

August 1, 2003

Mr. Alfred J. Cayia
Site Vice President
Point Beach Nuclear Plant
Nuclear Management Company, LLC
6610 Nuclear Road
Two Rivers, WI 54241

SUBJECT: POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2 - REQUEST FOR
ADDITIONAL INFORMATION RELATED TO SELECTIVE SCOPE
IMPLEMENTATION OF ALTERNATE SOURCE TERM FOR FUEL HANDLING
ACCIDENT (TAC NOS. MB8223 AND MB8224)

Dear Mr. Cayia:

By letter dated March 27, 2003, the Nuclear Management Company, LLC (NMC), submitted a license amendment request for a selective scope application of the alternate source term (AST) for a fuel handling accident (FHA). This submittal requested the Nuclear Regulatory Commission (NRC) staff review and approval of a selective scope application of AST for only the FHA and corresponding changes to Technical Specification 3.9.3, "Containment Penetrations." The NRC staff finds that additional information, identified in the enclosure, is needed.

A draft of the enclosure was discussed with Mr. Jack Gadzala and Ms. Sara Scott of NMC during a conference call on June 27, 2003. A subsequent discussion with Mr. Jack Gadzala of NMC on July 25, 2003, indicated a mutually agreeable response date of 90 days from the date of this letter. If you need to revise this date or need further clarification, contact me at 301-415-2928 or email me at dws@nrc.gov.

Sincerely,

/RA/

Deirdre W. Spaulding, Project Manager, Section 1
Project Directorate III
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-266 and 50-301

Enclosure: Request for Additional Information

cc w/encl: See next page

August 1, 2003

Mr. Alfred J. Cayia
Site Vice President
Point Beach Nuclear Plant
Nuclear Management Company, LLC
6610 Nuclear Road
Two Rivers, WI 54241

SUBJECT: POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2 - REQUEST FOR
ADDITIONAL INFORMATION RELATED TO SELECTIVE SCOPE
IMPLEMENTATION OF ALTERNATE SOURCE TERM FOR FUEL HANDLING
ACCIDENT (TAC NOS. MB8223 AND MB8224)

Dear Mr. Cayia:

By letter dated March 27, 2003, the Nuclear Management Company, LLC (NMC), submitted a license amendment request for a selective scope application of the alternate source term (AST) for a fuel handling accident (FHA). This submittal requested the Nuclear Regulatory Commission (NRC) staff review and approval of a selective scope application of AST for only the FHA and corresponding changes to Technical Specification 3.9.3, "Containment Penetrations." The NRC staff finds that additional information, identified in the enclosure, is needed.

A draft of the enclosure was discussed with Mr. Jack Gadzala and Ms. Sara Scott of NMC during a conference call on June 27, 2003. A subsequent discussion with Mr. Jack Gadzala of NMC on July 25, 2003, indicated a mutually agreeable response date of 90 days from the date of this letter. If you need to revise this date or need further clarification, contact me at 301-415-2928 or email me at dws@nrc.gov.

Sincerely,

/RA/

Deirdre W. Spaulding, Project Manager, Section 1
Project Directorate III
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-266 and 50-301

Enclosure: Request for Additional Information
cc w/encl: See next page

Distribution

PUBLIC	OGC	DSpaulding
PDIII-1 Reading	ACRS	RDennig
LRaghavan	GGrant, RGN III	LBrown
RBouling		

ADAMS Accession No. ML032060586

*Provided RAI input by memo

OFFICE	PDIII-1/PM	PDIII-1/LA	SPSB:SC*	PDIII-1/SC
NAME	DSpaulding	MO'Brien for RBouling	RDennig	LRaghavan
DATE	07/30/03	07/31/03	07/03/03	08/01/03

OFFICIAL RECORD COPY

Point Beach Nuclear Plant, Units 1 and 2

cc:

Jonathan Rogoff, Esquire
General Counsel
Nuclear Management Company, LLC
700 First Street
Hudson, WI 54016

Mr. Richard R. Grigg
President and Chief Operating Officer
Wisconsin Electric Power Company
231 West Michigan Street
Milwaukee, WI 53201

Manager, Regulatory Affairs
Point Beach Nuclear Plant
Nuclear Management Company, LLC
6610 Nuclear Road
Two Rivers, WI 54241

Mr. Ken Duveneck
Town Chairman
Town of Two Creeks
13017 State Highway 42
Mishicot, WI 54228

Chairman
Public Service Commission
of Wisconsin
P.O. Box 7854
Madison, WI 53707-7854

Regional Administrator, Region III
U.S. Nuclear Regulatory Commission
801 Warrenville Road
Lisle, IL 60532-4351

Resident Inspector's Office
U.S. Nuclear Regulatory Commission
6612 Nuclear Road
Two Rivers, WI 54241

Ms. Sarah Jenkins
Electric Division
Public Service Commission of Wisconsin
P.O. Box 7854
Madison, WI 53707-7854

Mr. Roy A. Anderson
Executive Vice President
Nuclear Management Company, LLC
700 First Street
Hudson, WI 54016

Nuclear Asset Manager
Wisconsin Electric Power Company
231 West Michigan Street
Milwaukee, WI 53201

Mano K. Nazar
Senior Vice President
Nuclear Management Company, LLC
Prairie Island Nuclear Generating Plant
1717 Wakonade Drive East
Welch, MN 55089

John Paul Cowan
Chief Nuclear Officer
Nuclear Management Company, LLC
27780 Blue Star Memorial Highway
Covert, MI 49043

March 2003

REQUEST FOR ADDITIONAL INFORMATION RELATED TO
SELECTIVE SCOPE IMPLEMENTATION
OF ALTERNATE SOURCE TERM
FOR FUEL HANDLING ACCIDENT
DOCKET NOS. 50-266 AND 50-301

By letter dated March 27, 2003, the Nuclear Management Company, LLC, submitted a license amendment request for a selective scope application of the alternate source term for a fuel handling accident. The Nuclear Regulatory Commission (NRC) staff finds that additional information is needed.

1. Meteorological Data

- a. With regard to atmospheric stability, there appears to be a relatively high occurrence of category A and lower occurrence of categories D and E when compared with some other nuclear power plant sites. Further, stability category A is reported to occur for as long as 56 consecutive hours which seems quite high and the occurrence of unstable conditions at night is reported to be high relative to some other sites. The response to NRC Question 1 in Attachment VII to the March 27, 2003, letter provides a discussion of methodologies used historically to estimate the stability category for Point Beach. It notes that use of fluctuations in wind direction appear to provide estimates more similar to those at other sites than use of the temperature change with height methodology. However, why do relatively warm temperatures occur near the ground so frequently at night and for such long durations at the Point Beach site? Other than changing from strip charts to digital recording in the control room in 1999, have other changes occurred in the onsite meteorological measurement during the period over which the data were measured? Was there a change in the 1999 time frame that resulted in the atmospheric stability data for that year appearing to be more similar to some other sites than the 1997 and 1998 data?
- b. With regard to wind speed, why was there a high occurrence of light wind speeds at both measurement levels in 1999 when compared with the other 2 years? For example, this is especially notable between roughly Julian days 159 and 214 at the upper level and Julian days 296 to 334 at the lower level when many of the speeds are listed as a single digit and do not seem well correlated with the wind speed at the other measurement level.

Further, there appears to be a relatively high occurrence of wind speed data repeating from hour to hour at the upper level, with a maximum duration of approximately 16 hours at the upper level and 11 hours at the lower level. While this may be associated with the question concerning the apparent anomalous occurrence of light wind speeds, what is the procedure for reviewing data to confirm that repeating data are valid?

Page 5 of Attachment VII states that the wind speed data provided in the ARCON96 format is in units of meters per second, but it appears to be in miles per hour (mph). Are the data in mph?

- c. With respect to Figure 5, page 10 of Attachment VII, the frequency of occurrence of the north and north northwest winds in 1997-1999 is approximately 11.5 percent and 2.5 percent, respectively. The NRC staff estimates based on the 1997-1999 hourly data at the 10 meter level for the same two directions are about 7.5 percent and 5.5 percent, respectively. The NRC staff does not understand the reason for this difference. Are all measurements from the same tower? What are the measurement heights of the wind roses shown in Figure 5? Are values centered on each direction?
- d. Why are calibrations performed annually and not semi-annually as recommended by Regulatory Guide 1.23, "Onsite Meteorological Programs?"

Are all data presented, including that provided in figures, from the same tower?

Are any of the 1997-1999 data from strip charts? If so, how much and for what time intervals?

2. Onsite Relative Concentration (X/Q) Values

- a. Table 5-1 of Attachment II of the March 27, 2003, letter provides inputs used in the control room X/Q calculations. Is the distance from the containment purge stack to the control room air intake the same as the height of the intake and are both the containment purge stack and drumming vent stack the same height or are these approximations?
- b. The first paragraph of page 21 of Attachment II implies that the closer a release location is to the receptor, the higher the resultant X/Q value will be. This is generally, but not always, true. Were comparative estimates made for an assumed release from the Unit 1 containment vent purge stack?
- c. Referring to page 31 of Attachment II, how do the resultant X/Q values for an open equipment hatch and personnel airlocks compare with X/Q estimates from the containment purge stack?
- d. The first paragraph of the response to NRC Question 3, page 5 of Attachment VII, states that Bechtel drawing M-142 has been attached. Is it attached to Attachment II, Attachment VII, or elsewhere?

3. Offsite X/Q Values

- a. Table 2-4, page 9 of Attachment II, lists the 0-8 hour low population zone (LPZ) X/Q value as 3.0 E-04 sec/m^3 , but is given as 3.0 E-05 sec/m^3 elsewhere. Is the value in Table 2-4 correct?
- b. Page 21 of Attachment II states that the X/Qs are 95 percentile values. Typically, but not always, the 99.5 percentile direction dependent values are more restrictive than the 95 percentile site X/Q values. Are the 95 percentile site X/Q values more restrictive at Point Beach and, therefore, the X/Q values shown are the 95 percentile values?