintenance rule, 10CFR50.65, which included all of the BOP without reference to safety function. We believe that NRC Commissioner Thomas Roberts's remarks concerning the proposed rule (53FR47825) were correct in concluding that this scope exceeds the Commission's authority.

Question 3

What criteria could be used to determine that a maintenance program is fully effective and additional improvement is not essential from a safety standpoint?

Answer

It is our belief that appropriate criteria and measurements of the effectiveness of a maintenance program are very plant-specific. Although Section 3 of the draft Guide seems to endorse this point, this question appears to be searching for some standardized basis for measuring program performance. We understand the Commission's desire to standardize the assessment process; however, we do not believe that the methods that the Yankee plants employ to assess maintenance program effectiveness necessarily have universal application for all other units.

We believe that the question of defining standard criteria to measure the effectiveness of maintenance programs is similar in many respects to the question of defining the term "adequate protection of the public health and safety" as employed in the NRC's backfit rule, 10CFR 50.109. In the statement of consideration accompanying the publication of the 1988 revision of 10CFR50.109 (53FR20603), the Commission stated that ideas of what constitute "adequate protection" are presently unquantifiable. However, the Commission then went on to note, "even in the absence of a useful and generally applicable definition of 'adequate protection,' the Commission can still make sound judgments about what 'adequate protection' requires, by relying upon expert engineering and scientific judgment, acting in the light of all relevant and material information." In like manner, we believe that personnel with appropriate maintenance experience and expertise are capable of reaching

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sound judgements about the adequacy of a plant's maintenance program in the absence of specific standard criteria. We also note that even in the absence of specific standard criteria, the NRC has been able to develop maintenance program assessments for the SALP evaluations.

Question 4

Is it appropriate to use quantitative goals, which are described in Regulatory Position 3 of the draft Regulatory Guide, directed toward achieving a satisfactory level of performance in plant maintenance programs consistent with the level achieved by top performing U.S. plants of similar design?

Answer

We do not believe that attempting to measure performance of a plant maintenance program against the level achieved by the top performing U.S. plants of similar design is appropriate or even a workable concept. We believe that the design factors which determine an individual plant's maintenance requirements are so numerous that, with the exception of the very limited number of plants that are true replicates, it would not be possible to identify valid peer groups of plants for such a comparison. Also, as noted previously, Section 3 of the draft Guide appears to endorse the concept of tailoring goals to the needs of each plant. If this is the case, how could there be a meaningful basis for comparison of plants and identification of the "top performer"? Finally, although it is laudable to aspire to be the best, it is logically impossible for everyone to be the "top performer".

Question 5

What quantitative measures would be appropriate for such goals? Should they be at the plant level, system level, component level, or some combination thereof?

Answer

We have seen no evidence that for the purposes of regulation, it is necessary to go beyond the plant level to assess maintenance effectiveness. As noted in our response to Question 3, we believe that each plant is best served by developing and implementing a more detailed (i.e., system level, component level) effectiveness assessment program geared to its specific environment and needs to measure performance.

In conclusion, in commenting on the proposed maintenance rule, Commissioner Roberts noted: "There has been no demonstration that this rule would improve implementation of existing programs. Neither have I been provided with compelling documentation on what the problem is and how, specifically, this rule will fix it." In our judgement, the issuance of the draft Regulatory Guide does not alter this situation. We continue to believe that the significant industry maintenance improvement initiatives (e.g., see the February 27, 1989 NUMARC letter to the NRC commenting on the proposed maintenance rule) represent an effective and good-faith response to the NRC's

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general concerns about plant maintenance. We urge the Commission to allow each plant to utilize, according to its needs, these initiatives to improve their maintenance programs rather than adopting an approach which seems to overemphasize a standard, uniform approach to dealing with this complex issue.

Very truly yours,



Donald W. Edwards  
Director, Industry Affairs

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