

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)
)
ENERGY NUCLEAR GENERATION)
COMPANY AND ENERGY NUCLEAR) Docket No. 50-293-LR
OPERATIONS, INC.)
)
(Pilgrim Nuclear Power Station))

NRC STAFF'S REPLY TO PILGRIM WATCH
RESPONSE BOARD'S MAY 5, 2010 ORDER

INTRODUCTION

Pursuant to the Atomic Safety and Licensing Board's ("Board") Order (Regarding Deadlines for Submissions of Parties) of May 5, 2010 ("Board's Order"), the staff of the U.S. Nuclear Regulatory Commission ("Staff") hereby submits this reply to Pilgrim Watch ("PW") Response to ASLB's May 5, 2010 Order ("PW's Response").

The Commission explicitly limited the scope of the remanded contention to the effects of additional meteorological data or alternative meteorological models on the conclusions of the Pilgrim Nuclear Power Station's ("Pilgrim") Severe Accident Mitigation Analysis ("SAMA"). Specifically, they affirmed most of the Board's majority opinion including the holding that PW failed to establish that a genuine issue of material dispute existed with respect to evacuation times and economic costs. Moreover, the Commission carefully explained that PW impermissibly challenged the regulations by challenging probabilistic risk analysis ("PRA"). PW now argues that the Commission's Order essentially remanded Contention 3 without limitation. The arguments PW seeks to advance include economic costs, evacuation times, and PRA among others. PW's Response seeks to bypass the Commission's Order by ignoring the clear instructions of the Commission to *first* determine if PW's meteorological concerns would result in the identification of a newly cost-beneficial SAMA. Only if the Board decides for PW in this first

instance, will it need to look at the second issue: the effect of changes to the meteorological inputs or meteorological models on economic costs.

DISCUSSION

First, PW's Response essentially argues that PW must be allowed to challenge all aspects of Pilgrim's SAMA analysis because the Board will not be able to determine if any particular issue would be material. Second, PW argues, despite the Commission's clear instructions, that it must be allowed to present evidence regarding the clean-up costs and increasing the regulatory area of analysis.¹ Finally, PW argues that the Board cannot separate PW's meteorological concerns from the concerns about the economic costs and evacuation time. Each of PW's arguments ignores the Commission's instructions for the proper conduct of the remanded proceeding.²

I. The Remanded Contention Excludes Separate and Distinct Challenges to Pilgrim's SAMAs Based on Economic Costs and Evacuation Timing

The Commission plainly excluded challenges to Pilgrim's SAMA analysis based directly on economic costs, evacuation times, the size of the affected area, economic infrastructure, and clean-up costs.³ The Commission stated that PW's arguments were "insufficient to demonstrate a genuine material dispute with the Pilgrim SAMA analysis's current overall cost-benefit conclusions"⁴ Similarly, the Commission held that PW "failed to present significantly probative evidence countering the Entergy expert evidence and supplemental analysis on economic costs."⁵ But, now, PW seeks to expand the scope of its contention as originally plead, as admitted by this Board, and as further limited by the Commission, by not limiting its

¹ PW's Response at 4.

² *Id.*

³ *Entergy Nuclear Generation Company and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), CLI-10-11 ("Commission's Order"), 71 NRC __ (March 26, 2010) (slip op. at 25, 27, 36).

⁴ *Id.* at 36.

⁵ *Id.*

challenges to the potential effects of altering the meteorological inputs to the MACCS2 code or using alternative meteorological models. PW asserts, without basis, that it may challenge a “wide range” of inputs including the size of the impacted area, damages to economic infrastructure other than loss of tourism and business value, clean-up costs, and PRA⁶ among others.

However, the Commission addressed each of these issues in detail. The Board is required to determine if any newly cost-beneficial SAMAs would result from the use of additional meteorological data or alternative meteorological models, before looking at the effects on the loss of tourism. PW, in effect, attempts to avoid this limitation by essentially arguing that any change is material regardless of its effect on Pilgrim's SAMA analysis or that the Board is incapable of determining the materiality of the PW's meteorological challenges without analyzing all its other unrelated issues. Nonetheless, the Commission excluded clean-up costs, new challenges to the economic costs not previously raised, and challenges to economic costs, except and until PW proves that a materially different result of the SAMA analysis necessarily results from the meteorological changes. PW, also, suggests expanding the size of the impacted area, even though an area with a 50-mile radius is normally analyzed. This change precludes resolving the contention by preventing a valid comparison of potentially cost-beneficial SAMAs. As such, PW should not be allowed to unfairly expand the scope of the contention as though no litigation or decisions have occurred. Further, the Board should limit PW's arguments to the sole remaining dispute, namely: will the use of additional meteorological data or alternative meteorological models identify newly cost-beneficial SAMAs.

II. The Commission Held That PW's Challenges of PRA Are Impermissible

PW argues that the probabilistic risk analysis is not required and that other types of statistical analysis should be used.⁷ The Commission held that challenges to PRA were outside

⁶ PRA is addressed more fully in section II, *infra*.

⁷ PW's Response at 2-3. PW questions whether PRA is even required by regulation. *Id.* Under

the scope of license renewal proceedings and could not be asserted by PW.⁸ The Commission stated that “[PRA] claims fall beyond the scope of [the] NRC SAMA analysis and impermissibly challenge our regulations.”⁹ Similarly, PW wishes to challenge the size of the area to be analyzed by Pilgrim’s SAMA. Again, as the Commission explained, challenges to regulations are not within the scope of this hearing.¹⁰ If PW wishes to challenge the use of PRA techniques for SAMA analysis or the size of the analyzed area, it must, instead, petition the Commission for rulemaking. Since PW is precluded from raising the issue of the use of PRA in the Pilgrim license renewal hearing, the scope of the remanded contention should exclude any challenge to PRA and any other challenge PW raises regarding the regulations governing Pilgrim's SAMA analysis.

III. The Commission's Order Requires the Board to First Determine If the Effects of PW's Meteorological Concerns on Pilgrim's SAMA Analysis Would Result in The Identification of Newly Cost-Beneficial SAMAs

PW urges this Board to collapse the inquiry directed by the Commission into a single issue for hearing covering essentially any aspect of the arguments.¹¹ But the Commission was clear that the Board must first resolve whether PW's additional meteorological data or alternative meteorological models would materially alter the conclusions of Pilgrim's SAMA analysis.¹² Absent a conclusion that newly identified SAMAs result from PW's meteorological challenges, the Board need not consider or resolve the effects of the meteorology on any economic costs.¹³ To do otherwise would fail to resolve the Commission's stated issue –

10 C.F.R. § 50.54(f), the Commission required plants including Pilgrim to conduct systemic risk assessments with PRA being an approved method. See, e.g., Generic Letter No. 88-20, "Individual Plant Examination for Severe Accident Vulnerabilities – 10 CFR §50.54(f)," (November 23, 1988).

⁸ Commission's Order at 36-37.

⁹ *Id.* at 33.

¹⁰ *Id.* at 36-37.

¹¹ PW's Response at 6-8.

¹² Commission's Order at 27, 35, 37.

¹³ *Id.*

“whether the Pilgrim SAMA analysis resulted in an erroneous conclusion on the SAMAs found to be cost-beneficial to implement” because of the use of the Gaussian plume model incorporated in the ATMOS module to the MACCS2 code.¹⁴ Because any inquiry into the effects of meteorological challenges on economic costs are conditioned on the Board's findings of material effects on the Pilgrim's SAMA analysis, conducting an evidentiary hearing on issues that are not material to the resolution of that issue would undermine the intent of the Commission for a limited hearing on remand.

CONCLUSION

Because the Commission limited the scope of the remanded contention to additional meteorological data or alternative meteorological models and the Board is capable of resolving if these limited issues would result in the identification of newly cost-beneficial SAMAs, the Board should limit the scope of the hearing to issues remanded by the Commission. Only if the Board determines that the meteorological issues would result in newly identified SAMAs, should the Board allow PW to present evidence regarding how meteorological challenges affect the economic costs. Thus, the use of a single hearing limited to whether PW's meteorological issues are material to Pilgrim's SAMA analysis would result in the most efficient use of resources and clearest record for the Board's decision.

Respectfully submitted,



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Dated at Rockville, Maryland
This 17th day of May, 2010

¹⁴ See Commission's Order at 36-37.

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CERTIFICATE OF SERVICE

I hereby certify that copies of "NRC Staff's Reply To Pilgrim Watch Response Board's May 5, 2010 Order" in the above-captioned proceeding have been served on the following by electronic mail and by deposit in the U.S. Nuclear Regulatory Commission's internal mail system, or, as indicated by an asterisk (*), by electronic mail and by deposit in the U.S. Mail system this 17th day of May, 2010.

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