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Jan 24, 2000*

PECO Energy Company
965 Chesterbrook Boulevard
Wayne, PA 19087-5691

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March 21, 2000

Chief, Rules and Directives Branch,
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Attention: David L. Meyer

Subject: Comments Concerning "High Level Guidelines for Developing
Performance Based Activities" (65FR3615, dated January 24, 2000)

Dear Sir:

This letter is being submitted in response to the NRC's request for comments concerning "High Level Guidelines for Developing Performance Based Activities" (65FR3615, dated January 24, 2000). These guidelines would be used to assess NRC regulatory activities for performance-based approaches. The guidelines were designed to assess whether candidate regulatory activities are amenable to a performance-based approach; identify those regulatory activities that should utilize performance-based approaches based on opportunities for regulatory improvement; and ensure consistency with the NRC's existing high-level regulatory goals and principles.

PECO Energy appreciates the opportunity to comment on the "High Level Guidelines for Developing Performance Based Activities." Comments are provided in the attachment to this letter.

If you have any questions, please do not hesitate to contact us.

Very truly yours,

J. A. Hutton, Jr.

James A. Hutton, Jr.
Director - Licensing

ATTACHMENT

**Comments Regarding
“High Level Guidelines for Developing Performance Based Activities”**

General

The high level guidance provided in the Federal Register Notice appears appropriate for developing performance-based activities within a regulatory framework. The guidance link to the NRC charter and recognition that future performance-based initiatives should reflect the need to optimize operation is sufficiently stated.

Performance-based guidelines could best be implemented with a graded approach using deterministic or safety margin backstops. In other words, a minimum acceptable risk is defined with flexible operating criteria above the minimum acceptable threshold.

The "high level" nature of the guidelines does not affect the clarity of the intent. The guidance should be stated at a level that existing nuclear power facilities could meet the intent regardless of plant specific design or operational differences.

Consistency with Other Regulatory Approaches

A performance-based approach would need to be aligned and consistent with other high level principles. The goals, principles, and approaches stated appear to be based on the premise that a new performance-based approach is implemented within the current regulatory structure. The current regulatory structure is highly deterministic (not operational or probabilistically based) and does not readily recognize the margin that excellent plant performance provides. Defense-in-depth is a sound engineering philosophy and as such should remain as a foundation for any new approach. It should not, however, be assumed that the level of defense-in-depth remain the same in a performance-based approach. Performance-based approaches should replace (not just supplement) current regulatory premises.

Establishment of Objective Performance Criteria

Realistic performance criteria should be introduced using probabilistic considerations. Conservative assumptions used to set criteria would invalidate the approach. A minimum set of criteria could be established (a much more refined version of the new oversight process could be used), consistent with the NRC's charter, above which performance is not impeded by regulatory mandates. If a performance criteria is set at the threshold of an immediate safety concern as defined then performance or decisions regarding performance above that threshold should result in reduced NRC scrutiny. 10CFR definitions regarding safety and releases may require change to implement an optimum performance-based approach.

Information collection at nuclear facilities may require changes to better measure performance. For example, if true reliability of a particular system were required as a measure, it would be necessary to document successful operation as well as failures in operation. Much of the utility and NRC measurement (PI) infrastructure in the current deterministic environment is failure based, not reliability-based.

Identification and Use of Measurable Parameters

Uncertainty in a measurable parameter should not be defined in an absolute sense, it should be characterized relative to the size of the margin or overall risk to the public that the parameter may influence. For example, the leakage criteria used for containment isolation valves is stringent when considering the probability of an event requiring the barrier, the assumed source terms associated with the event, the margin of the containment structure (2 to 3 times design), and other structures or active systems designed to filter releases.

Pilot projects must be used to highlight the implementation issues and costs.

Closing

If a performance-based approach is developed within the existing deterministic regulatory structure it would result in another layer of regulation. A true performance-based approach should redefine the regulatory structure to prevent additional regulatory and utility resources from being applied without benefit to the health and safety to the public.