From: Ronaldo Jenkins
To: Michael Scott
Date: 5/2/03 4:54PM
Subject: Telephone Conference Meeting Summary - Design Tornado Speed

This memorandum summarizes a telecon meeting between representives of NRC staff and Nuclear Energy Institute (NEI), Entergy, Exelon and Dominion between 11:00 am and 12:00 Noon.

Attendees:

NRC	NEI	Other
R. Jenkins	R. Bell	J. Hegner, Dominion
J. Lee		E. Grant, Exelon
L. Brown		Mike Cambia, Parsons
		G. Cesare, Enercon
		W. Hickherckn, Bechtel

NRC staff presented the staff position on the design basis tornado speed parameters (see attached file) to NEI and the ESP applicant representatives and responded to associated questions.

J. Lee explained to the attendees an interim staff position as documented in a letter dated March 25, 1998 from Ruberstein to E. E. Kintner, Chairman, ALWP Utility Steering Committee which uses new tornado data since Regulatory Guide 1.76. Staff will make the subject document available on ADAMS.

The subject of the applicable section of SECY 93-087 is design basis tornado for design of ALWRs. The staff does not agree that acceptance of a given design basis tornado wind speed for design of ALWRs means that this speed is acceptable for all sites that might be the subject of an ESP. Site parameters are postulated for a design certification [10 CFR 52.47(a)(iii)] and are not required to bound every site on which an applicant might seek to construct a nuclear power plant of certified design.

SECY 93-087 states: "The staff expects that use of these criteria will not preclude siting the ALWR plant designs on most sites in the United States. However, should an actual site hazard exceed the design envelop in a certain area, the COL applicant would have the option of performing a site specific analysis to verify that the design is still acceptable for that site."

The documented basis for the tornado-related conclusions in SECY 93-087 is NUREG/CR-4661, which shows 10^{-7}/yr tornado wind speeds above 300 mph in some parts of the United States. The staff's interim position on design basis tornado wind speed on a site-specific basis was provided in a letter dated 3/25/1988, NRC to ALWR Utility Steering Committee, Subj: ALWR Design Basis Tornado. It also cited design basis tornado wind speeds higher than 300 mph in some parts of the United States. The following is a quote from the Executive Summary of NUREG/CR-4461: "On the basis of this analysis, it would appear to be reasonable to reduce tornado design basis wind speeds to 200 mph for the United States west of the Rocky Mountains and to **330** mph (emphasis added) for the United States east of the Rocky Mountains." Therefore, the source document cited in all the discussions that followed does not support using 300 mph for all sites in the United States.

ESP applicants are not required to use Reg Guide 1.76 (though they may do so, as Reg Guide 1.76 is a staff-accepted approach). ESP applicants may use any design basis tornado wind speeds that are appropriately justified for their sites. However, the staff does not believe that citing SECY 93-087 (or any other document of which the staff is aware) is adequate basis for use of 300 mph at all sites. Rather, a technical evaluation of site-specific data would be required.

NUREG/CR-4661 is based on the characteristics of tornadoes that were reported in the contiguous United States for the period from January 1, 1954, through December 31, 1983. Therefore, the staff plans to re-evaluate the maximum allowable design basis tornado wind speed, incorporating additional tornado data collected since 1983. The staff expects to complete this re-evaluation by December 2003.