



July 18, 2016

SRNL-L4500-2016-00091

Division of Spent Fuel Management
Office of Nuclear Material Safety and Safeguards
ATTN: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Submittal of Model 9979 SAR Revision 1 and SRNL RAI Responses (U) – Docket No. 71-9979

Ref: NRC, "Request for Additional Information for the Review of the Model No. 9979 Package,
June 7, 2016, NRC Docket No. 71-9979, CAC No. L25101

This memo transmits Revision 1 of the Model 9979 SAR, S-SAR-G-00002, for Texas A&M University AGN Fuel Contents along with Savannah River National Laboratory responses to the referenced RAIs on Revision 0 of the 9979 SAR.

The enclosed submittal includes:

- 1 redacted hardcopy 9979 SAR Revision 1, S-SAR-G-0002, for NRC Public Release
- 1 proprietary hardcopy of Revision 1 for NRC Document Control
- 1 hardcopy of SRNL responses to RAIs, U-SARQ-A-00012, and
- Affidavit

If you have any questions concerning the submittal please contact me at (803) 725-3738 or Kurt Eberl at (803) 725-2656.

Sincerely,

A handwritten signature in black ink that reads "Paul S. Blanton".

Paul S. Blanton
Program Manager
Packaging Technology and Pressurized Systems
Savannah River National Laboratory

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NM5501

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Copies sent to:

| | |
|---------------|-----------------|
| Rich Werdann | ReNuke Services |
| Steve Bellamy | SRNL/PT&PS |
| Paul Blanton | SRNL/PT&PS |
| Kurt Eberl | SRNL/PT&PS |

List of enclosures (.pdf files)

9979_NRC_SAR_Cx_R1.pdf
9979_NRC_SAR_Appendices.pdf
U-SARQ-A-00012, 7/15/2016
Affidavit

(where Cx is Chapters 0 through 8)
(App 1.1, 3.1, 3.2, 4.1, 5.1, 6.1 and 8.1)
(SRNL RAI responses w/references)
(Executed on 7/18/2016, J.S. Bellamy)

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AFFIDAVIT PURSUANT TO 10 CFR 2.390

State of South Carolina)
) SS.
 County of Aiken)

I, John S. Bellamy, depose and say as follows:

- (1) I am the Manager of *Savannah River Nuclear Solutions* Packaging Technology and Pressurized Systems Group for the Model 9979, and have been delegated the function of reviewing the information described in paragraph (2) which is sought to be withheld, and have been duly authorized to apply for its withholding.
- (2) The information sought to be withheld is contained in the document listed in Table 1. This document has been appropriately designated as proprietary on the basis of (4)(ii)(a), (b), (c), (f) and (g) as described below.

TABLE 1

| Document No. | Document Title | Rev/Date |
|---|---|------------------------|
| SAR Model 9979 Type AF Shipping Package, Appendix 1.1 | Engineering Drawings | Rev 1 / July 2016 |
| SAR Model 9979 Type AF Shipping Package, Appendix 8.1 | Acceptance Tests for DOW BETAFOAM™ 87100/87124 in the 9979 Packaging | Rev 1 / July 2016 |
| M-TRT-A-00007 | 9977 General Purpose Fissile Packaging Prototype Testing | May 2006 |
| NT-TDR-08-010 | Structural Testing of the SRNL Bulk Tritium Shipping Package | Rev 0, June 2, 2008 |
| M-CLC-A-00471 | HAC Thermal Benchmark Analysis for the BTSP | Rev 0, August 27, 2014 |
| Southwest Research Institute, Memorandum | Custom Fire Test Results for Next Generation Rail Tank Car (NGRTC) Final Report | April 15, 2008 |

- (3) I have personal knowledge of the criteria and procedures used by Savannah River Nuclear

Solutions and its Vendors in designating information as trade secret, privileged, or as confidential or financial sensitive information associated with the Model 9979 Packaging.

- (4) Pursuant to the provisions of paragraph (b)(4) of 10 CFR 2.390, the following is furnished for consideration by the Commission in determining whether the information sought to be withheld from public disclosure, including the information as designated in paragraph (2) above, should be withheld.
- (i) The information sought to be withheld from public disclosure is included in the report documenting information which is owned and has been held in confidence by *Savannah River Nuclear Solutions*.
- (ii) The information is of a type customarily held in confidence by *Savannah River Nuclear Solutions* and not customarily disclosed to the public by agreement with the Department of Energy and the National Nuclear Security Administration. *Savannah River Nuclear Solutions* 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 constitute *Savannah River Nuclear Solutions* policy and provide 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., and the prevention of its use by *Savannah River Nuclear Solutions'* competitors, without license from *Savannah River Nuclear Solutions*, gives *Savannah River Nuclear Solutions* a competitive economic advantage.
- (b) The information consists of supporting data (including test data) relative to a process or component, structure, tool, method, etc. and gives *Savannah River*

Nuclear Solutions a competitive economic advantage, e.g., by optimization or improved marketability.

- (c) The information, if used by a competitor, would reduce the competitor's expenditure of resources or improve the competitor's advantage in the design, manufacture, shipment, installation, assurance of quality, or licensing of a similar product.
 - (d) The information reveals cost or price information, production capacities, budget levels, or commercial strategies of *Savannah River Nuclear Solutions*, its customers or suppliers.
 - (e) The information reveals aspects of past, present, or future *Savannah River Nuclear Solutions* or customer funded development plans and programs of potential commercial value to *Savannah River Nuclear Solutions*.
 - (f) The information contains patentable ideas, for which patent protection may be desirable.
 - (g) The information is third-party Proprietary Information.
- (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 and being transmitted by *Savannah River Nuclear Solutions* to the Document Control Desk. The proprietary information has been presented to the Nuclear Regulatory Commission and is being voluntarily provided by *Savannah River*

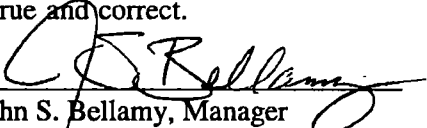
Nuclear Solutions.

- (vi) Public disclosure of the information is likely to cause harm to the competitive position of *Savannah River Nuclear Solutions* because:
- (a) Similar products are manufactured and sold by competitors of Savannah River Nuclear Solutions.
 - (b) The development of this information by *Savannah River Nuclear Solutions* is the result of a significant expenditure of staff effort and a considerable monetary investment. To the best of my knowledge and belief, a competitor would have to undergo similar effort and expense in generating equivalent information.
 - (c) In order to acquire such information, a competitor would also require considerable time and inconvenience.
 - (d) The information consists of detailed descriptions, properties and test data. The availability of such information to competitors would enable them to modify their product to better compete with *Savannah River Nuclear Solutions*, take marketing or other actions to improve their product's position or impair the position of *Savannah River Nuclear Solutions'* product, and avoid developing fabrication data in support of their processes, methods, and/or apparatus.
 - (e) In pricing *Savannah River Nuclear Solutions'* products and services, significant research, development, engineering, analytical, licensing, fabrication, quality assurance and other costs must be included. The ability of Savannah River Nuclear Solutions' competitors to utilize such information without similar expenditure of resources may enable them to sell their product at prices reflecting significantly lower costs.

Further the deponent sayeth not.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on 7-12-2016
Date


John S. Bellamy, Manager
Packaging Technology and Pressurized Systems
Savannah River Nuclear Solutions