



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

April 22, 2011

Mr. R. M. Krich
Vice President, Nuclear Licensing
Tennessee Valley Authority
3R Lookout Place
1101 Market Street
Chattanooga, TN 37402-2801

SUBJECT: WATTS BAR NUCLEAR PLANT, UNIT 1 – REQUEST FOR ADDITIONAL
INFORMATION REGARDING LICENSE AMENDMENT REQUEST FOR
CARBON DIOXIDE FIRE SUPPRESSION SYSTEM INSTALLED IN
AUXILIARY INSTRUMENT ROOM (TAC NO. ME2532)

Dear Mr. Krich:

By letter dated October 30, 2009 (Agencywide Documents Access and Management System Accession No. ML093080377), Tennessee Valley Authority (TVA) requested a license amendment concerning a change to the Watts Bar Nuclear Plant, Unit 1 fire protection program requirements. Specifically, this involves changing the design basis of the total flooding automatic carbon dioxide (CO₂) fire suppression system in the Auxiliary Instrument Room from a 50-percent CO₂ concentration to a 45-percent concentration, retaining the currently required 15-minute hold time to suppression a fire.

In order to complete its review, the U.S. Nuclear Regulatory Commission (NRC) requires additional information. Enclosed is the NRC staff's request for additional information (RAI). Based on discussions with your staff on April 22, 2011, we understand that you plan to respond to the enclosed RAI by May 24, 2011.

If you have any questions regarding this issue, please feel free to contact me at (301) 415-3100.

Sincerely,

A handwritten signature in black ink, appearing to read "John G. Lamb", is written over a horizontal line.

John G. Lamb, Senior Project Manager
Watts Bar Special Projects Branch
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-390

Enclosure: RAI

cc: Distribution via Listserv

REQUEST FOR ADDITIONAL INFORMATION
REGARDING THE LICENSE AMENDMENT REQUEST FOR
THE CARBON DIOXIDE FIRE SUPPRESSION SYSTEM
INSTALLED IN THE AUXILIARY INSTRUMENT ROOM
WATTS BAR NUCLEAR PLANT, UNIT 1
TENNESSEE VALLEY AUTHORITY
DOCKET NO. 50-390

By letter dated October 30, 2009 (Agencywide Documents Access and Management System Accession No. ML093080377), Tennessee Valley Authority requested a license amendment concerning a change to the Watts Bar Nuclear Plant (WBN), Unit 1 fire protection program requirements. Specifically, this involves changing the design basis of the total flooding automatic carbon dioxide (CO₂) fire suppression system in the Auxiliary Instrument Room from a 50-percent CO₂ concentration to a 45-percent concentration, retaining the currently required 15-minute hold time to suppression a fire.

In order to complete its review, the U.S. Nuclear Regulatory Commission (NRC) requires additional information. Below is the NRC staff's request for additional information (RAI).

RAI

The National Fire Protection Association 12, 1973 Edition, Section 2421 (Code of Record) for WBN Unit 1 installation, Table 6, "Flooding Factors for Specific Hazards," specifies flooding factors for specific hazards. Confirm the flooding factor (12 cubic feet per pound (ft³/lb) CO₂ or 0.083 lb CO₂/ft³) used to calculate the quantity of the CO₂ to protect the Auxiliary Instrument Room. Provide the calculated quantity in pounds of CO₂ to be injected into WBN Unit 1 Auxiliary Instrument Room.

Enclosure

April 22, 2011

Mr. R. M. Krich
Vice President, Nuclear Licensing
Tennessee Valley Authority
3R Lookout Place
1101 Market Street
Chattanooga, TN 37402-2801

SUBJECT: WATTS BAR NUCLEAR PLANT, UNIT 1 – REQUEST FOR ADDITIONAL
INFORMATION REGARDING LICENSE AMENDMENT REQUEST FOR
CARBON DIOXIDE FIRE SUPPRESSION SYSTEM INSTALLED IN
AUXILIARY INSTRUMENT ROOM (TAC NO. ME2532)

Dear Mr. Krich:

By letter dated October 30, 2009 (Agencywide Documents Access and Management System Accession No. ML093080377), Tennessee Valley Authority (TVA) requested a license amendment concerning a change to the Watts Bar Nuclear Plant, Unit 1 fire protection program requirements. Specifically, this involves changing the design basis of the total flooding automatic carbon dioxide (CO₂) fire suppression system in the Auxiliary Instrument Room from a 50-percent CO₂ concentration to a 45-percent concentration, retaining the currently required 15-minute hold time to suppression a fire.

In order to complete its review, the U.S. Nuclear Regulatory Commission (NRC) requires additional information. Enclosed is the NRC staff's request for additional information (RAI). Based on discussions with your staff on April 22, 2011, we understand that you plan to respond to the enclosed RAI by May 24, 2011.

If you have any questions regarding this issue, please feel free to contact me at (301) 415-3100.

Sincerely,

/RA by PMilano for/

John G. Lamb, Senior Project Manager
Watts Bar Special Projects Branch
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-390

Enclosure: RAI

cc: Distribution via Listserv

DISTRIBUTION:

PUBLIC
LPWB Reading
RidsNrrDoriLp-Wb Resource
RidsAcrsAcnw_MailCTR Resource

RidsNrrDraAfpb Resource
RidsNrrPMWattsBar1 Resource
RidsNrrLABClayton Resource

RidsRgn2MailCenter Resource
Niqbal, NRR/DRA/AFP
RidsOgcRp Resource

Accession No.: ML111040272

*via memorandum ** by phone

OFFICE	DORL/LPWB/PM	DORL/LPWB/LA	DRA/AFP/BC	DORL/LPWB/BC	DORL/LPWB/PM
NAME	JLamb (PMilano for)	BClayton	AKlein*	SCampbell** (LRaghavan for)	JLamb (PMilano for)
DATE	04/22/11	04/22/11	04/12/11	04/22/11	04/22/11

OFFICIAL RECORD COPY