

February 28, 2006

Mr. Britt T. McKinney
Sr. Vice President
and Chief Nuclear Officer
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769 Salem Blvd., NUCSB3
Berwick, PA 18603-0467

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION REGARDING THE
SUSQUEHANNA REQUEST FOR EXEMPTION FROM THE STANDARDIZED
NUHOMS® CERTIFICATE OF COMPLIANCE NO. 1004 (TAC. NO. L23943)

Dear Mr. McKinney:

By letter dated January 31, 2006, PPL Susquehanna, LLC (PPL) submitted an exemption request from the Standardized NUHOMS® Horizontal Modular Storage System for Irradiated Nuclear Fuel, Certificate of Compliance (CoC) No. 1004. PPL is requesting an exemption from CoC No. 1004 to allow loading of Framatome-ANP 9x9-2 fuel assemblies in the NUHOMS® 61BT canister.

In connection with the staff's review, we need the information identified in the enclosure to this letter. We request that you provide this information by March 10, 2006. Inform us at your earliest convenience, but no later than March 8, 2006, if you are not able to provide the information by that date. To assist us in re-scheduling your review, you should include a new proposed submittal date and the reasons for the delay.

Please reference Docket No. 72-28 and TAC No. L23943 in future correspondence related to this request. The staff is available to meet to discuss your proposed responses. If you have any questions regarding this matter, I may be contacted at (301) 415-1132.

Sincerely,

/RA/

Joseph M. Sebrosky, Senior Project Manager
Spent Fuel Project Office
Office of Nuclear Material Safety
and Safeguards

Docket No. 72-28

Enclosure: Request for Additional Information
cc: Mailing List

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 Sr. Vice President
 and Chief Nuclear Officer
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 Office of Nuclear Material Safety
 and Safeguards

Docket No. 72-28

Enclosure: Federal Register Notice

cc: Mailing List

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Susquehanna Steam Electric Station, Unit Nos. 1 and 2

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Salem Township
P.O. Box 405
Berwick, PA 18603-0035

Dr. Judith Johnsrud
National Energy Committee
Sierra Club
443 Orlando Avenue
State College, PA 16803

**REQUEST FOR ADDITIONAL INFORMATION
PPL SUSQUEHANNA, LLC (PPL)
DOCKET NUMBER 72-28**

By letter dated January 31, 2006, PPL Susquehanna, LLC (PPL) submitted an exemption from the Standardized NUHOMS® Horizontal Modular Storage System for Irradiated Nuclear Fuel, Certificate of Compliance (CoC) No. 1004. PPL is requesting an exemption from CoC No. 1004 to allow loading of Framatome-ANP 9x9-2 fuel assemblies in the NUHOMS® 61BT canister. This request for additional information (RAI) identifies additional information needed by the U.S. Nuclear Regulatory Commission (NRC) staff in connection with its review of the exemption request.

The RAI describes information needed by the staff for it to complete its review of the exemption request to determine whether the applicant has demonstrated compliance with the regulatory requirements.

RAI - 1

Provide the parameters for the Framatome ANP 9x9-2 fuel that are contained in Table K.6-3 for the Final Safety Analysis Report for the Standardized NUHOMS® Horizontal Modular Storage System for Irradiated Nuclear Fuel.

Table K.6-3 of the FSAR is attached. In the January 31, 2006, exemption request PPL states that the FANP 9x9-2 fuel is identical to the GE 9x9 except for the part-length rods. However, the staff has discovered that the assembly design (pitch, pellet size, etc.) used in the exemption request for the FANP 9x9-2 fuel does not match the SAR table (K.6-3) values for the GE 9x9. However, the GE 10x10 information in the exemption request does match the table. The staff would like PPL to supply the parameters contained in Table K.6-3 for the Framatome ANP 9X9-2 fuel and confirm that the parameters provided in PPL's January 31, 2006, submittal are consistent with these supplied values. If the values are different, then PPL should provide updated input data used for the criticality analysis.

This information is needed to satisfy the requirements of 10 CFR 72.236(c).

Enclosure

**Table K.6-3
Parameters for BWR Assemblies**

Manufacturer ⁽¹⁾	Array	Version	Active Fuel Length (in)	Number Fuel Rods per Assembly	Pitch (in)	Fuel Pellet OD (in)	Clad Thickness (in)	Clad OD (in)	Water Rod OD (in)	Water Rod ID (in)
GE	7x7	GE1	144	49	0.738	0.488	0.0355	0.570	NA	NA
GE	7x7	GE2	144	49	0.738	0.487	0.032	0.563	NA	NA
GE	7x7	GE3	144	49	0.738	0.487	0.032	0.563	NA	NA
Exxon/ANF	7x7	ENC III-A	144	49	0.738	(2)	0.0355 ⁽⁴⁾	0.570	NA	NA
Exxon/ANF	7x7	ENC III	144	48	0.738	(3)	0.0355 ⁽⁴⁾	0.570	0.572 ⁽⁵⁾	NA
GE	8x8	GE4	146	63	0.640	0.416	0.034	0.493	0.591	0.531
GE	8x8	GE5	150	62	0.640	0.410	0.032	0.483	0.591	0.531
GE	8x8	GE-Pres	150	62	0.640	0.410	0.032	0.483	0.591	0.531
GE	8x8	GE-Barrier	150	62	0.640	0.410	0.032	0.483	0.591	0.531
GE	8x8	GER Type I	150	62	0.640	0.410	0.032	0.483	0.591	0.531
GE	8x8	GE8 Type II	150	60	0.640	0.411	0.032	0.483	2@0.0591 2@0.0483	2@0.531 2@0.4312
GE	8x8	GE9	150	60	0.640	0.411	0.032	0.483	1.34	1.26
GE	8x8	GE10	150	60	0.640	0.411	0.032	0.483	1.34	1.26
Exxon/ANF	8x8	ENC Va and Vb	144	60	0.642	0.4195	0.036	0.5015	0.5015 ⁽⁵⁾	NA
GE	9x9	GE11	146-Full 90-Partial	66-Full 8-Partial	0.566	0.376	0.028	0.440	0.98	0.92
GE	9x9	GE13	146-Full 90-Partial	66-Full 8-Partial	0.566	0.376	0.028	0.440	0.98	0.92
GE	10x10	GE12	150-Full 93-Partial	78-Full 14-Partial	0.510	0.345	0.026	0.404	0.98	0.92

- (1) Reload fuel from other manufacturers with these parameters are also acceptable.
- (2) Variable Fuel Pellet OD – evaluated from 0.468 to 0.488 in same assembly
- (3) Variable Fuel Pellet OD – evaluated from 0.468 to 0.491 in same assembly.
- (4) Variable Fuel Clad Thickness from 0.0355 to 0.0455 in – Thinnest clad thickness listed and conservatively used in the analysis.
- (5) Solid Zirc rod(s)