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LTR-NRC-12-47

June 13, 2012

Subject: Response to the NRC's Request for Supplemental Information on WCAP-17483-P,
"Westinghouse Methodology for Spent Fuel Pool and New Fuel Rack Criticality Safety
Analysis" (Proprietary/Non-Proprietary)

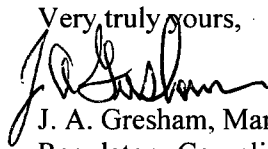
Enclosed are the proprietary and non-proprietary versions of, "Response to the NRC's Request for
Supplemental Information on WCAP-17483-P, 'Westinghouse Methodology for Spent Fuel Pool and
New Fuel Rack Criticality Safety Analysis.'"

Also enclosed is:

1. One (1) copy of the Application for Withholding Proprietary Information from Public Disclosure,
AW-12-3497 (Non-Proprietary), with Proprietary Information Notice and Copyright Notice.
2. One (1) copy of Affidavit (Non-Proprietary).

This submittal contains proprietary information of Westinghouse Electric Company LLC. In
conformance with the requirements of 10 CFR Section 2.390, as amended, of the Commission's
regulations, we are enclosing with this submittal an Application for Withholding Proprietary Information
from Public Disclosure and an affidavit. The affidavit sets forth the basis on which the information
identified as proprietary may be withheld from public disclosure by the Commission.

Correspondence with respect to the proprietary aspects of the application for withholding or the
Westinghouse affidavit should reference AW-12-3497, and should be addressed to J. A. Gresham,
Manager, Regulatory Compliance, Westinghouse Electric Company, Suite 428, 1000 Westinghouse
Drive, Cranberry Township, Pennsylvania 16066.

Very truly yours,

J. A. Gresham, Manager
Regulatory Compliance

Enclosures

cc: E. Lenning
A. Ulises

T007
NRR



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AW-12-3497

June 13, 2012

APPLICATION FOR WITHHOLDING PROPRIETARY
INFORMATION FROM PUBLIC DISCLOSURE

Subject: LTR-NRC-12-47 P-Attachment, "Response to the NRC's Request for Supplemental Information on WCAP-17483-P, 'Westinghouse Methodology for Spent Fuel Pool and New Fuel Rack Criticality Safety Analysis'" (Proprietary)

Reference: Letter from J. A. Gresham to Document Control Desk, LTR-NRC-12-47, dated June 13, 2012

The Application for Withholding Proprietary Information from Public Disclosure is submitted by Westinghouse Electric Company LLC (Westinghouse), pursuant to the provisions of paragraph (b)(1) of Section 2.390 of the Commission's regulations. It contains commercial strategic information proprietary to Westinghouse and customarily held in confidence.

The proprietary information for which withholding is being requested is identified in the proprietary version of the subject report. In conformance with 10 CFR Section 2.390, Affidavit AW-12-3497 accompanies this Application for Withholding Proprietary Information from Public Disclosure, setting forth the basis on which the identified proprietary information may be withheld from public disclosure.

Accordingly, it is respectfully requested that the subject information which is proprietary to Westinghouse be withheld from public disclosure in accordance with 10 CFR Section 2.390 of the Commission's regulations.

Correspondence with respect to the proprietary aspects of the application for withholding or the accompanying affidavit should reference AW-12-3497, and should be addressed to J. A. Gresham, Manager, Regulatory Compliance, Westinghouse Electric Company, Suite 428, 1000 Westinghouse Drive, Cranberry Township, Pennsylvania 16066.

Very truly yours,

A handwritten signature in black ink, appearing to read 'J. A. Gresham', written over a horizontal line.

J. A. Gresham, Manager
Regulatory Compliance

Enclosures

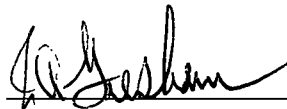
AFFIDAVIT

COMMONWEALTH OF PENNSYLVANIA:

SS


COUNTY OF BUTLER:

Before me, the undersigned authority, personally appeared J. A. Gresham, who, being by me duly sworn according to law, deposes and says that he is authorized to execute this Affidavit on behalf of Westinghouse Electric Company LLC (Westinghouse), and that the averments of fact set forth in this Affidavit are true and correct to the best of his knowledge, information, and belief:


J. A. Gresham, Manager

Regulatory Compliance

Sworn to and subscribed before me
this 13th day of June 2012


Notary Public

COMMONWEALTH OF PENNSYLVANIA

Notarial Seal
Cynthia Olesky, Notary Public
Manor Boro, Westmoreland County
My Commission Expires July 16, 2014
Member, Pennsylvania Association of Notaries

- (1) I am Manager, Regulatory Compliance, in Nuclear Services, Westinghouse Electric Company LLC (Westinghouse), and as such, I have been specifically delegated the function of reviewing the proprietary information sought to be withheld from public disclosure in connection with nuclear power plant licensing and rule making proceedings, and am authorized to apply for its withholding on behalf of Westinghouse.
- (2) I am making this Affidavit in conformance with the provisions of 10 CFR Section 2.390 of the Commission's regulations and in conjunction with the Westinghouse Application for Withholding Proprietary Information from Public Disclosure accompanying this Affidavit.
- (3) I have personal knowledge of the criteria and procedures utilized by Westinghouse in designating information as a trade secret, privileged or as confidential commercial or financial information.
- (4) Pursuant to the provisions of paragraph (b)(4) of Section 2.390 of the Commission's regulations, the following is furnished for consideration by the Commission in determining whether the information sought to be withheld from public disclosure should be withheld.
 - (i) The information sought to be withheld from public disclosure is owned and has been held in confidence by Westinghouse.
 - (ii) The information is of a type customarily held in confidence by Westinghouse and not customarily disclosed to the public. Westinghouse has a rational basis for determining the types of information customarily held in confidence by it and, in that connection, utilizes a system to determine when and whether to hold certain types of information in confidence. The application of that system and the substance of that system constitutes Westinghouse policy and provides the rational basis required.

Under that system, information is held in confidence if it falls in one or more of several types, the release of which might result in the loss of an existing or potential competitive advantage, as follows:

- (a) The information reveals the distinguishing aspects of a process (or component, structure, tool, method, etc.) where prevention of its use by any of

Westinghouse's competitors without license from Westinghouse constitutes a competitive economic advantage over other companies.

- (b) It consists of supporting data, including test data, relative to a process (or component, structure, tool, method, etc.), the application of which data secures a competitive economic advantage, e.g., by optimization or improved marketability.
- (c) Its use by a competitor would reduce his expenditure of resources or improve his competitive position in the design, manufacture, shipment, installation, assurance of quality, or licensing a similar product.
- (d) It reveals cost or price information, production capacities, budget levels, or commercial strategies of Westinghouse, its customers or suppliers.
- (e) It reveals aspects of past, present, or future Westinghouse or customer funded development plans and programs of potential commercial value to Westinghouse.
- (f) It contains patentable ideas, for which patent protection may be desirable.

There are sound policy reasons behind the Westinghouse system which include the following:

- (a) The use of such information by Westinghouse gives Westinghouse a competitive advantage over its competitors. It is, therefore, withheld from disclosure to protect the Westinghouse competitive position.
- (b) It is information that is marketable in many ways. The extent to which such information is available to competitors diminishes the Westinghouse ability to sell products and services involving the use of the information.
- (c) Use by our competitor would put Westinghouse at a competitive disadvantage by reducing his expenditure of resources at our expense.

- (d) Each component of proprietary information pertinent to a particular competitive advantage is potentially as valuable as the total competitive advantage. If competitors acquire components of proprietary information, any one component may be the key to the entire puzzle, thereby depriving Westinghouse of a competitive advantage.
 - (e) Unrestricted disclosure would jeopardize the position of prominence of Westinghouse in the world market, and thereby give a market advantage to the competition of those countries.
 - (f) The Westinghouse capacity to invest corporate assets in research and development depends upon the success in obtaining and maintaining a competitive advantage.
- (iii) The information is being transmitted to the Commission in confidence and, under the provisions of 10 CFR Section 2.390, it is to be received in confidence by the Commission.
- (iv) The information sought to be protected is not available in public sources or available information has not been previously employed in the same original manner or method to the best of our knowledge and belief.
- (v) The proprietary information sought to be withheld in this submittal is that which is appropriately marked in LTR-NRC-12-47 P-Attachment, "Response to the NRC's Request for Supplemental Information on WCAP-17483-P, 'Westinghouse Methodology for Spent Fuel Pool and New Fuel Rack Criticality Safety Analysis'" (Proprietary), for submittal to the Commission, being transmitted by Westinghouse letter, LTR-NRC-12-47, and Application for Withholding Proprietary Information from Public Disclosure, to the Document Control Desk. The proprietary information as submitted by Westinghouse is that associated with Westinghouse's request for NRC approval of WCAP-17483, and may be used only for that purpose.

This information is part of that which will enable Westinghouse to:

- (a) Obtain NRC approval of WCAP-17483-P, "Westinghouse Methodology for Spent Fuel Pool and New Fuel Rack Criticality Safety Analysis."
- (b) Assist customers in analyzing the spent fuel pool and new fuel racks to ensure criticality does not occur.

Further this information has substantial commercial value as follows:

- (a) Westinghouse plans to sell the use of this information to its customers for the purpose of assisting in obtaining license changes.
- (b) The information requested to be withheld reveals the distinguishing aspects of a methodology which was developed by Westinghouse.

Public disclosure of this proprietary information is likely to cause substantial harm to the competitive position of Westinghouse because it would enhance the ability of competitors to provide similar fuel design and licensing defense services for commercial power reactors without commensurate expenses. Also, public disclosure of the information would enable others to use the information to meet NRC requirements for licensing documentation without purchasing the right to use the information.

The development of the technology described in part by the information is the result of applying the results of many years of experience in an intensive Westinghouse effort and the expenditure of a considerable sum of money.

In order for competitors of Westinghouse to duplicate this information, similar technical programs would have to be performed and a significant manpower effort, having the requisite talent and experience, would have to be expended.

Further the deponent sayeth not.

**Response to NRC Request for Supplemental Information on
WCAP-17483-NP, "Westinghouse Methodology for Spent Fuel Pool and New Fuel Rack Criticality
Safety Analysis" (Non-Proprietary)**

June 2012

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1000 Westinghouse Drive
Cranberry Township, PA 16066

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RSI Question 1. Please clearly define limitations and conditions of the methodology in order to clarify the scope of the topical report (TR).

Response:

The Westinghouse methodology is applicable to the following:

- [

] ^{a,c}

The Westinghouse methodology topical does not cover:

- [

] ^{a,c}

RSI Question 2. The criticality code validation does not contain a sufficient number of experiments to validate Erbium, Gadolinium, or Ag-In-Cd as integral poisons. With respect to the criticality code validation of Erbium, Gadolinium, or Ag-In-Cd provide the following: 1. Increase the number of experiments to validate Erbium, Gadolinium, and Ag-In-Cd as integral poisons or remove them from the scope of the TR. If they are retained provide a trend analysis. 2. Describe the effect of the limited number of Erbium, Gadolinium, and Ag-In-Cd experiments on the bias and bias uncertainty determined in TR.

Response:

Erbium Validation: [

] ^{a,c}

Gadolinium Validation : [

] ^{a,c}

Table 2-1	Benchmark cases with UO ₂ -Gd ₂ O ₃ fuel in the Topical Report
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] ^{a,c}

[

] ^{a,c}

Table 2-2 Comparison of Validation Results for []^{a,c}

a,c

Table 2-3 Validation Results for []^{a,c}

a,c

Table 2-4 Bias and Bias Uncertainty [
]^{a,c}

a,c

Table 2-5 Bias and Bias Uncertainty [
]^{a,c}

a,c

Table 2-6 Bias and Bias Uncertainty [
]^{a,c}

a,c

Ag-In-Cd Validation:

[

]a,c

]a,c

Figure 2-1 keff versus Number of Ag-In-Cd Pins

¹*L. W. Newman, Urania-Gadolinia: Nuclear Model Development and Critical Experiment Benchmark, DOE/ET/34212-41 (BAW-1810), Babcock & Wilcox, April 1984.

[

]a.c

RSI Question 3. Section 3.3.5.7 does not have the same topics as the rest of the sections which describe the experiments used in the validation. Is this intentional? If not provide the additional information. If it is intentional, please explain why those topics are not applicable.

Response: This information was not intentionally excluded in the TR and the additional information is provided here. It is pointed out in the TR that the simplifying assumptions made for modeling the []^{a,c} experiments are consistent with those described in the International Handbook of Evaluated Criticality Safety Benchmark Experiments (NEA/NCS/DOC(95)03/IV, 2009 Edition).

Specifically, the following are included in the model:

- []

] ^{a,c}

The following modeling assumptions were followed per the handbook:

- All structures above the active fuel height are neglected.
- The instrumentation thimble, diameter of which is larger than the cell pitch, is represented in a regular cell by homogenizing air and stainless steel such that the mass inventory in the basket is preserved.
- The instrumentation thimble cell without water and lower grid + water + bottom plugs, bottom plugs + water below and above the grid are described with homogenized materials, conserving volume fractions.
- PVC Crossing plates are not included.

Temperature Data

The experimental temperature is reported as 21°C in most cases, except a few values at 20°C and 22°C; therefore a temperature of 22°C is used in the model.

RSI Question 4. The information provided in NUREG/CR-6760, "Study of the Effect of Integral Burnable Absorbers for PWR Burnup Credit," is insufficient in of itself to draw the conclusion that it is always conservative to not model Erbium and Gadolinium as integral poisons. Additionally, besides IFBA, Erbium, and Gadolinium, NUREG/CR-6760 does not consider other potential integral neutron absorbers. Provide the analysis that demonstrates that not modeling Erbium and Gadolinium as integral poisons is always conservative, within the scope of the methodology. The NRC staff expects neutron absorbers not explicitly demonstrated within TR to be outside the scope of methodology.

Response: NUREG-6760 reviews the use of Integral Burnable Absorbers (IBAs) for their impact on reactivity and concludes:

"The analyses described in this report conclusively demonstrate that, with the exception of the Westinghouse IFBA rods, the neutron multiplication factor for an assembly without IBAs is always greater (throughout burnup) than the neutron multiplication factor for an assembly with IBAs, including $\text{UO}_2\text{-Gd}_2\text{O}_3$, $\text{UO}_2\text{-Er}_2\text{O}_3$, and $\text{Al}_2\text{O}_3\text{-B}_4\text{C}$ rods. Therefore, for those IBAs other than IFBAs, burnup credit criticality safety analyses may simply and conservatively neglect the presence of the IBAs by assuming nonpoisoned equivalent enrichment fuel. Considering the variations in IBA assembly designs, neglecting the presence of the IBAs is an important simplifying assumption that does not add significant unnecessary conservatism."

The analyses performed in developing the NUREG-6760 conclusion involved both calculations of an infinite array of assemblies (without fixed poison panels) and cask criticality calculations which included fixed poison panels between assemblies. The IBAs included in the study which relate to this question are $\text{UO}_2\text{-Gd}_2\text{O}_3$ (gadolinia) and $\text{UO}_2\text{-Er}_2\text{O}_3$ (erbia). There were two fuel assembly types used in the gadolinia pin studies, a Siemens 17x17 fuel lattice similar to the Westinghouse 17x17 Standard design, and a CE 16x16 fuel lattice. The erbia pin studies were performed with a CE 14x14 fuel lattice.

The gadolinia study was performed using a 2 dimensional transport code, HELIOS, and included calculations in which both the number and weight percent (wt%) of the gadolinia were varied. A parametric study of the impact of ^{235}U enrichment was also performed. The results of these studies showed that for the two fuel designs, ignoring the presence of gadolinia in depletion was always conservative at all enrichments and with and without fixed poison panels considered.

[

J^{a,c}

Table 4-1: [] a,c	a,c

Table 4-2: [] a,c	a,c

[

] ^{a,c}

² [

] ^{a,c}

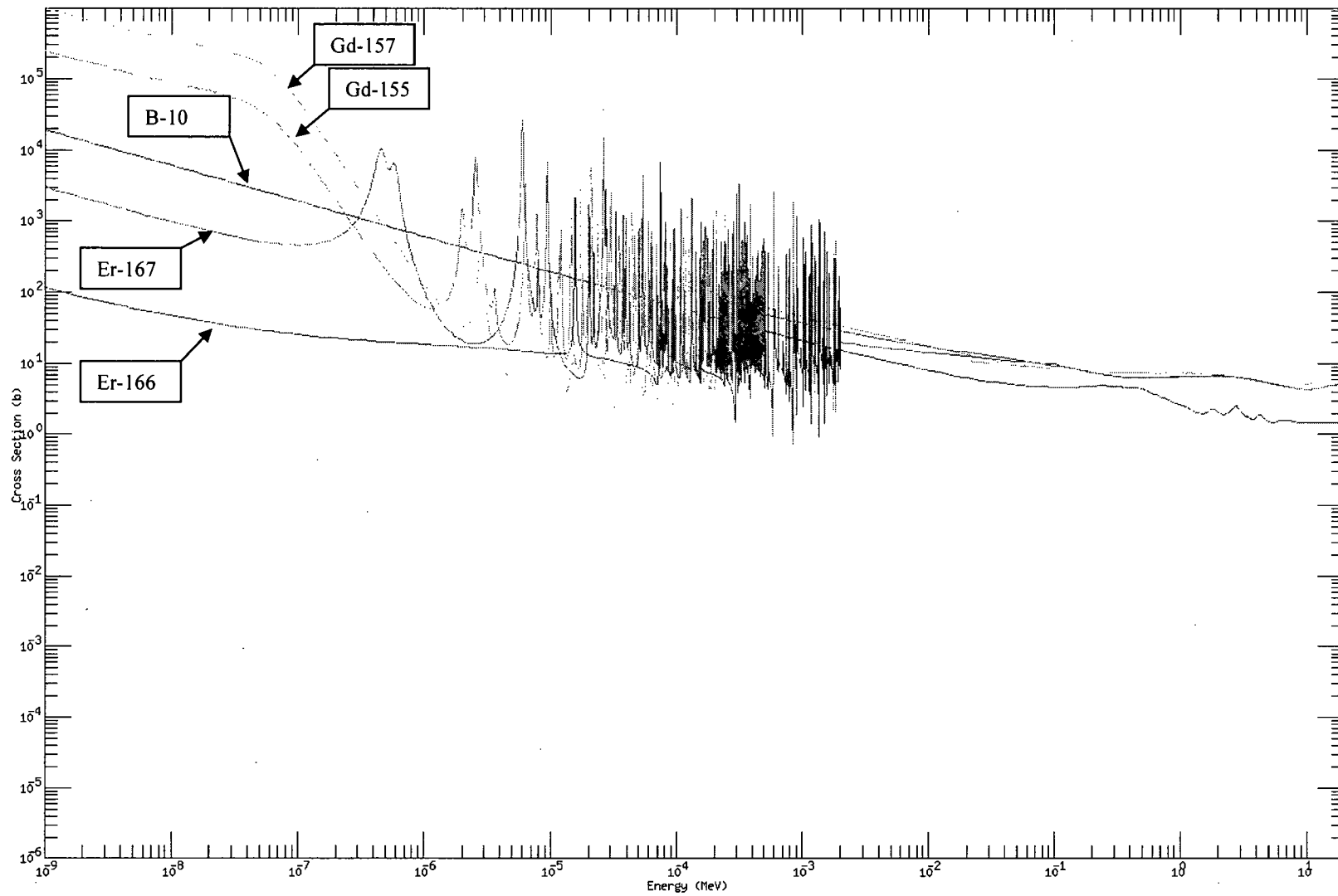


Figure 4-1 ENDF-VI pointwise total cross section data for Gd-155(green), Gd-157 (light green), B-10 (red), Er-166 (purple) and Er-167 (blue)

RSI Question 5. The last sentence in Section 4.1.2.2 is inconsistent with Section 4.1.2. The staff's experience is that it does not always identify the limiting fuel assembly. Provide the analysis that demonstrates that it will always identify the limiting fuel assembly.

Response: [

]a,c

RSI Question 6. It is unclear exactly what is being modeled in Section 4.2.3 and its subsections of the TR. The figures associated with this section indicate that multiple parameters are being varied, but there is no discussion about which parameters are being varied or by how much. Please provide the details of the analysis that are being performed to generate the graphs.

Response: [

]a.c

a/c	
]a/c	
[

Table 6-1

a/c

a/c

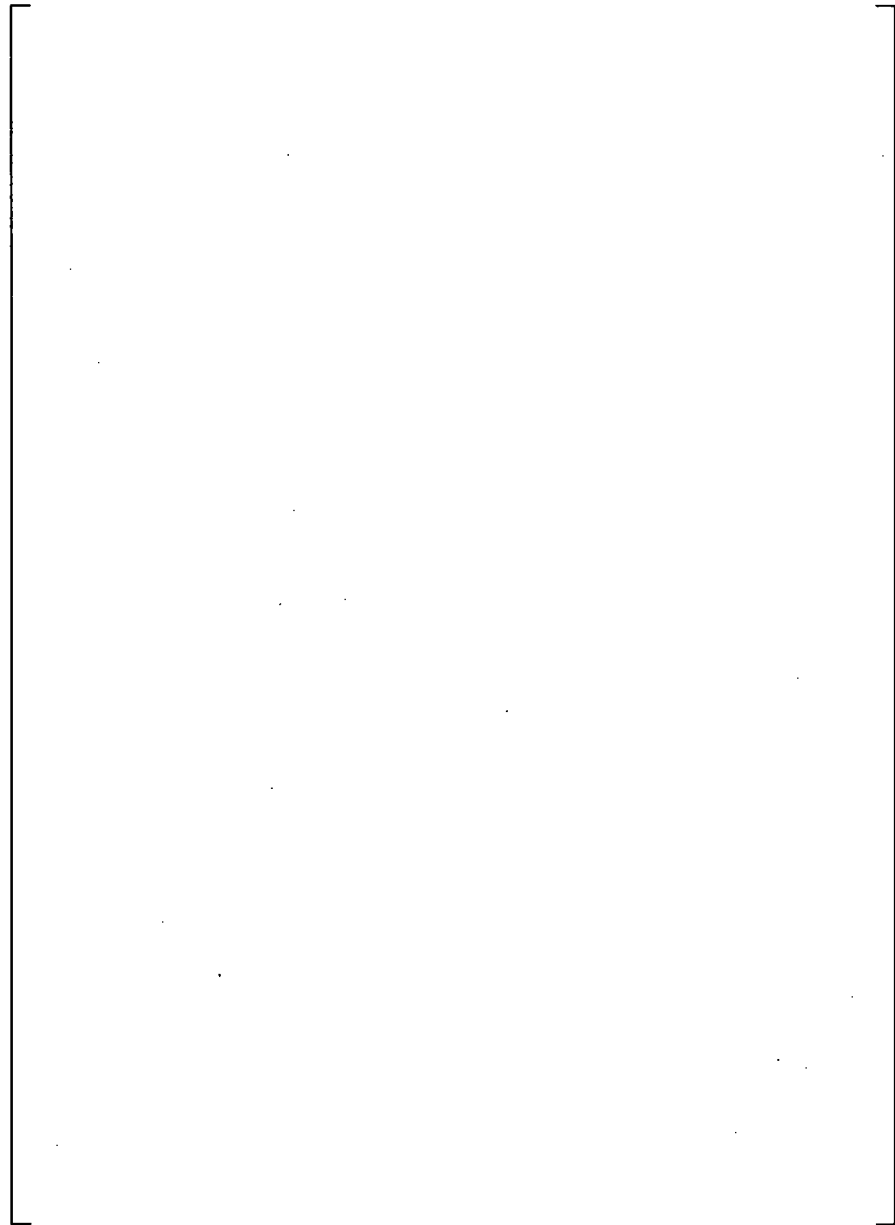
Table 6-2

Table 6-3	[]a,c
		a,c

RSI Question 7. The modeling of spacer grids and other structural aspects of the fuel assembly is not described. Provide the description of how these attributes of the fuel assemblies are being modeled. For example, how are the grids modeled in the depletion analysis? How are the grids modeled in the criticality analysis?

Response: [

j^{a,c}



a,c

Figure 7-1. [

]a,c

RSI Question 8. The axial burnup distributions used in TR are appropriate over certain burnup intervals only. However, the analysis indicates that profiles are being used outside their appropriate burnup interval. Provide the justification as to why this is appropriate.

Response: [

]a,c

RSI Question 9. Please explain the statement made in the last sentence in Section 5.4.2 of the TR by providing the description of the methodology. Please provide a detailed description of how the temperature profile is derived and applied.

Response: [

] ^{a,c}

RSI Question 10. In Section 6.1, as with Section 4.2.3, it is unclear exactly what is being modeled. It is clear from the graphs that several parameters are being varied, but which, when and by how much is not specified. Please provide the details essential for the review to start.

Response: The purposes of Section 6.1 of the TR are to:

1. [

] ^{a,c}

Table 10-1 Fuel Rack Specifications for Plant A		
Parameter	Value	
	Region I	Region II
Cell ID, inch	8.75 [] ^{a,c}	8.80 [] ^{a,c}
Wall thickness, inch	0.075 [] ^{a,c}	0.075 [] ^{a,c}
Cell pitch, inch	10.60 [] ^{a,c}	9.00 [] ^{a,c}
Poison cavity thickness, inch	0.090 [] ^{a,c}	0.064 [] ^{a,c}
Poison thickness, inch	0.078 [] ^{a,c}	0.051 [] ^{a,c}
Sheathing thickness, inch	0.02 [] ^{a,c}	0.02 [] ^{a,c}
Sheathing width, inch	7.50 [] ^{a,c}	7.50 [] ^{a,c}

Table 10-2 Fuel Assembly Specifications for Plant A

Parameter	Value
Assembly type	15x15 STD
Rod Array size	15x15
Rod pitch, inch	0.563 ± [] ^{a,c}
Active fuel length, inch	144
Stack density, % TD	[] ^{a,c}
Total number of Fuel Rods	204
Fuel cladding outer diameter, inch	0.4220 ± [] ^{a,c}
Fuel cladding inner diameter, inch	0.3734 ± [] ^{a,c}
Fuel cladding thickness, inch	0.0243 ± [] ^{a,c}
Pellet diameter, inch	0.3659 ± [] ^{a,c}
Number of Guide/Instrument tubes	20/1
Guide/Instrument tube OD, inch	0.546 ± [] ^{a,c}
Guide/Instrument tube ID, inch	0.512 ± [] ^{a,c}
Guide/Instrument tube thickness, inch	0.017 ± [] ^{a,c}
Note: 1. [] ^{a,c}	

Table 10-3 Fuel Rack Specifications for Plant B	
Parameter	Value
Rack material & density	SS304 7.94 g/cc
Cell inner dimension, inch	8.27 [] ^{a,c}
Cell wall thickness, inch	0.09 [] ^{a,c}
Cell pitch, inch	9.50 [] ^{a,c}
Poison cavity thickness, inch	0.125 [] ^{a,c}
Poison cavity width, inch	8.20 [] ^{a,c}
Sheathing thickness, inch	0.024 [] ^{a,c}

Table 10-4 Fuel Assembly Specifications for Plant B	
Parameter	Value
Assembly type	14x14 422 Vantage +
Rod array size	14x14
Rod pitch, inch	0.556 [] ^{a,c}
Active fuel length, inch	144
Stack density, % TD	[] ^{a,c}
Total number of fuel rods	179
Fuel cladding OD, inch	0.422 [] ^{a,c}
Fuel cladding ID, inch	0.3734 [] ^{a,c}
Fuel cladding thickness, inch	0.0243 [] ^{a,c}
Pellet diameter, inch	0.3659 [] ^{a,c}
Number of guide/instrument tubes	16 / 1
Instrument tube OD, inch	0.4220 [] ^{a,c}
Instrument tube ID, inch	0.3740 [] ^{a,c}
Instrument tube thickness, inch	0.0240 [] ^{a,c}
Guide tube OD, inch	0.5260 [] ^{a,c}
Guide tube ID, inch	0.4920 [] ^{a,c}
Guide tube thickness, inch	0.017 [] ^{a,c}

Table 10-5 Fuel Storage Array Descriptions				
Plant	Fuel Description	Rack Design	Poison Materials per 2x2 Storage Unit (unless otherwise specified)	Empty Cells per 2x2 Storage Unit
A	2-out-of-4 fresh fuel	Region I	None	2
A	All-cell burned fuel	Region I	None	0
A	All-cell burnup credit array with the option to credit control rods and integral absorbers in fresh fuel in place of a burned assembly	Region I	Variable number of Ag-In-Cd Control Rods and Integral Boron based on enrichment and number of fresh assemblies	0
A	All-cell burned fuel	Region I	1 Ag-In-Cd Control Rod	0
A	3-out-of-4 burned fuel	Region II	1 Boron Panel	1
A	All-cell burned fuel	Region II	2 Boron Panels	0
A	All-cell high burnup – low burnup combination	Region II	2 Boron Panels	0
A	All-cell burned fuel	Region II	3 Boron Panels	0
B	All-cell burned fuel	Region I	None	0
B	3-out-of-4 burned fuel	Region I	None	1
B	2-out-of-4 fresh fuel	Region I	None	2
B	3-out-of-4 burned fuel and fresh fuel combination	Region I	None	1
B	3-out-of-4 high burnup – low burnup combination	Region I	None	1
B	All-cell burned fuel	Region I	1 Ag-In-Cd Control Rod per 9 assemblies	0

RSI Question 11. It is unclear in Section 6.1 whether the analysis considered both poisoned and non-poisoned spent fuel storage racks. If both were not considered, provide the rationale for not evaluating both conditions or provide a revised analysis that does consider both.

Response: As discussed in the Response to RSI-10, the trend examination considered a diversity of rack and storage array designs, which included both poisoned and unpoisoned racks.

RSI Question 12. In Table 6-1 the uncertainty for the rack cell pitch for the first eight entries is an order of magnitude larger than last few entries. Explain what is causing this phenomenon.

Response: [

]a,c

a,c



Figure 12-1 [

]a,c

a,c

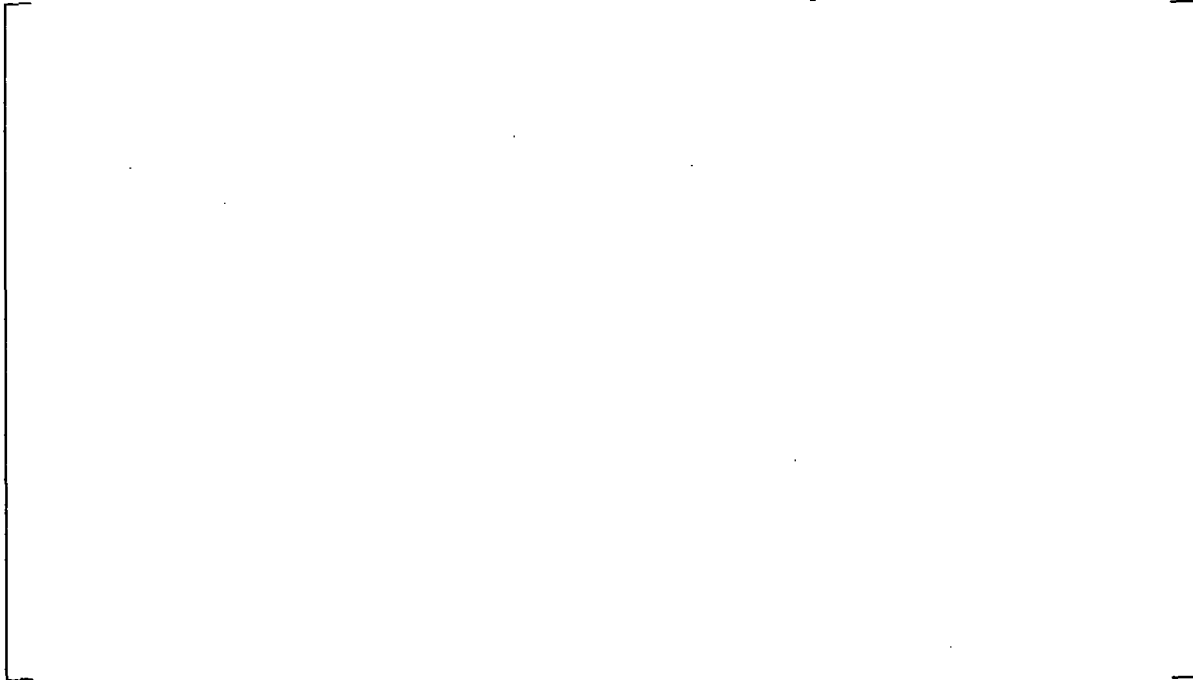


Figure 12-2 [

]a,c

a,c

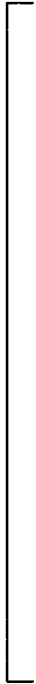
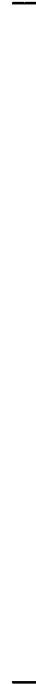


Figure 12-3 [

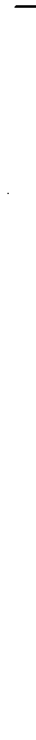


]a,c

a,c



Figure 12-4 [



]a,c

a,c

[

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Figure 12-5 [

]a,c

a,c

[

]

Figure 12-6 [

]a,c

RSI Question 13. The Section 7.4 criteria for determining the limiting accident does not necessarily determine the limiting accident. Another aspect of the limiting accident is the amount of soluble boron required to meet the regulatory requirement. Please revise the criteria for determining the limiting accident to include verification of which accident requires the maximum soluble boron concentration.

Response: A soluble boron concentration sufficient to offset all accidents will be determined by modeling each of the accidents with a bounding boron concentration present. The boron concentration will be determined to be sufficiently high such that the calculated k_{eff} plus the sum of biases and uncertainties is less than 0.95 for all accidents.

RSI Question 14. The accident analysis does not consider that the accident may occur during any normal condition other than the static storage of fuel. Fuel handling, fuel inspection, and fuel reconstitution are examples of normal conditions that may exist in the SFP and may be the initial conditions for an accident. Additionally, a given site may have normal conditions that are unique. Please revise the accident analysis to include a fuller range of normal conditions. The NRC staff expects normal conditions not explicitly demonstrated within the TR to be outside the scope of the methodology.

Response: Normal operations outside of the static storage of fuel in the rack are considered in the evaluation of accidents on a plant specific basis. Normal conditions other than static storage are not addressed for the generic accident evaluation methodology because the fuel assembly that is being worked on is typically isolated. Fuel inspection and reconstitution typically require the fuel to be moved at least one rack cell pitch away from other fuel and fuel movement occurs above the fuel storage racks; both of these fuel handling activities neutronically decouple the fuel from other fissile material. The isolation of the fuel assemblies leads to a decrease in reactivity relative to the static storage configuration. Additionally, plants can have different normal conditions and different procedures for the performance of individual conditions. It is not possible to generically evaluate these plant specific processes. Therefore, these processes will be considered on a plant specific basis.

RSI Question 15. Statements "may be used with justification" and "shall be justified on the analysis specific basis" are consistently used within the TR. These statements are vague and do not provide NRC staff basis for the review. Please describe what actions will be taken including the methodology, acceptance criteria and bounds within which they will be used.

Response: The limitations and conditions of the methodology are outlined in the response provided in RSI Question 1. All plant-specific analysis items outside the scope of the topical will satisfy the same acceptance criteria described in Sections 2.1 and 2.2 of the TR. The statements such as "shall be justified on the analysis specific basis" recognize the ability for areas outside of the approval scope of the topical report to be identified and submitted as part of a plant specific analysis in a License Amendment Request. While this is not expected to be a common occurrence, it is a necessary flexibility to accommodate plant specific issues that cannot be covered generically in the topical report.

[

]a,c

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