



72-1026

BNFL Fuel Solutions Corporation
3600 Glen Canyon Road
Scotts Valley, CA 95066
Tel: (831) 438-6444
Fax: (831) 438-5206

September 19, 2001
BFS/NRC 01-021
Docket No. 72-1026
File No. CMPC.0006.2

Director, Office of Nuclear Material Safety and Safeguards
United States Nuclear Regulatory Commission
Washington, DC 20555-0001

**Subject: Storage License Amendment Request for the FuelSolutions™ System
Transmittal of Modified Tech Spec Bases Pages (TAC No. L23296)**

Reference: FuelSolutions™ License Amendment Request (LAR) for the W74 Canister,
LAR 01-02, Revision 1, July 2001.

Dear Sir or Madam:

This letter transmits modified pages for Section B.3.3.2 and Section B.3.3.3 for the FuelSolutions™ W74 Canister License Amendment Request (LAR 01-02), Revision 1. These changes reflect incorporation of clarification comments from NRC staff. Specifically, pages B3.3-4 through B3.3-8 of the FuelSolutions™ W74 Canister Technical Specification Bases, Amendment 2 (9/19/01), are enclosed.

Should you or any member of your staff have any questions, please contact the undersigned at (831) 430-5220.

Sincerely,

A handwritten signature in cursive script that reads "Robert D. Quinn".

Robert D. Quinn, P.E.
Manager of Operations

Enclosure: Modified pages B3.3-4 through B3.3.8 of FuelSolutions™ W74 Canister Technical Specification Bases, Amendment 2 (9/19/01) (10 copies)

NMSSolPublic

cc:

Mr. John Broschak
Consumers Energy
Palisades Nuclear Plant
27780 Blue Star Memorial Highway
Covert, MI 49043

Mr. Mike Bourassa
Consumers Energy
Big Rock Point Plant
10269 US 31 North
Charlevoix, MI 49720

Mr. Norio Hiyama
IHI
Westinghouse Energy Center Site
4350 Northern Pike
Monroeville, PA 15146-2886

BASES

ACTIONS (continued)

A.5

Another possible cause of temperatures exceeding the limits is obstruction inside the vents or the cask. Visual inspection of the STORAGE CASK vent channels is performed by removing the debris screens and using visual aids as necessary. If no obstruction is found, the interior of the STORAGE CASK, including the guide rails and heat shield, should be visually inspected for ventilation obstructions using remote inspection tools or by temporarily removing the STORAGE CASK top cover.

The Completion Time is sufficient to determine and correct most failure mechanisms.

B.1 - B.3

If the temperature cannot be successfully reduced to within the specified limits by the above actions, then mitigating actions must be taken to cool the STORAGE CASK within the limits until other measures can be employed. The CANISTER can be retrieved to the TRANSFER CASK (which has been evaluated to maintain acceptable temperatures under steady state conditions). The licensee will temporarily store the CANISTER in the TRANSFER CASK in a horizontal configuration bounded by that analyzed in the FSAR, and any supplemental shielding that is determined necessary to maintain dose rates within the limits of 10 CFR 72.104 on a site-specific basis will be evaluated in accordance with 10 CFR 72.48. The Completion Times are reasonable based on the time required to establish cooling actions and place the CANISTER into the TRANSFER CASK, and to return CANISTER to a repaired or replacement STORAGE CASK, in an orderly manner without challenging personnel.

The potential for freezing of the transfer cask liquid neutron shield during temporary storage will be evaluated on a cask- and site-specific basis, and measures will be implemented, if necessary, to prevent freezing.

SURVEILLANCE
REQUIREMENTS

SR 3.1.2.1

The STORAGE CASK concrete temperatures are to be checked daily to provide adequate frequency to assure that temperatures remain within the specified limits and provide adequate time to initiate corrective actions.

BASES

REFERENCES

1. FuelSolutions™ Storage System SAR, Section 4.4.
 2. FuelSolutions™ W74 Canister Storage SAR, Section 4.4.
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B 3.3 STORAGE CASK INTEGRITY

B 3.3.3 Storage Cask Temperatures During Horizontal Transfer

BASES

BACKGROUND When a STORAGE CASK with a CANISTER containing fuel assemblies is in the horizontal orientation, the natural convective air flow that cools the CANISTER is altered. The STORAGE CASK thermocouple temperature is correlated through analysis to the maximum concrete temperature near the liner/concrete interface. Assuring that the storage cask thermocouple temperature limit is not exceeded assures that the short-term allowable concrete temperature is not exceeded.

APPLICABLE SAFETY ANALYSIS The basis for maintaining this STORAGE CASK temperature limit is the thermal analysis contained in Chapter 4 of the Storage System SAR (Reference 1). The specified temperature limit is correlated to the short-term allowable concrete temperature.

LCO Limiting the concrete temperature during horizontal CANISTER TRANSFER OPERATIONS maintains the STORAGE CASK concrete temperatures within the design basis.

APPLICABILITY Temperature monitoring is performed during horizontal TRANSFER OPERATIONS.

ACTIONS A note has been added to the Actions stating that a separate Condition entry is allowed for each STORAGE CASK. This is acceptable since the Required Actions for each Condition provide appropriate compensatory measures for each STORAGE CASK not meeting the LCO. Subsequent STORAGE CASKs that do not meet the LCO are governed by subsequent Condition entry and application of associated Required Actions.

A.1

If the STORAGE CASK concrete temperature limit is not met, then it is required to take action to reduce the STORAGE CASK concrete temperature. This may be accomplished by removing the CANISTER from the STORAGE CASK into the TRANSFER CASK.

The Completion Time is adequate to perform this task.

(continued)

BASES

ACTIONS (continued)

B.1

The STORAGE CASK should be inspected for signs of damage to the concrete. The Completion time is adequate to perform the inspection and assessment.

B.2.1

If the STORAGE CASK is undamaged, it may be reused. The Completion Time is reasonable based on the time to complete the TRANSFER OPERATIONS.

B.2.2

If the STORAGE CASK is damaged, then it may not be used. A new STORAGE CASK will be required to store the CANISTER. The Completion Time is reasonable based on the time to complete the TRANSFER OPERATIONS.

C.1 - C.2

If the CANISTER cannot be placed into storage or retrieved from storage within the specified time, mitigating actions must be initiated. The CANISTER can be retrieved to the TRANSFER CASK (which has been evaluated to maintain acceptable temperatures under steady state conditions). The licensee will temporarily store the CANISTER in the TRANSFER CASK in a horizontal configuration bounded by that analyzed in the FSAR, and any supplemental shielding that is determined necessary to maintain dose rates within the limits of 10 CFR 72.104 on a site-specific basis will be evaluated in accordance with 10 CFR 72.48. The CANISTER will be returned to a repaired or replacement STORAGE CASK for continued long term storage. The Completion Times are reasonable based on the time required to place the CANISTER into the TRANSFER CASK, and to return CANISTER to a repaired or replacement STORAGE CASK, in an orderly manner without challenging personnel.

The potential for freezing of the transfer cask liquid neutron shield during temporary storage will be evaluated on a cask- and site-specific basis, and measures will be implemented, if necessary, to prevent freezing.

BASES

**SURVEILLANCE
REQUIREMENTS**

The STORAGE CASK concrete temperature is to be checked every 30 minutes when the STORAGE CASK is in a horizontal orientation with a CANISTER containing fuel assemblies. The frequency of inspection assumes that temperatures remain within limits and provide adequate time to initiate corrective actions.

REFERENCES

1. FuelSolutions™ Storage System SAR, Section 4.5.
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