

From: DiFrancesco, Nicholas
Sent: Wednesday, November 18, 2009 11:38 AM
To: Humphreys, Michael C.
Cc: Walli, Lori A.
Subject: DRAFT Request for Additional Information (RAIs) Re: Diesel Fuel Oil Storage and Testing Technical Specification Changes (TAC ME2121)

Mike,

Below is the draft request for additional information (RAI) from the Component Performance and Testing Branch regarding the proposed diesel generator fuel oil storage and testing technical specifications changes. The lead reviewer for the draft questions is available through Dec 3 and Dec 14 - 18 if you are interested in a conference call to discuss the staff questions.

Regards,

Nick DiFrancesco

*Project Manager
Nuclear Regulatory Commission
Division of Operating Reactor Licensing
nicholas.difrancesco@nrc.gov
Tel: (301) 415-1115
Fax: (301) 415-1222*

DRAFT

DRAFT REQUEST FOR ADDITIONAL INFORMATION
LICENSE AMENDMENT REQUEST FOR CHANGES TO TECHNICAL SPECIFICATIONS
RELATING TO DIESEL GENERATOR FUEL OIL STORAGE AND TESTING
COLUMBIA GENERATING STATION
DOCKET NO. 50-397
TAC NO. ME2121

RAI 001

On Page 5 of 16 of the Enclosure, it is stated that "The level equivalent to a 7 day supply is 330 gallons for Division 1 or 2 DG, and 165 gallons for Division 3 DG." Please confirm that these 7 day supplies are for a lube oil that the EDG manufacturer has confirmed is compatible with ULSD fuel, and that these quantities are derived from consumption rates applicable to the EDG operating with ULSD fuel.

RAI 002

On Page 8 of 16 of the Enclosure, it is stated that "Following the calculation method outlined in Reference 4, utilizing actual consumption rates determined by testing..." Are these consumption rates determined by testing with ULSD fuel? If not, please explain why these rates are conservative compared to testing with ULSD fuel.

RAI 003

On Page 10 of 16 of the Enclosure, it is stated that “Energy Northwest currently allows a range of API Gravity values at 60°F of greater than 27 degrees but less than or equal to 38 degrees.” Please explain what happens if you receive a shipment of fuel oil that has an API Gravity of greater than 38 degrees.

RAI 004

On Page 11 of 16 of the Enclosure, it is stated that “The corresponding updated ANSI standard, ANS/ANSI-59.51-1997 (Reference 5), Section 5.51, ‘Tanks,’ contains the same requirements while providing more specific details as regards to the tank capacity being sufficient to maintain at least 60 minutes of operation after reaching the low level alarm setpoint (at 110% of continuous rated load) based on the minimum quality fuel oil that is acceptable.” In the next paragraph it is stated that “From the above it can be ascertained that the principle safety concern with the volume of stored diesel fuel oil in the day tank is that there is an equivalent supply of fuel oil in the day tank is that there is an equivalent supply of fuel to support one hour of operation at 110% of full load.” The staff’s interpretation is that the minimum day tank capacity is an amount of fuel oil to support 60 minutes of operation at 100 percent continuous rated load plus a minimum additional margin of 10 percent. Please explain how a supply of fuel to support one hour of operation at 110 percent of full load is conservative as compared to the staff’s interpretation.

RAI 005

On Page 15 of 16 of the Enclosure, Reference 6 is listed as ASTM D975-08. Please explain why ASTM D975-08a is not used as the reference.

RAI 006

ASTM D975-08a allows fuel oil to contain up to 5 percent biodiesel. Please explain how your fuel oil calculation will be affected if your fuel oil contains 5 percent biodiesel.

RAI 007

Please confirm that the volumes shown in Table B 3.8.3-1 include an unusable volume for vortex prevention and for water and sediment at the tank bottoms.

RAI 008

Section 5.4 of ANSI/ANS-59.51-1997 states that the usable fuel oil storage requirements calculation shall include an explicit allowance for fuel consumption required by periodic testing. Please discuss how this allowance is incorporated into your seven day fuel oil quantities.

DRAFT

E-mail Properties

Mail Envelope Properties (0046140293E11F408991442DB4FE25CA01EB57168A)

Subject: DRAFT Request for Additional Information (RAIs) Re: Diesel Fuel Oil Storage and Testing Technical Specification Changes (TAC ME2121)

Sent Date: 11/18/2009 11:38:27 AM

Received Date: 11/18/2009 11:38:27 AM

From: DiFrancesco, Nicholas

Created By: Nicholas.DiFrancesco@nrc.gov

Recipients:

MCHUMPHREYS@energy-northwest.com (Humphreys, Michael C.)

Tracking Status: None

LWALLI@energy-northwest.com (Walli, Lori A.)

Tracking Status: None

Post Office:

HQCLSTR01.nrc.gov

Files	Size	Date & Time
MESSAGE	15174	11/18/2009

Options

Expiration Date:

Priority: olImportanceNormal
ReplyRequested: False
Return Notification: False

Sensitivity: olNormal
Recipients received: