DS09
B. MARCUS

#820

Pennsylvania Power & Light Company
Two North Ninth Street • Allentown, PA 18101-1179 • 215/770-5151

'89 DEC 14 P4:00

Harold W. Keiser
Senior Vice President-Nuclear
215/770-4194

33
54FR33983
8/17/89

DEC 06 1989

Mr. Samuel J. Chilk
Secretary
U.S. Nuclear Regulatory Commission
Washington DC 20555
ATTN: Docketing and Service Branch

SUSQUEHANNA STEAM ELECTRIC STATION
COMMENTS ON DRAFT REGULATORY GUIDE DG-1001
PLA-3306 FILE-A17-11

Dear Mr. Chilk:

Enclosed are Pennsylvania Power and Light Company's comments submitted in response to the request of the U.S. Nuclear Regulatory Commission for comments on NRC Draft Regulatory Guide DG-1001, "Maintenance Programs for Nuclear Power Plants" 54 Federal Register 33988 (August 17, 1989).

The importance of proper maintenance to safe and reliable nuclear plant operations is recognized by Pennsylvania Power & Light Company. We also recognize the concerns of the commission regarding this subject.

The industry has made substantial progress in maintenance performance as indicated by respective performance indicators, commission inspections and plant conditions and performance. We believe the industry has been proactive in its approach to plant maintenance. We also believe Susquehanna Station in particular has demonstrated an aggressive approach to maintenance of the facility. We will continue to be progressive in our maintenance programs to sustain a trend of improvement in both operation and maintenance. We are actively involved in industry efforts involving EPRI, INPO, NUMARC, as well as the BWR Owner's Group. We believe our efforts are in keeping with the commission's expectations relative to the maintenance of nuclear facilities.

Following are general comments with respect to the proposed guidance:

- The guidance appears to permit flexibility for individual utilities relative to defining their maintenance programs. However, in order to avoid interpretational difficulties, it is recommended that consideration be given to expanding the guidance to include the use of a question and answer section as used previously in other guidance documents.

- The assumption expressed in the regulatory analysis that capacity improvements will result from guidance implementation is speculative. We believe capacity improvements are and will be seen in the industry as a result of past and ungoing industry and individual utility improvements.

1/0

Our responses to the five questions posed in the letter are as follows:

QUESTION 1: What level of detail should be included in the regulatory guide?

RESPONSE: The level of detail in the draft regulatory guide is at an appropriate level. It provides expectations versus rules. The draft provides a philosophy of pro-active, priority based, and self monitoring activities supporting a sound maintenance program.

QUESTION 2: Is the scope of systems, structures, and components covered by the regulatory guide appropriate?

RESPONSE: Yes. However, the concept of covering ALL equipment should be discussed in more detail. Specifically, it should be recognized that certain equipment is more important than other equipment and that some equipment can be run to failure without adversely impacting plant safety or operation. The "right" maintenance for each component depends on its function in the system and its effect if failure occurs. The right maintenance for a specific component may be no maintenance if it is deemed cost effective and non-impacting to run a component to failure.

Each component should be analyzed to determine the right maintenance for the component. This analysis should be documented and utilized as the basis for performing maintenance on the component (or for performing no maintenance, as the case may warrant).

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?

RESPONSE: There is no single measure that quantifies the effectiveness of a maintenance program. A balance is needed between equipment reliability, dollars expended on maintenance, man-rem expended, etc. The only true way to measure effectiveness is via a plant specific program to measure forward progress from an established baseline.

The utility's values and initiatives are factored into an overall plan to progress from the current baseline. Resources are applied in a balanced manner to insure appropriate progress in each identified area, according to the plan. The plan is utility specific and virtually meaningless outside of the utility on a comparison basis.

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 the top performing U.S. plants of similar design?

RESPONSE: Quantitative goals are appropriate to monitor change or assess the difference between a plant's philosophy and values and its actual performance. These items must be balanced between competing objectives and geared to the plant's priorities. One or two goals can not be singled out and emphasized because of their potential impact on other items.

Goals are appropriate at a high level, i.e., capacity factor, O & M budget, man-rem, scrams, etc. When looking at a maintenance program, trends are more important than goals. A certain number of maintenance work requests may be good or bad. What is important however, is the trend over time. If the number is deemed high but trending down, the program is heading in the proper direction. The plant should understand what actions are contributing to this positive trend.

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?

Response: Goals are fine at the plant level but trends are better at lower levels. There should be at least three levels of monitoring activities. The first level should be goal oriented as noted in the response to Question 4. The second level provides a picture of where a program is going. There must be several of these and geared to provide a balanced picture. These are internal tracking mechanisms used to trend outstanding work requests, scheduled performance of PMs, etc. The third level is component specific and provides an idea of what is happening with each component, e.g., vibration monitoring on a particular pump.

We appreciate the opportunity to comment on the draft guidance.

H. W. Keiser

Attachment(s)

cc: NRC Document Control Desk (original)
NRC Region I
Mr. G. S. Barber, NRC Sr. Resident Inspector
Mr. M. C. Thadani, NRC Project Manager