

Part 21 (PAR)

Event # 47895

Rep Org: ENERGYSOLUTIONS	Notification Date / Time: 05/03/2012 11:02 (EDT)
Supplier: ENERGYSOLUTIONS	Event Date / Time: 05/03/2012 (MDT)
	Last Modification: 05/25/2012
Region: 4	Docket #:
City: SALT LAKE CITY	Agreement State: Yes
County:	License #:
State: UT	
NRC Notified by: DAN SHRUM	Notifications: GREG WERNER R4DO
HQ Ops Officer: PETE SNYDER	RICHARD CONTE R1DO
Emergency Class: NON EMERGENCY	DEBORAH SEYMOUR R2DO
10 CFR Section:	MARK RING R3DO
21.21(d)(3)(i) DEFECTS AND NONCOMPLIANCE	PART 21 REACTOR GRP EMAIL
	PART 21 MATERIALS GR EMAIL

SHIPPING CASKS TAKEN OUT OF SERVICE FOR ACCIDENT SCENARIO NOT PREVIOUSLY ANALYZED

"This serves as notification of a regulatory compliance issue with the 10-160B Type B Cask (Certificate of Compliance #9204) and the 8-120B Type B Cask (Certificate of Compliance #9168). This notification is being made in accordance with 10 CFR Part 21.21(d)(3)(i). These casks have been administratively placed out of service as Type B Packages until a complete determination can be made by Energy Solutions and the Nuclear Regulatory Commission (NRC).

"As part of the relicensing of new 8-120B Casks, EnergySolutions identified a hypothetical accident scenario required by 10 CFR 71 which was not previously analyzed as part of the original or ongoing licensing activities. This analysis confirmed that the current cask design does not comply with the Type B package requirement for this specific accident scenario. The 10-160B has a similar design. As such, the casks have been placed out of service. EnergySolutions initiated Condition Report ENG-CR12-018 to track this issue.

"In accordance with 10 CFR Part 21.21(d)(4), EnergySolutions will provide written notification to the NRC within 30 days with additional information including corrective actions."

*** UPDATE AT 1644 EDT ON 5/25/12 FROM SHRUM TO HUFFMAN ***

The licensee provided a 30-day written follow-up report to the condition described above:

"Pursuant to the requirements of 10 CFR 21, EnergySolutions is providing this thirty day written report as required by 10 CFR 21.21(d)(3)(ii).

"On May 3, 2012, the Senior Vice President, Regulatory Affairs, of EnergySolutions provided written notification to

JEI9
NRC

Part 21 (PAR)

Event # 47895

the NRC Operations Center of a regulatory compliance issue with the 10-160B Type B Cask (Certificate of Compliance #9204) and the 8-120B Type B Cask (Certificate of Compliance #9168) as required by 10 CFR 21.21(d)(3)(i).

"Information required to be reported by 10 CFR 21.21(d)(3)(ii) is provided as follows:

(4) The written report required by this paragraph shall include, but need not be limited to, the following information, to the extent known:

(i) Name and address of the individual or individuals informing the Commission.

"Dan Shrum, EnergySolutions Senior Vice President, Regulatory Affairs
423 West 300 South, Suite 200
Salt Lake City, UT 84103

(ii) Identification of the facility, the activity, or the basic component supplied for such facility or such activity within the United States which fails to comply or contains a defect.

"Model 8-120B Package, USA/9168B(U)
"Model 10-160B Package, USA/9204B(U)F-96

(iii) Identification of the firm constructing the facility or supplying the basic component which fails to comply or contains a defect.

"The basic component is supplied by EnergySolutions

(iv) Nature of the defect or failure to comply and the safety hazard which is created or could be created by such defect or failure to comply.

"A Hypothetical Accident Condition was identified that had not been previously analyzed. Evaluation of this accident scenario found that during the thermal test the package secondary lid seals might reach a temperature exceeding the temperature limit for the seal material. If the temperature exceeds the limit, the seals may fail. Failure of the seals could result in a release of radioactive material exceeding the limits of 10 CFR 71.51.

(v) The date on which the information of such defect or failure to comply was obtained.

"Confirmatory calculations of the engineering analysis issue were completed on May 26, 2012.

(vi) In the case of a basic component which contains a defect or fails to comply, the number and location of these components in use at, supplied for, being supplied for, or may be supplied for manufactured, or being manufactured for one or more facilities or activities subject to the regulations in this part.

"The packages, as currently designed, meet the requirements of a Type A or IP-2 package and some are being used in that capacity. The package location listed below is as of 5/23/12.

MODEL	NUMBER	LOCATION(S)
8-120B	4	120B-1 Cooper Nuclear Station in Nebraska; 120B-2 in transit to Tennessee; 120B-1S in to transit to Tennessee; 120B-2S in transit to Tennessee
10-160B	6	160B-1 Bremerton, WA; 160B-2 Columbia, SC; 160B-3 Portsmouth, MA; 160B-4 Canada; 160B-5 Canada; 160B-6 Kittery, ME; 160B-7 Carlsbad, NM; 160B-8 Columbia, SC

(vii) The corrective action which has been, is being, or will he taken; the name of the individual or organization

Part 21 (PAR)

Event # 47895

responsible for the action; and the length of time that has been or will be taken to complete the action,

"EnergySolutions issued a Condition Report, ENG-CR12-018, on 4/26/12 identifying the issue and beginning the internal investigation process to determine the cause of the defect and identify corrective action(s); this internal investigation is in progress. The packages were taken out of service as of 4/27/12. EnergySolutions has submitted a request for NRC approval to continue use of the packages for a limited time. EnergySolutions will submit a request to the NRC before the end of May 2012 for approval of a change to the package design supported by a revision to the SAR demonstrating compliance with the requirements of Part 71.

(viii) Any advice related to the defect or failure to comply about the facility, activity, or basic component that has been, is being, or will be given to purchasers or licensees.

"Owners and users of the packages have been informed of the defect and have concurred with EnergySolution's action to remove the packages from service. Any action by the NRC on continued use will be communicated to the package users and owners. Once NRC has approved the design change, users and owners will be notified and modifications to the packages will be made to conform with the approved design.

(ix) In the case of an early site permit, the entities to whom an early site permit was transferred.

"Not applicable"

The R1DO (Trapp), R2DO (Sykes), R3DO (Dailey); R4DO (Spitzburg) & NMSS EO (Smith) were notified. Copies of this report were sent to the Part 21 Reactors and Materials Group and FSME Event Resource via e-mail.

ATTN:

FROM: Karen Kirkwood

DATE: May 25, 2012

SUBJECT: Required Follow-Up - Type B Cask Thermal Analysis

JOB: 9440

ATTACH: "S75BW-112052513360.pdf"

This Fax Originated From a Biscom 'Faxcom'.

MEMO:

Attached sent on behalf of Daniel B. Shrum, Sr. VP, Regulatory Compliance

Karen Kirkwood
Administrative Assistant of Regulatory Compliance
EnergySolutions
423 West 300 South, Suite 200
Salt Lake City, UT 84101
Phone: 801-649-2146
Fax: 801-413-5646



Fax Cover Sheet

Date: May 25, 2012

To: Operations Center

From: Dan Shrum  5/25/2012

Company: Nuclear Regulatory Commission

Phone: (301) 816-5100

Phone: 801-649-2000

Fax: (301) 816-5151

Fax: 801-416-5646

Re: Required follow-up

Number of pages including cover sheet: 4

Message: See attached follow-up report

This facsimile transmission (and/or the documents accompanying it) is intended only for the use of the individuals or entities to whom it is addressed. This transmission contains information from EnergySolutions which may be privileged, confidential or exempt from disclosure under applicable law. If the reader of this transmission is not the intended recipient, you are hereby notified that any dissemination, distribution, copying or the taking of any action in reliance on the contents of this transmission is strictly prohibited. If you have received this transmission in error, please notify us immediately at our telephone number listed below. We will be happy to arrange for the return of this transmission to our offices at no cost to you.

423 West 300 South, Suite 200 • Salt Lake City, Utah 84101 • 801.649.2000 • Fax: 801.321.0453

www.energysolutions.com

Report to the US Nuclear Regulatory Commission (USNRC)

Type B Cask Thermal Analysis

May 25, 2012

PURPOSE OF THE REPORT

Pursuant to the requirements of 10 CFR 21, EnergySolutions is providing this thirty day written report as required by 10 CFR 21.21(d)(3)(ii).

On May 3, 2012, the Senior Vice President, Regulatory Affairs, of EnergySolutions provided written notification to the NRC Operations Center of a regulatory compliance issue with the 10-160B Type B Cask (Certificate of Compliance #9204) and the 8-120B Type B Cask (Certificate of Compliance #9168) as required by 10 CFR 21.21(d)(3)(i).

Information required to be reported by 10 CFR 21.21(d)(3)(ii) is provided as follows:

(4) The written report required by this paragraph shall include, but need not be limited to, the following information, to the extent known:

(i) Name and address of the individual or individuals informing the Commission.

Dan Shrum, EnergySolutions Senior Vice President, Regulatory Affairs

423 West 300 South, Suite 200

Salt Lake City, UT 84103

(ii) Identification of the facility, the activity, or the basic component supplied for such facility or such activity within the United States which fails to comply or contains a defect.

Model 8-120B Package, USA/9168/B(U)

Model 10-160B Package, USA/9204/B(U)F-96

(iii) Identification of the firm constructing the facility or supplying the basic component which fails to comply or contains a defect.

The basic component is supplied by EnergySolutions

(iv) Nature of the defect or failure to comply and the safety hazard which is created or could be created by such defect or failure to comply.

A Hypothetical Accident Condition was identified that had not been previously analyzed.

Evaluation of this accident scenario found that during the thermal test the package secondary lid

seals might reach a temperature exceeding the temperature limit for the seal material. If the temperature exceeds the limit, the seals may fail. Failure of the seals could result in a release of radioactive material exceeding the limits of 10 CFR 71.51.

(v) The date on which the information of such defect or failure to comply was obtained.

Confirmatory calculations of the engineering analysis issue were completed on May 26, 2012.

(vi) In the case of a basic component which contains a defect or fails to comply, the number and location of these components in use at, supplied for, being supplied for, or may be supplied for, manufactured, or being manufactured for one or more facilities or activities subject to the regulations in this part.

The packages, as currently designed, meet the requirements of a Type A or IP-2 package and some are being used in that capacity. The package location listed below is as of 5/23/12.

MODEL	NUMBER	LOCATION(S)
8-120B	4	120B-1 Cooper Nuclear Station in Nebraska; 120B-2 in transit to Tennessee; 120B-1S in transit to Tennessee, 120B-2S in transit to Tennessee
10-160B	6	160B-1 Bremerton, WA; 160B-2 Columbia, SC; 160B-3 Portsmouth, MA; 160B-4 Canada; 160B-5 Canada; 160B-6 Kittery ME; 160B-7 Carlsbad, NM; 160B-8 Columbia, SC

(vii) The corrective action which has been, is being, or will be taken; the name of the individual or organization responsible for the action; and the length of time that has been or will be taken to complete the action.

EnergySolutions issued a Condition Report, ENG-CR12-018, on 4/26/12 identifying the issue and beginning the internal investigation process to determine the cause of the defect and identify corrective action(s); this internal investigation is in progress. The packages were taken out of service as of 4/27/12. EnergySolutions has submitted a request for NRC approval to continue use of the packages for a limited time. EnergySolutions will submit a request to the NRC before the end of May 2012 for approval of a change to the package design supported by a revision to the SAR demonstrating compliance with the requirements of Part 71.

(viii) Any advice related to the defect or failure to comply about the facility, activity, or basic component that has been, is being, or will be given to purchasers or licensees.

Owners and users of the packages have been informed of the defect and have concurred with EnergySolution's action to remove the packages from service. Any action by the NRC on continued use will be communicated to the package users and owners. Once NRC has approved the design change, users and owners will be notified and modifications to the packages will be made to conform with the approved design.

(ix) In the case of an early site permit, the entities to whom an early site permit was transferred.

Not applicable

This report is provided to the USNRC by *EnergySolutions* on May 25, 2012.

A handwritten signature in black ink, appearing to read "Daniel B. Shrum". The signature is fluid and cursive, with the first name being the most prominent.

Daniel B. Shrum
Senior Vice President, Regulatory Affairs
EnergySolutions