



March 30, 2016
ES/NRC 16-007
Docket No. 71-9320

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

Subject: Request to Amend Certificate of Compliance No. 9320, Revision 2 for the MIDUS Transportation Package

References: (1) Certificate of Compliance 9320, Docket No. 71-9320, Revision 2.

EnergySolutions (ES) hereby submits an application to the U.S. Nuclear Regulatory Commission (NRC) to amend the Certificate of Compliance (CoC) for the MIDUS Transportation Package (Reference 1). The application requests the addition of a new solid Mo-99 payload. No physical changes have been made to the packaging.

A summary of the specific proposed changes to the MIDUS SAR is provided in Attachment 1 of this letter. Enclosure 1 contains one (1) paper copy of the non-public version of the revised SAR that contains proprietary and security-related information that should be withheld under 10 CFR 2.390. Enclosure 2 contains one (1) paper copy of the public version of the revised SAR in which all proprietary and security-related information is redacted. An affidavit containing a full statement of the reasons that the proprietary information in the SAR should be withheld from the public, pursuant to the requirements of 10 CFR 2.390, is included in Attachment 2 of this letter.

Should you or any member of your staff have questions, please contact me at (408) 558-3509.

Sincerely,

A handwritten signature in black ink, appearing to read "Sisley".

Steven E. Sisley
Cask Licensing Manager

Attachments:

- 1) Summary of Changes, MIDUS Transportation Package SAR, Revision 3.
- 2) Affidavit pursuant to 10 CFR 2.390.

NM5520

Enclosures:

- 1) MIDUS Transportation Package Safety Analysis Report, Document No. TYC01-1600, Revision 3, March 2016, Non-Public Version (1 paper copy), **(Proprietary and Security-Related Information – Withhold Under 10 CFR 2.390)**,
 - 2) MIDUS Transportation Package Safety Analysis Report, Document No. TYC01-1600, Revision 3, March 2016, Public Version (1 paper copy),
- cc) Norma Garcia-Santos, USNRC, NMSS, DSFM
Dan Shrum, *EnergySolutions*

**Summary of Changes, MIDUS Transportation Package SAR, Revision 3
 (4 pages)**

Section	Page(s)	Change	Purpose
Front Matter	ii	Deleted "Approved for Release" block and added "This page intentionally blank."	Design release of SAR documented in separate form.
Front Matter	xix	Revised Nomenclature definitions of Package and Product and deleted SFD acronym.	Definitions made non-payload specific. Removed company division (SFD) from company name.
1.1	1-1	Revised and combined 1 st two sentences of 1 st paragraph; added sentence to end of 1 st paragraph; revised content definition in 2 nd paragraph; delete references to SFD; revised QA program certificate number.	Editorial change; editorial revisions for clarity; removed company division from company name; update to refer to corporate QA program.
1.2.1.2	1-3	Revised description of the worst-case HAC scenario for source migration around the shield plug.	Removed payload-specific terminology and editorial corrections for clarity.
1.2.2	1-5	Added new paragraph.	General discussion for multiple content specifications.
1.2.2.1	1-5, 1-6	Changed section heading; merged previous Section 1.2.2.2 into current Section 1.2.2.1; revised to refer to liquid payload as Content #01; added reference to content specification on drawing.	Editorial changes to facilitate addition of the solid payload.
Figure 1-1	1-7	Added content number to caption.	Content-specific payload internals.
1.2.2.2	1-8	Section added for Content #02.	Discuss sections that describe specification and evaluation of Content #02.
1.3.2	1-9	Changed drawing revision numbers.	Updated for revised drawings.

**Summary of Changes, MIDUS Transportation Package SAR, Revision 3
 (4 pages)**

Section	Page(s)	Change	Purpose
1.3.2	---	Revised Dwg. No. TYC01-1601 to replace flagnotes 2 through 5 with new flagnote 3 and add new tabular format for content specifications with new Content #02; Renumber flagnote 6 to flagnote 2; replace consignee-specific information on nameplate with new flagnote 4 identifying consignee information required on nameplate.	Revised presentation of content specification for added clarity for multiple contents; editorial change; specific consignee name and address removed from SAR to allow for multiple consignees.
1.3.2	---	Revised Dwg. No. TYC01-1604, to show closure bolt in section view in Detail C on sheet 1; remove "MAX" from the dimensional call-out for radius at bottom of O-ring groove in Detail B on sheet 2.	Editorial correction. "MAX" call-out conflicts with dimension tolerance specified.
1.3.2	---	Revised Dwg. No. TYC01-1606, Sheet 1: Reduced minimum Charpy V-notch impact energy to 6 ft-lb in Note 2; Deleted phantom outline of payload internals in Section A-A.	Charpy V-notch impact energy reduced based on material availability; payload outline is not relevant to gamma shielding
2.	2-1	Added text to first paragraph to discuss evaluation of different contents.	Clarification for multiple content specifications.
2.1.2.5	2-12	Reduced minimum Charpy V-notch impact energy from 10 ft-lb to 6 ft-lb.	Charpy V-notch impact energy reduced based on material availability
Table 2-9	2-22 thru 2-24	Deleted reference to SFD (7 places); deleted reference to MSC (1 place).	Removed company division from company name; reference to fabricator by name is not necessary.

**Summary of Changes, MIDUS Transportation Package SAR, Revision 3
 (4 pages)**

Section	Page(s)	Change	Purpose
Table 2-10	2-25 thru 2-27	Deleted reference to SFD (8 places); deleted reference to MSC (2 places).	Removed company division from company name; reference to fabricator by name is not necessary.
2.3.1	2-49	Deleted reference to SFD (2 places); revised QA program certificate number.	Removed company division from company name; update to refer to corporate QA program
2.3.2	2-52, 2-53	Deleted reference to SFD (2 places).	Removed company division from company name.
2.3.2	2-53	Material Tests: Reduced minimum Charpy V-notch impact energy from 10 ft-lb to 6 ft-lb.	Charpy V-notch impact energy reduced based on material availability
2.6.5	2-84	Changed "bottom end drop" to "vibration".	Editorial correction.
2.12.2	2-173	Deleted reference to SFD (4 places).	Removed company division from company name.
3.	3-1	Added text to first paragraph to discuss evaluation of different contents; deleted reference to SFD (2 places).	Clarification for multiple content specifications; removed company division from company name.
5.	5-1	Added text to first paragraph to discuss evaluation of different contents.	Clarification for multiple content specifications.
7.1.2	7-3	Steps 1, 4, and 5 revised to eliminate content-specific terminology for payload internals; Steps 5 and 6 revised to account for loading of payload for Content #01 and #02.	Editorial changes; Content #01 is mechanically connected to shield plug whereas Content #02 is placed directly into cask cavity.
7.2.2	7-7	Step 5 revised to address removal of payload for Content #01 and #02.	Content #01 is mechanically connected to shield plug whereas Content #02 is placed directly into cask cavity.

**Summary of Changes, MIDUS Transportation Package SAR, Revision 3
(4 pages)**

Section	Page(s)	Change	Purpose
7.3	7-8	Step 4 revised to eliminate content-specific terminology for payload internals.	Editorial change.
Chapter 9	9-1 thru 9-6	New chapter addenda added for solid Mo-99 payload.	Description and evaluation of new Mo-99 payload.

AFFIDAVIT PURSUANT TO 10 CFR 2.390

State of California)
) SS.
County of Santa Clara)

I, Steven E. Sisley, depose and say as follows:

- (1) I am Cask Licensing Manager of *EnergySolutions*, 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.

TABLE 1

Document No.	Document Title	Rev/Date
TYC01.1600	MIDUS Transportation Package Safety Analysis Report	3

- (3) I have personal knowledge of the criteria and procedures used by *EnergySolutions* in designating information as trade secret, privileged, or as confidential commercial or financial information.
- (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 *EnergySolutions*.

- (ii) The information is of a type customarily held in confidence by *EnergySolutions* and not customarily disclosed to the public. *EnergySolutions* 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 *EnergySolutions*' 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., and the prevention of its use by *EnergySolutions*' competitors, without license from *EnergySolutions*, gives *EnergySolutions* 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 *EnergySolutions* 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.

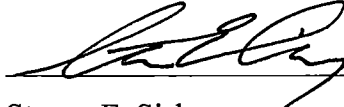
- (d) The information reveals cost or price information, production capacities, budget levels, or commercial strategies of *EnergySolutions*, its customers or suppliers.
 - (e) The information reveals aspects of past, present, or future *EnergySolutions* or customer funded development plans and programs of potential commercial value to *EnergySolutions*.
 - (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 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 *EnergySolutions* to the Document Control Desk. The proprietary information has been presented to the Nuclear Regulatory Commission and is being voluntarily provided by *EnergySolutions*.
 - (vi) Public disclosure of the information is likely to cause substantial harm to the competitive position of *EnergySolutions* because:
 - (a) Similar products are manufactured and sold by competitors of *EnergySolutions*.

- (b) The development of this information by *EnergySolutions* is the result of a significant expenditure of staff effort and a considerable sum of money. 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 *EnergySolutions*, take marketing or other actions to improve their product's position or impair the position of *EnergySolutions*' product, and avoid developing fabrication data in support of their processes, methods, and/or apparatus.
- (e) In pricing *EnergySolutions*' products and services, significant research, development, engineering, analytical, licensing, fabrication, quality assurance and other costs must be included. The ability of *EnergySolutions*' 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 forgoing is true and correct.

Executed on March 30, 2016
Date



Steven E. Sisley
Cask Licensing Manager
EnergySolutions