

## FCNMED Redaction

The Nuclear Material Events Database (NMED) was developed for the Nuclear Regulatory Commission (NRC) by the Idaho National Laboratory (INL) in 1993. NMED contains records of events involving nuclear material such as lost/stolen material, medical events, personnel overexposures, equipment failures, etc. The information contained in NMED is obtained from publically available references (Event Notification Reports, Inspection Reports, Licensee Reports, etc.).

In 2004, NRC directed INL to remove events involving Nuclear Fuel Services (NFS) and BWX Technologies, Inc. (BWXT; Previously named Babcock & Wilcox, Co.) from NMED because the events were reclassified as non-publically available information. However, there was still an interest in tracking material events involving those facilities, so a separate database was created (designated the Fuel Cycle Nuclear Material Events Database, or FCNMED). A total of 169 events were moved from NMED to FCNMED on 7/22/2004. The FCNMED software was transmitted to personnel in the Division of Fuel Cycle Safety and Safeguards (FCSS), which is under NRC's Office of Nuclear Material Safety and Safeguards (NMSS), on 8/31/2004 to allow them to enter future events involving NFS and BWXT.

On or about 11/5/2005, the INL was directed to resume entering events into FCNMED for FCSS. In late 2007, NRC decided to retire FCNMED, redact the event information in FCNMED, and add the events to NMED.

This document contains the NRC-redacted event records for all events in FCNMED (now 209 events). This information will be used by INL to enter the FCNMED events into NMED. It is estimated that these events will be entered into NMED by January 2009. A summary table is provided that lists the FCNMED item number, the facility information, and the event date for each FCNMED event. The FCNMED item number will be included as a reference document in the NMED record. Once the FCNMED event is entered into NMED, the FCNMED event can be located in NMED by performing a reference document search for the FCNMED item number.

# List of FCNMED Events

Item Number	Name	License Number	Event Date	City	State
FC900036	BABCOCK & WILCOX CO.	SNM-0042	01/12/1990	LYNCHBURG	VA
FC900218	NUCLEAR FUEL SERVICES, INC.	SNM-0124	03/29/1990	ERWIN	TN
FC900306	BABCOCK & WILCOX CO.	SNM-0042	05/12/1990	LYNCHBURG	VA
FC900421	BABCOCK & WILCOX CO.	SNM-0042	07/07/1990	LYNCHBURG	VA
FC900662	NUCLEAR FUEL SERVICES, INC.	SNM-0124	11/11/1990	ERWIN	TN
FC900707	NUCLEAR FUEL SERVICES, INC.	SNM-0124	11/30/1990	ERWIN	TN
FC910127	BABCOCK & WILCOX CO.	SNM-0042	11/20/1991	LYNCHBURG	VA
FC910532	NUCLEAR FUEL SERVICES, INC.	SNM-0124	04/08/1991	ERWIN	TN
FC910596	BABCOCK & WILCOX CO.	SNM-0042	05/20/1991	LYNCHBURG	VA
FC910619	NUCLEAR FUEL SERVICES, INC.	SNM-0124	05/28/1991	ERWIN	TN
FC910620	BABCOCK & WILCOX CO.	SNM-0042	05/28/1991	LYNCHBURG	VA
FC910696	NUCLEAR FUEL SERVICES, INC.	SNM-0124	06/13/1991	ERWIN	TN
FC910768	NUCLEAR FUEL SERVICES, INC.	SNM-0124	07/01/1991	ERWIN	TN
FC910995	NUCLEAR FUEL SERVICES, INC.	SNM-0124	09/05/1991	ERWIN	TN
FC911087	BABCOCK & WILCOX CO.	SNM-0042	09/28/1991	LYNCHBURG	VA
FC911138	BABCOCK & WILCOX CO.	SNM-0042	10/09/1991	LYNCHBURG	VA
FC911152	NUCLEAR FUEL SERVICES, INC.	SNM-0124	10/15/1991	ERWIN	TN
FC911162	NUCLEAR FUEL SERVICES, INC.	SNM-0124	10/17/1991	ERWIN	TN
FC911195	NUCLEAR FUEL SERVICES, INC.	SNM-0124	10/26/1991	ERWIN	TN
FC911248	NUCLEAR FUEL SERVICES, INC.	SNM-0124	11/07/1991	ERWIN	TN
FC911288	BABCOCK & WILCOX CO.	SNM-0042	11/21/1991	LYNCHBURG	VA
FC911316	BABCOCK & WILCOX CO.	SNM-0042	12/02/1991	LYNCHBURG	VA
FC911379	NUCLEAR FUEL SERVICES, INC.	SNM-0124	12/20/1991	ERWIN	TN
FC920130	NUCLEAR FUEL SERVICES, INC.	SNM-0124	02/07/1992	ERWIN	TN
FC920181	NUCLEAR FUEL SERVICES, INC.	SNM-0124	02/24/1992	ERWIN	TN
FC920208	BABCOCK & WILCOX CO.	SNM-0042	03/01/1992	LYNCHBURG	VA
FC920231	NUCLEAR FUEL SERVICES, INC.	SNM-0124	03/05/1992	ERWIN	TN
FC920321	NUCLEAR FUEL SERVICES, INC.	SNM-0124	03/31/1992	ERWIN	TN
FC920354	BABCOCK & WILCOX CO.	SNM-0042	04/07/1992	LYNCHBURG	VA
FC920389	BABCOCK & WILCOX CO.	SNM-0042	04/20/1992	LYNCHBURG	VA
FC920397	BABCOCK & WILCOX CO.	SNM-0042	04/23/1992	LYNCHBURG	VA
FC920439	NUCLEAR FUEL SERVICES, INC.	SNM-0124	05/04/1992	ERWIN	TN
FC920500	NUCLEAR FUEL SERVICES, INC.	SNM-0124	05/21/1992	ERWIN	TN
FC920530	BABCOCK & WILCOX CO.	SNM-0042	06/01/1992	LYNCHBURG	VA
FC920608	BABCOCK & WILCOX CO.	SNM-0042	06/22/1992	LYNCHBURG	VA
FC920701	BABCOCK & WILCOX CO.	SNM-0042	07/15/1992	LYNCHBURG	VA
FC920719	NUCLEAR FUEL SERVICES, INC.	SNM-0124	07/20/1992	ERWIN	TN
FC920804	BABCOCK & WILCOX CO.	SNM-0042	08/21/1992	LYNCHBURG	VA
FC920815	NUCLEAR FUEL SERVICES, INC.	SNM-0124	08/26/1992	ERWIN	TN
FC920855	NUCLEAR FUEL SERVICES, INC.	SNM-0124	09/10/1992	ERWIN	TN
FC920949	BABCOCK & WILCOX CO.	SNM-0042	10/09/1992	LYNCHBURG	VA
FC920955	NUCLEAR FUEL SERVICES, INC.	SNM-0124	10/13/1992	ERWIN	TN
FC921008	NUCLEAR FUEL SERVICES, INC.	SNM-0124	10/26/1992	ERWIN	TN
FC921017	BABCOCK & WILCOX CO.	SNM-0042	10/28/1992	LYNCHBURG	VA
FC921034	BABCOCK & WILCOX CO.	SNM-0042	11/04/1992	LYNCHBURG	VA
FC921044	NUCLEAR FUEL SERVICES, INC.	SNM-0124	11/09/1992	ERWIN	TN
FC921085	NUCLEAR FUEL SERVICES, INC.	SNM-0124	11/25/1992	ERWIN	TN
FC921101	NUCLEAR FUEL SERVICES, INC.	SNM-0124	12/03/1992	ERWIN	TN
FC921121	BABCOCK & WILCOX CO.	SNM-0042	12/16/1992	LYNCHBURG	VA

Item Number	Name	License Number	Event Date	City	State
FC940619	NUCLEAR FUEL SERVICES, INC.	SNM-0124	07/02/1994	ERWIN	TN
FC940631	BABCOCK & WILCOX CO.	SNM-0042	04/19/1993	LYNCHBURG	VA
FC940778	BABCOCK & WILCOX CO.	SNM-0042	02/02/1994	LYNCHBURG	VA
FC940780	BABCOCK & WILCOX CO.	SNM-0042	02/11/1994	LYNCHBURG	VA
FC940827	BABCOCK & WILCOX CO.	SNM-0042	07/02/1993	LYNCHBURG	VA
FC940828	BABCOCK & WILCOX CO.	SNM-0042	06/02/1993	LYNCHBURG	VA
FC940829	BABCOCK & WILCOX CO.	SNM-0042	04/20/1993	LYNCHBURG	VA
FC940830	BABCOCK & WILCOX CO.	SNM-0042	04/16/1993	LYNCHBURG	VA
FC940831	BABCOCK & WILCOX CO.	SNM-0042	02/26/1993	LYNCHBURG	VA
FC940832	BABCOCK & WILCOX CO.	SNM-0042	01/27/1993	LYNCHBURG	VA
FC940834	BABCOCK & WILCOX CO.	SNM-0042	02/18/1994	LYNCHBURG	VA
FC940839	NUCLEAR FUEL SERVICES, INC.	SNM-0124	10/13/1993	ERWIN	TN
FC940840	NUCLEAR FUEL SERVICES, INC.	SNM-0124	09/02/1993	ERWIN	TN
FC940841	NUCLEAR FUEL SERVICES, INC.	SNM-0124	05/20/1993	ERWIN	TN
FC940842	NUCLEAR FUEL SERVICES, INC.	SNM-0124	05/10/1993	ERWIN	TN
FC940843	NUCLEAR FUEL SERVICES, INC.	SNM-0124	04/07/1993	ERWIN	TN
FC940844	NUCLEAR FUEL SERVICES, INC.	SNM-0124	02/04/1993	ERWIN	TN
FC940845	BABCOCK & WILCOX CO.	SNM-0042	10/21/1993	LYNCHBURG	VA
FC940846	BABCOCK & WILCOX CO.	SNM-0042	09/16/1993	LYNCHBURG	VA
FC940850	BABCOCK & WILCOX CO.	SNM-0042	07/17/1993	LYNCHBURG	VA
FC940851	BABCOCK & WILCOX CO.	SNM-0042	07/04/1993	LYNCHBURG	VA
FC940892	BABCOCK & WILCOX CO.	SNM-0042	01/21/1993	LYNCHBURG	VA
FC940893	BABCOCK & WILCOX CO.	SNM-0042	03/11/1993	LYNCHBURG	VA
FC940895	NUCLEAR FUEL SERVICES, INC.	SNM-0124	01/28/1993	ERWIN	TN
FC940914	NUCLEAR FUEL SERVICES, INC.	SNM-0124	11/16/1993	ERWIN	TN
FC940923	BABCOCK & WILCOX CO.	SNM-0042	02/02/1994	LYNCHBURG	VA
FC940924	BABCOCK & WILCOX CO.	SNM-0042	02/02/1994	LYNCHBURG	VA
FC940925	BABCOCK & WILCOX CO.	SNM-0042	01/20/1994	LYNCHBURG	VA
FC940926	BABCOCK & WILCOX CO.	SNM-0042	01/03/1994	LYNCHBURG	VA
FC940950	BABCOCK & WILCOX CO.	SNM-0042	06/28/1994	LYNCHBURG	VA
FC941284	BABCOCK & WILCOX CO.	SNM-0042	10/22/1992	LYNCHBURG	VA
FC941285	BABCOCK & WILCOX CO.	SNM-0042	12/16/1992	LYNCHBURG	VA
FC941445	BABCOCK & WILCOX CO.	SNM-0042	06/04/1993	LYNCHBURG	VA
FC941456	BABCOCK & WILCOX CO.	SNM-0042	03/22/1994	LYNCHBURG	VA
FC941504	BABCOCK & WILCOX CO.	SNM-0042	02/21/1994	LYNCHBURG	VA
FC941518	NUCLEAR FUEL SERVICES, INC.	SNM-0124	01/20/1994	ERWIN	TN
FC941601	BABCOCK & WILCOX CO.	SNM-0042	11/11/1993	LYNCHBURG	VA
FC941602	BABCOCK & WILCOX CO.	SNM-0042	04/09/1993	LYNCHBURG	VA
FC941666	BABCOCK & WILCOX CO.	SNM-0042	07/07/1994	LYNCHBURG	VA
FC941676	BABCOCK & WILCOX CO.	SNM-0042	12/23/1992	LYNCHBURG	VA
FC941677	BABCOCK & WILCOX CO.	SNM-0042	02/16/1993	LYNCHBURG	VA
FC941680	BABCOCK & WILCOX CO.	SNM-0042	02/19/1993	LYNCHBURG	VA
FC941681	BABCOCK & WILCOX CO.	SNM-0042	07/26/1994	LYNCHBURG	VA
FC941682	BABCOCK & WILCOX CO.	SNM-0042	07/26/1994	LYNCHBURG	VA
FC941686	BABCOCK & WILCOX CO.	SNM-0042	07/17/1993	LYNCHBURG	VA
FC941701	BABCOCK & WILCOX CO.	SNM-0042	06/04/1993	LYNCHBURG	VA
FC941881	NUCLEAR FUEL SERVICES, INC.	SNM-0124	09/27/1994	ERWIN	TN
FC942045	BABCOCK & WILCOX CO.	SNM-0042	11/17/1994	LYNCHBURG	VA
FC950333	BABCOCK & WILCOX CO.	SNM-0042	03/19/1995	LYNCHBURG	VA
FC950973	BABCOCK & WILCOX CO.	SNM-0042	05/11/1995	LYNCHBURG	VA
FC950982	BABCOCK & WILCOX CO.	SNM-0042	07/20/1995	LYNCHBURG	VA
FC951139	BABCOCK & WILCOX CO.	SNM-0042	08/29/1995	LYNCHBURG	VA
FC960082	BABCOCK & WILCOX CO.	SNM-0042	07/19/1995	LYNCHBURG	VA
FC960199	NUCLEAR FUEL SERVICES, INC.	SNM-0124	03/22/1996	ERWIN	TN

Item Number	Name	License Number	Event Date	City	State
FC960215	NUCLEAR FUEL SERVICES, INC.	SNM-0124	04/02/1996	ERWIN	TN
FC960283	BABCOCK & WILCOX CO.	SNM-0042	06/19/1996	LYNCHBURG	VA
FC960306	BABCOCK & WILCOX CO.	SNM-0042	03/14/1996	LYNCHBURG	VA
FC960307	BABCOCK & WILCOX CO.	SNM-0042	04/29/1996	LYNCHBURG	VA
FC960472	NUCLEAR FUEL SERVICES, INC.	SNM-0124	08/07/1996	ERWIN	TN
FC960494	BABCOCK & WILCOX CO.	SNM-0042	08/25/1996	LYNCHBURG	VA
FC960579	BABCOCK & WILCOX CO.	SNM-0042	09/19/1996	LYNCHBURG	VA
FC960582	BABCOCK & WILCOX CO.	SNM-0042	09/24/1996	LYNCHBURG	VA
FC960623	BABCOCK & WILCOX CO.	SNM-0042	10/15/1996	LYNCHBURG	VA
FC960673	BABCOCK & WILCOX CO.	SNM-0042	10/30/1996	LYNCHBURG	VA
FC960796	BABCOCK & WILCOX CO.	SNM-0042	05/24/1996	LYNCHBURG	VA
FC960838	BABCOCK & WILCOX CO.	SNM-0042	12/19/1996	LYNCHBURG	VA
FC970194	BABCOCK & WILCOX CO.	SNM-0042	03/04/1997	LYNCHBURG	VA
FC970615	BABCOCK & WILCOX CO.	SNM-0042	11/21/1996	LYNCHBURG	VA
FC970719	BABCOCK & WILCOX CO.	SNM-0042	07/25/1997	LYNCHBURG	VA
FC970729	BABCOCK & WILCOX CO.	SNM-0042	07/28/1997	LYNCHBURG	VA
FC980288	NUCLEAR FUEL SERVICES, INC.	SNM-0124	02/25/1998	ERWIN	TN
FC980598	NUCLEAR FUEL SERVICES, INC.	SNM-0124	05/19/1998	ERWIN	TN
FC980741	NUCLEAR FUEL SERVICES, INC.	SNM-0124	06/29/1998	ERWIN	TN
FC980827	NUCLEAR FUEL SERVICES, INC.	SNM-0124	07/22/1998	ERWIN	TN
FC981021	NUCLEAR FUEL SERVICES, INC.	SNM-0124	09/29/1998	ERWIN	TN
FC981177	NUCLEAR FUEL SERVICES, INC.	SNM-0124	12/03/1998	ERWIN	TN
FC990133	NUCLEAR FUEL SERVICES, INC.	SNM-0124	02/26/1999	ERWIN	TN
FC990293	NUCLEAR FUEL SERVICES, INC.	SNM-0124	05/06/1999	ERWIN	TN
FC990314	BWX TECHNOLOGIES, INC.	SNM-0042	05/18/1999	LYNCHBURG	VA
FC990383	BWX TECHNOLOGIES, INC.	SNM-0042	06/15/1999	LYNCHBURG	VA
FC990587	NUCLEAR FUEL SERVICES, INC.	SNM-0124	08/25/1999	ERWIN	TN
FC990679	BWX TECHNOLOGIES, INC.	SNM-0042	10/01/1999	LYNCHBURG	VA
FC990705	NUCLEAR FUEL SERVICES, INC.	SNM-0124	06/03/1998	ERWIN	TN
FC000112	BWX TECHNOLOGIES, INC.	SNM-0042	02/12/2000	LYNCHBURG	VA
FC000497	NUCLEAR FUEL SERVICES, INC.	SNM-0124	03/16/2000	ERWIN	TN
FC000571	NUCLEAR FUEL SERVICES, INC.	SNM-0124	08/03/2000	ERWIN	TN
FC000684	BWX TECHNOLOGIES, INC.	SNM-0042	09/09/2000	LYNCHBURG	VA
FC000773	BWX TECHNOLOGIES, INC.	SNM-0042	09/19/2000	LYNCHBURG	VA
FC010007	BWX TECHNOLOGIES, INC.	SNM-0042	12/15/2000	LYNCHBURG	VA
FC010212	NUCLEAR FUEL SERVICES, INC.	SNM-0124	03/05/2001	ERWIN	TN
FC010314	NUCLEAR FUEL SERVICES, INC.	SNM-0124	04/01/2001	ERWIN	TN
FC010479	NUCLEAR FUEL SERVICES, INC.	SNM-0124	05/19/2001	ERWIN	TN
FC010506	NUCLEAR FUEL SERVICES, INC.	SNM-0124	05/31/2001	ERWIN	TN
FC010522	NUCLEAR FUEL SERVICES, INC.	SNM-0124	06/05/2001	ERWIN	TN
FC010705	NUCLEAR FUEL SERVICES, INC.	SNM-0124	07/23/2001	ERWIN	TN
FC010854	NUCLEAR FUEL SERVICES, INC.	SNM-0124	09/23/2001	ERWIN	TN
FC010909	NUCLEAR FUEL SERVICES, INC.	SNM-0124	09/24/2001	ERWIN	TN
FC010960	NUCLEAR FUEL SERVICES, INC.	SNM-0124	09/12/2001	ERWIN	TN
FC010972	NUCLEAR FUEL SERVICES, INC.	SNM-0124	10/27/2001	ERWIN	TN
FC020138	NUCLEAR FUEL SERVICES, INC.	SNM-0124	01/27/2002	ERWIN	TN
FC020156	BWX TECHNOLOGIES, INC.	SNM-0042	11/21/2001	LYNCHBURG	VA
FC020157	BWX TECHNOLOGIES, INC.	SNM-0042	12/07/2001	LYNCHBURG	VA
FC020475	BWX TECHNOLOGIES, INC.	SNM-0042	05/01/2002	LYNCHBURG	VA
FC020548	BWX TECHNOLOGIES, INC.	SNM-0042	05/28/2002	LYNCHBURG	VA
FC020647	BWX TECHNOLOGIES, INC.	SNM-0042	04/30/2002	LYNCHBURG	VA
FC020650	NUCLEAR FUEL SERVICES, INC.	SNM-0124	07/07/2002	ERWIN	TN
FC020705	BWX TECHNOLOGIES, INC.	SNM-0042	07/25/2002	LYNCHBURG	VA
FC030042	BWX TECHNOLOGIES, INC.	SNM-0042	01/02/2003	LYNCHBURG	VA

Item Number	Name	License Number	Event Date	City	State
FC030141	BWX TECHNOLOGIES, INC.	SNM-0042	02/19/2003	LYNCHBURG	VA
FC030194	NUCLEAR FUEL SERVICES, INC.	SNM-0124	03/10/2003	ERWIN	TN
FC030391	BWX TECHNOLOGIES, INC.	SNM-0042	05/10/2003	LYNCHBURG	VA
FC030717	BWX TECHNOLOGIES, INC.	SNM-0042	09/07/2003	LYNCHBURG	VA
FC030752	BWX TECHNOLOGIES, INC.	SNM-0042	09/17/2003	LYNCHBURG	VA
FC030802	BWX TECHNOLOGIES, INC.	SNM-0042	10/07/2003	LYNCHBURG	VA
FC030834	NUCLEAR FUEL SERVICES, INC.	SNM-0124	10/17/2003	ERWIN	TN
FC030835	BWX TECHNOLOGIES, INC.	SNM-0042	10/06/2003	LYNCHBURG	VA
FC040070	BWX TECHNOLOGIES, INC.	SNM-0042	01/27/2004	LYNCHBURG	VA
FC040347	NUCLEAR FUEL SERVICES, INC.	SNM-0124	05/14/2004	ERWIN	TN
FC040391	BWX TECHNOLOGIES, INC.	SNM-0042	05/27/2004	LYNCHBURG	VA
FC040532	NUCLEAR FUEL SERVICES, INC.	SNM-0124	06/24/2004	ERWIN	TN
FC050001	NUCLEAR FUEL SERVICES, INC.	SNM-0124	07/27/2004	ERWIN	TN
FC050002	NUCLEAR FUEL SERVICES, INC.	SNM-0124	10/25/2004	ERWIN	TN
FC050003	NUCLEAR FUEL SERVICES, INC.	SNM-0124	12/17/2004	ERWIN	TN
FC050004	NUCLEAR FUEL SERVICES, INC.	SNM-0124	01/07/2005	ERWIN	TN
FC050005	BWX TECHNOLOGIES, INC.	SNM-0042	02/16/2005	LYNCHBURG	VA
FC050006	NUCLEAR FUEL SERVICES, INC.	SNM-0124	04/07/2005	ERWIN	TN
FC050007	BWX TECHNOLOGIES, INC.	SNM-0042	05/10/2005	LYNCHBURG	VA
FC050008	BWX TECHNOLOGIES, INC.	SNM-0042	07/05/2005	LYNCHBURG	VA
FC050009	BWX TECHNOLOGIES, INC.	SNM-0042	07/13/2005	LYNCHBURG	VA
FC050010	NUCLEAR FUEL SERVICES, INC.	SNM-0124	07/09/2005	ERWIN	TN
FC050011	NUCLEAR FUEL SERVICES, INC.	SNM-0124	09/01/2005	ERWIN	TN
FC050012	NUCLEAR FUEL SERVICES, INC.	SNM-0124	10/28/2005	ERWIN	TN
FC050013	NUCLEAR FUEL SERVICES, INC.	SNM-0124	10/19/2005	ERWIN	TN
FC060001	NUCLEAR FUEL SERVICES, INC.	SNM-0124	12/08/2005	ERWIN	TN
FC060002	NUCLEAR FUEL SERVICES, INC.	SNM-0124	12/22/2005	ERWIN	TN
FC060003	NUCLEAR FUEL SERVICES, INC.	SNM-0124	01/05/2006	ERWIN	TN
FC060004	NUCLEAR FUEL SERVICES, INC.	SNM-0124	03/06/2006	ERWIN	TN
FC060005	NUCLEAR FUEL SERVICES, INC.	SNM-0124	10/21/2005	ERWIN	TN
FC060006	BWX TECHNOLOGIES, INC.	SNM-0042	02/20/2006	LYNCHBURG	VA
FC060007	NUCLEAR FUEL SERVICES, INC.	SNM-0124	03/13/2006	ERWIN	TN
FC060008	BWX TECHNOLOGIES, INC.	SNM-0042	08/14/2006	LYNCHBURG	VA
FC070001	NUCLEAR FUEL SERVICES, INC.	SNM-0124	06/24/2004	ERWIN	TN
FC070002	NUCLEAR FUEL SERVICES, INC.	SNM-0124	10/05/2004	ERWIN	TN
FC070003	NUCLEAR FUEL SERVICES, INC.	SNM-0124	11/15/2004	ERWIN	TN
FC070004	BWX TECHNOLOGIES, INC.	SNM-0042	01/17/2005	LYNCHBURG	VA
FC070005	NUCLEAR FUEL SERVICES, INC.	SNM-0124	03/24/2005	ERWIN	TN
FC070006	NUCLEAR FUEL SERVICES, INC.	SNM-0124	03/22/2006	ERWIN	TN
FC070007	NUCLEAR FUEL SERVICES, INC.	SNM-0124	05/20/2006	ERWIN	TN
FC070008	NUCLEAR FUEL SERVICES, INC.	SNM-0124	01/11/2007	ERWIN	TN
FC070009	NUCLEAR FUEL SERVICES, INC.	SNM-0124	03/01/2007	ERWIN	TN
FC070010	BWX TECHNOLOGIES, INC.	SNM-0042	03/22/2007	LYNCHBURG	VA
FC070011	BWX TECHNOLOGIES, INC.	SNM-0042	04/17/2007	LYNCHBURG	VA
FC070012	BWX TECHNOLOGIES, INC.	SNM-0042	04/27/2007	LYNCHBURG	VA
FC070013	BWX TECHNOLOGIES, INC.	SNM-0042	05/24/2007	LYNCHBURG	VA
FC070014	BWX TECHNOLOGIES, INC.	SNM-0042	05/08/2007	LYNCHBURG	VA
FC070015	BWX TECHNOLOGIES, INC.	SNM-0042	07/13/2007	LYNCHBURG	VA
FC070016	BWX TECHNOLOGIES, INC.	SNM-0042	07/26/2007	LYNCHBURG	VA
FC070017	BWX TECHNOLOGIES, INC.	SNM-0042	08/22/2007	LYNCHBURG	VA
FC080001	NUCLEAR FUEL SERVICES, INC.	SNM-0124	12/29/2007	ERWIN	TN
FC080002	NUCLEAR FUEL SERVICES, INC.	SNM-0124	01/15/2008	ERWIN	TN

# Full Report

10/15/2008

**Item Number: FC900036**

**Last Updated: 06/01/1995**

**Narrative:**

THE LICENSEE REPORTED THAT THE FACILITY DECLARED AN EMERGENCY DUE TO A FIRE IN THE LAUNDRY FACILITY; THERE WAS NO RELEASE OF RADIOACTIVE MATERIAL.

**Event Date:** 01/12/1990

**Discovery Date:** 01/12/1990

**Report Date:** 01/16/1990

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO

Reciprocity: NONE

License Number: SNM-0042

Name: BABCOCK & WILCOX CO.

NRC Docket Number: 07000027

City: LYNCHBURG

NRC Program Code: 21210

State: VA Zip Code: 24505-0785

Responsible NRC Region: 2

**Site of Event:**

Site Name LYNCHBURG

State: VA

**Additional Involved Party:**

License Number: NA

Name: NA

City: NA

State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: N

Investigation: Y

Atomic Energy Act Material: Y

Record Complete:

Consultant Hired: N

Event Closed: Y

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**Event Cause:**

FCP - FUEL CYCLE PROBLEMS

Cause: EXTERNAL FIRE OR EXPLOSION

**Corrective Actions Information:**

Action Number: Corrective Action:

FCP

1 NOT REPORTED

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
900034	08/19/1994		CDB	OLD ASSIGNED ITEM NUMBER

[REDACTED] - Unmarked Legacy Reference

NR	08/19/1994		CDB	PRELIMINARY NOTIFICATION
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[REDACTED] - Unmarked Legacy Reference

Item Number: FC900218

Last Updated: 06/09/1995

**Narrative:**

THE LICENSEE REPORTED THAT URANIUM CONCENTRATION IN A SOLUTION WAS GREATER THAN THE [REDACTED] LIMIT.

Event Date: 03/29/1990

Discovery Date: 03/29/1990

Report Date: 07/11/1990

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0124	Name: NUCLEAR FUEL SERVICES, INC.
NRC Docket Number: 07000143	City: ERWIN
NRC Program Code: 21210	State: TN      Zip Code: 376509718
Responsible NRC Region: 2	

**Site of Event:**

Site Name      ERWIN      State:      TN

**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA      Zip Code: NA

**Other Information:**

NRC Reportable Event:	Y	Abnormal Occurrence:	N
Agreement State Reportable Event:	N	Investigation:	Y
Atomic Energy Act Material:	Y	Record Complete:	
Consultant Hired:	N	Event Closed:	Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: NOT REPORTED

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1      NOT REPORTED

**Source of Radiation:**

FCP

<b>Source Number:</b> 1		
Source/Material: UNSEALED SOURCE NORM	Radionuclide or Voltage (kVp/MeV): U-NAT	
Device Name: NA	Activity: NR Ci	NR GBq
Manufacturer: NR		
Model Number: NR		
Serial Number: NR		

**Reporting Requirements:**

FCP

Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported: Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
900213	08/19/1994		CDB	OLD ASSIGNED ITEM NUMBER
[REDACTED]				- Unmarked Legacy Reference
9007260073	08/19/1994		CDB	LICENSEE REPORT
[REDACTED]				- Unmarked Legacy Reference

Item Number: FC900306

Last Updated: 06/16/1995

**Narrative:**

THE LICENSEE REPORTED THAT DUCTS WHICH CONTAINED [REDACTED] WERE CLEANED OUT WITHOUT FIRST CONDUCTING A CRITICALITY REVIEW.

Event Date: 05/12/1990

Discovery Date: 05/12/1990

Report Date: 09/10/1990

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BABCOCK & WILCOX CO.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name LYNCHBURG State: VA

**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: Y
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: MANAGEMENT DEFICIENCY

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 NOT REPORTED

**Source of Radiation:**

FCP

<b>Source Number:</b> 1			
Source/Material: UNSEALED SOURCE SNM	Radionuclide or Voltage (kVp/MeV): U-HE		
Device Name: NA	Activity: NR Ci	NR	GBq
Manufacturer: NR			
Model Number: NA			
Serial Number: NA			

**Reporting Requirements:**

FCP  
Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported: Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
900274	08/19/1994		CDB	OLD ASSIGNED ITEM NUMBER
[REDACTED]				- Unmarked Legacy Reference
9009170042	08/19/1994		CDB	INSPECTION REPORT
[REDACTED]				- Unmarked Legacy Reference

Item Number: FC900421

Last Updated: 12/04/2001

**Narrative:**

THE LICENSEE REPORTED THAT A TRUCK CARRYING A SHIPMENT OF ITS NEW UNIRRADIATED FUEL OVERTURNED ON HIGHWAY 81 NEAR WYTHEVILLE, VA. UP TO SIX CONTAINERS FELL OFF THE TRUCK BUT THERE WAS NO RELEASE OR ANY CONTAMINATION.

Event Date: 07/07/1990

Discovery Date: 07/07/1990

Report Date: 07/07/1990

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BABCOCK & WILCOX CO.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name LYNCHBURG	State: VA
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**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: Y
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed:

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS

Cause: VEHICLE ACCIDENT OR DEVICE STRUCK BY VEHICLE

TRS - TRANSPORTATION

Cause: VEHICLE ACCIDENT OR DEVICE STRUCK BY VEHICLE

**Corrective Actions Information:**

Action Number:	Corrective Action:
FCP	
1	NO CORRECTIVE ACTION TAKEN
TRS	
1	NO CORRECTIVE ACTION TAKEN

**Source of Radiation:**

FCP

<b>Source Number:</b> 1			
Source/Material:	FUEL PELLETT	Radionuclide or Voltage (kVp/MeV):	U-OTH
Device Name:	CONTAINER, SHIPPING	Activity:	NR Ci NR GBq
Manufacturer:	NR		
Model Number:	NR		
Serial Number:	NR		

TRS

<b>Source Number:</b> 1			
Source/Material:	FUEL PELLETT	Radionuclide or Voltage (kVp/MeV):	U-OTH
Device Name:	CONTAINER, SHIPPING	Activity:	NR Ci NR GBq
Manufacturer:	NR		
Model Number:	NR		
Serial Number:	NR		

**Device/Associated Equipment:**

FCP



**Device Number: 1**

Device Name: CONTAINER, SHIPPING  
Manufacturer: NR

Model Number: NR  
Serial Number: NR

TRS

**Device Number: 1**

Device Name: CONTAINER, SHIPPING  
Manufacturer: NR

Model Number: NR  
Serial Number: NR

**Reporting Requirements:**

FCP

Reporting Requirement: 71.5 - Transportation of licensed material  
Mode Reported: Written

TRS

Reporting Requirement: 71.5 - Transportation of licensed material  
Mode Reported: Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
900193	08/19/1994		CDB	OLD ASSIGNED ITEM NUMBER
				- Unmarked Legacy Reference
900283	08/19/1994		CDB	OLD ASSIGNED ITEM NUMBER
				- Unmarked Legacy Reference
NR	08/19/1994		CDB	DAILY REPORT
				- Unmarked Legacy Reference



Item Number: FC900662

Last Updated: 07/03/1995

**Narrative:**

THE LICENSEE REPORTED THE DISCOVERY OF CONTAMINATED SLUDGE IN AN OLD DIGESTER AT THE CITY WASTE TREATMENT PLANT. PLANS WERE MADE TO DECONTAMINATED IT PRIOR TO RENOVATION. ANALYSIS YIELDED IN THE WITH A DRY WEIGHT OF DRY WEIGHT.

Event Date: 11/11/1990

Discovery Date: 11/11/1990

Report Date: 11/11/1990

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0124 Name: NUCLEAR FUEL SERVICES, INC.  
NRC Docket Number: 07000143 City: ERWIN  
NRC Program Code: 21210 State: TN Zip Code: 376509718  
Responsible NRC Region: 2

**Site of Event:**

Site Name ERWIN State: TN

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: Y  
Atomic Energy Act Material: Y Record Complete:  
Consultant Hired: N Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: NOT REPORTED  
RLM - RADIOACTIVE MATERIAL REL.  
Cause: NOT REPORTED

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 NOT REPORTED  
RLM  
1 NOT REPORTED

**Release of Material or Contamination Information:**

Type or Release or Contamination:	Activity:	Radionuclide:	Effect of Release or Contamination:
SURFACE	Ci GBq NR NR	U-OXIDE	

**Source of Radiation:**

FCP  
**Source Number: 1**  
Source/Material: FUEL FABRICATION MATERIAL Radionuclide or Voltage (kVp/MeV): U-OXIDE  
Device Name: NA Activity: NR Ci NR GBq  
Manufacturer: NUCLEAR FUEL SERVICE  
Model Number: NR  
Serial Number: NR  
RLM  
**Source Number: 1**  
Source/Material: FUEL FABRICATION MATERIAL Radionuclide or Voltage (kVp/MeV): U-OXIDE  
Device Name: NA Activity: NR Ci NR GBq  
Manufacturer: NUCLEAR FUEL SERVICE  
Model Number: NR  
Serial Number: NR



**Reporting Requirements:**

FCP

Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.

Mode Reported: Written

RLM

Reporting Requirement: 20.0405(a)(1)(v) - old - (SUPERSEDED) THE 30 DAY WRITTEN REPORT OF LEVELS OF RADIATION OR CONCENTRATIONS OF RADIOACTIVE MATERIAL IN AN UNRESTRICTED AREA IN EXCESS OF 10 TIMES ANY APPLICABLE LIMIT SET FORTH IN THIS PART OR LICENSE.

Mode Reported: Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
900247	08/19/1994		CDB	OLD ASSIGNED ITEM NUMBER
	- Unmarked Legacy Reference			
900318	08/19/1994		CDB	OLD ASSIGNED ITEM NUMBER
	- Unmarked Legacy Reference			
NR	08/19/1994		CDB	PRELIMINARY NOTIFICATION
	- Unmarked Legacy Reference			



**Narrative:**

THE LICENSEE REPORTED THAT THE CRITICALITY CONTROL LIMIT WAS VIOLATED WHEN A SOLUTION OF URANIUM WITH A CONCENTRATION OVER THE ADMINISTRATIVE LIMIT WAS TRANSFERRED TO A WASTE TANK. HIGHLY CONCENTRATED URANIUM SOLUTIONS IN AN ADJOINING PART OF THE PROCESS WERE AVAILABLE IN QUANTITIES THAT WERE MORE THAN SUFFICIENT TO HAVE CAUSED A CRITICALITY ACCIDENT IN THE UNFAVORABLE GEOMETRY TANK. THE NRC ISSUED WRITTEN CONFIRMATION ON 11/30/90, THAT THE LICENSEE WOULD REFRAIN FROM TRANSFERRING LIQUID WASTE UNTIL CERTAIN ACTIONS HAD BEEN COMPLETED. THE LICENSEE IDENTIFIED THE PROBABLE CAUSES TO BE (1) LESS THAN ADEQUATE PIPING LAYOUT THAT ALLOWED URANIUM SOLUTIONS TO FLOW INTO THE UNFAVORABLE GEOMETRY TANK AND (2) PERSONNEL-RELATED INADEQUACIES IN THAT OPERATORS HAD NO KNOWLEDGE OF THE POTENTIAL FOR CROSSOVER OF HIGHLY CONCENTRATED URANIUM SOLUTIONS INTO UNFAVORABLE TANKS AS A RESULT OF OPEN VALVES OR OTHER ANOMALIES IN THE PIPING SYSTEMS. CORRECTIVE ACTIONS INCLUDED MODIFICATION OF THE PIPING SYSTEM TO PREVENT HIGHLY CONCENTRATED URANIUM SOLUTIONS FROM FLOWING INTO THE UNFAVORABLE GEOMETRY TANKS.

Event Date: 11/30/1990

Discovery Date: 11/30/1990

Report Date: 11/30/1990

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0124 Name: NUCLEAR FUEL SERVICES, INC.  
NRC Docket Number: 07000143 City: ERWIN  
NRC Program Code: 21210 State: TN Zip Code: 376509718  
Responsible NRC Region: 2

**Site of Event:**

Site Name ERWIN State: TN

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y Abnormal Occurrence: Y  
Agreement State Reportable Event: N Investigation: Y  
Atomic Energy Act Material: Y Record Complete:  
Consultant Hired: N Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: MANAGEMENT DEFICIENCY

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 NOT REPORTED

**Reporting Requirements:**

FCP  
Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported: Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
900313	08/19/1994		CDB	OLD ASSIGNED ITEM NUMBER
[REDACTED]				- Unmarked Legacy Reference
NR	08/19/1994		CDB	DAILY REPORT
[REDACTED]				- Unmarked Legacy Reference
91-1	08/17/1995		NRB	ABNORMAL OCCURRENCE NUMBER
[REDACTED]				- Unmarked Legacy Reference

Item Number: FC910127

Last Updated: 10/10/1995

**Narrative:**

INSPECTION FOUND TWO APPARENT VIOLATIONS; FAILURE TO PROPERLY USE PERSONAL AIR SAMPLERS AND ANOTHER APPARENT VIOLATION RELATED TO THE CRITICALITY ALARMS INABILITY TO SENSE FISSION LEVELS => 1E17 DUE TO SATURATION. ONE URI WAS IDENTIFIED.

Event Date: 11/20/1991

Discovery Date: 11/20/1991

Report Date: 11/20/1991

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BABCOCK & WILCOX CO.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name NR State: VA

**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: Y
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS

Cause: NOT REPORTED

**Corrective Actions Information:**

Action Number: Corrective Action:  
 FCP  
 1 NOT REPORTED

**Device/Associated Equipment:**

FCP

**Device Number: 1**

Device Name: ALARM, CRITICALITY	Model Number: NR
Manufacturer: NR	Serial Number: NR

**Reporting Requirements:**

FCP

Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.  
 Mode Reported: Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
910394	09/22/1994		CDB	OLD ASSIGNED ITEM NUMBER
[REDACTED]				- Unmarked Legacy Reference
9112270176	09/22/1994		CDB	INSPECTION REPORT
[REDACTED]				- Unmarked Legacy Reference

Item Number: FC910532

Last Updated: 09/04/1997

**Narrative:**

OPERATOR CUT TIP OF FINGER USING HIGH PRESSURE JETTING SYSTEM. TRIGGER ON SPRAY WAND WOULD NOT SHUT OFF WATER. INDIVIDUAL INADVERTENTLY SPRAYED HAND WITH JET. CONTAMINATION WITH [REDACTED]. CHELATION WITH CADTPA; REAC/TS CONSULTED.

Event Date: 04/08/1991

Discovery Date: 04/08/1991

Report Date: 04/08/1991

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0124	Name: NUCLEAR FUEL SERVICES, INC.
NRC Docket Number: 07000143	City: ERWIN
NRC Program Code: 21210	State: TN      Zip Code: 376509718
Responsible NRC Region: 2	

**Site of Event:**

Site Name      NR      State: TN

**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA      Zip Code: NA

**Other Information:**

NRC Reportable Event: Y	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: Y
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed: Y

**Event Cause:**

EXP - OVEREXPOSURE

Cause: DEFECTIVE OR FAILED PART

FCP - FUEL CYCLE PROBLEMS

Cause: DEFECTIVE OR FAILED PART

**Corrective Actions Information:**

Action Number:	Corrective Action:
EXP	
1	NOT REPORTED
FCP	
1	NOT REPORTED

**Exposure Detail:**

Person Number:	Exposure Dose:	Type of Dose:	Effect of Exposure:
1	NR      Sv	INTERNAL (CEDE), OCCUPATIONAL	

**Source of Radiation:**

EXP

<b>Source Number:</b> 1	
Source/Material: NR	Radionuclide or Voltage (kVp/MeV): AM-241
Device Name: NA	Activity: NR Ci      NR GBq
Manufacturer: NR	
Model Number: NR	
Serial Number: NR	

FCP

<b>Source Number:</b> 1	
Source/Material: NR	Radionuclide or Voltage (kVp/MeV): PU-239
Device Name: NA	Activity: NR Ci      NR GBq
Manufacturer: NR	
Model Number: NR	
Serial Number: NR	



**Reporting Requirements:**

EXP

Reporting Requirement: 20.0405(a)(1)(i) - old - (SUPERSEDED) THE 30 DAY WRITTEN REPORT OF EACH EXPOSURE OF AN INDIVIDUAL TO RADIATION IN EXCESS OF THE APPLICABLE LIMITS IN 20.101 OR 20.104(A) OR THE LICENSE.

Mode Reported: Written

FCP

Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.

Mode Reported: Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
910004	09/22/1994		CDB	OLD ASSIGNED ITEM NUMBER
	- Unmarked Legacy Reference			
NR	09/22/1994		CDB	DAILY REPORT
	- Unmarked Legacy Reference			



Item Number: FC910596

Last Updated: 05/10/1995

**Narrative:**

APPROXIMATELY [REDACTED] OF THE AUDIBLE ALARMS (HOWLERS) WHICH SIGNAL A CRITICALITY MONITORING SYSTEM ALARM DID NOT ACTUATE DURING A TEST. PERSONNEL IN THE AFFECTED AREAS WERE EVACUATED. ALTHOUGH THE HOWLERS WERE INOPERABLE, THE CRITICALITY MONITORING SYSTEM WAS OPERABLE THROUGHOUT THE PLANT.

Event Date: 05/20/1991

Discovery Date: 05/20/1991

Report Date: 08/05/1991

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BABCOCK & WILCOX CO.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name LYNCHBURG	State: VA
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**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: Y
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed: Y

**Event Cause:**

EQP - EQUIPMENT  
Cause: DEFECTIVE OR FAILED PART  
FCP - FUEL CYCLE PROBLEMS  
Cause: DEFECTIVE OR FAILED PART

**Corrective Actions Information:**

Action Number:	Corrective Action:
EQP	
1	NOT REPORTED
FCP	
1	NOT REPORTED

**Device/Associated Equipment:**

EQP

<b>Device Number: 1</b>	
Device Name: ALARM, CRITICALITY	Model Number: NR
Manufacturer: NR	Serial Number: NR
	Problem with Equipment:

FCP

<b>Device Number: 1</b>	
Device Name: ALARM, CRITICALITY	Model Number: NR
Manufacturer: NR	Serial Number: NR

**Reporting Requirements:**

EQP

Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.
Mode Reported: Written

FCP

Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.
Mode Reported: Written

**References:**

<b>Reference Number:</b>	<b>Entry Date:</b>	<b>Retraction Date:</b>	<b>Coder Initials:</b>	<b>Reference Type:</b>
910272	09/22/1994		CDB	OLD ASSIGNED ITEM NUMBER
[REDACTED]				- Unmarked Legacy Reference
9108160227	09/22/1994		CDB	INSPECTION REPORT
[REDACTED]				- Unmarked Legacy Reference

Item Number: FC910619

Last Updated: 05/10/1995

**Narrative:**

INSPECTION REPORT RELATED TO INCIDENT OF 08/28/91 AND 06/13/91. ONE VIOLATION NOTED BUT NOT CITED RELATING TO THE VIOLATION OF A POSTED SAFETY LIMIT.

Event Date: 05/28/1991

Discovery Date: 05/28/1991

Report Date: 08/16/1991

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0124	Name: NUCLEAR FUEL SERVICES, INC.
NRC Docket Number: 07000143	City: ERWIN
NRC Program Code: 21210	State: TN      Zip Code: 376509718
Responsible NRC Region: 2	

**Site of Event:**

Site Name ERWIN      State: TN

**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA      Zip Code: NA

**Other Information:**

NRC Reportable Event: Y	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: Y
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: NOT REPORTED

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1      NOT REPORTED

**Source of Radiation:**

FCP

<b>Source Number:</b> 1			
Source/Material: UNSEALED SOURCE OTHER	Radionuclide or Voltage (kVp/MeV): PU-OTH		
Device Name: NA	Activity: NR Ci	NR	GBq
Manufacturer: NR			
Model Number: NR			
Serial Number: NR			

**Reporting Requirements:**

FCP  
Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported: Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
910362	09/22/1994		CDB	OLD ASSIGNED ITEM NUMBER
[REDACTED]				- Unmarked Legacy Reference
9109160071	09/22/1994		CDB	INSPECTION REPORT
[REDACTED]				- Unmarked Legacy Reference

Item Number: FC910620

Last Updated: 10/10/1995

**Narrative:**

INSPECTION REPORT OF 05/28/91 NOTES VIOLATIONS ALTHOUGH NONE ARE CITED.

Event Date: 05/28/1991

Discovery Date: 05/28/1991

Report Date: 09/19/1991

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BABCOCK & WILCOX CO.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name LYNCHBURG State: VA

**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: Y
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: MANAGEMENT DEFICIENCY

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 NOT REPORTED

**Source of Radiation:**

FCP

<b>Source Number:</b> 1		
Source/Material: NR	Radionuclide or Voltage (kVp/MeV): NR	
Device Name: NA	Activity: NR Ci	NR GBq
Manufacturer: NR		
Model Number: NR		
Serial Number: NR		

**Reporting Requirements:**

FCP  
Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.  
Mode Reported: Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
910366	09/22/1994		CDB	OLD ASSIGNED ITEM NUMBER
[REDACTED]				- Unmarked Legacy Reference
9110080077	09/22/1994		CDB	INSPECTION REPORT
[REDACTED]				- Unmarked Legacy Reference

Item Number: FC910696

Last Updated: 05/31/1995

**Narrative:**

LICENSEE REPORTS THAT PIPE LEADING TO SAFETY SHOWER RUPTURED DUMPING 350 GALLONS OF WATER ONTO THE FLOOR. A SAMPLE OF THE WATER HAD 1 E-7 μCURIES/ML. WATER BEING STORED IN 55 GALLON DRUMS. NO WATER EXITED THE BUILDING.

Event Date: 06/13/1991

Discovery Date: 06/13/1991

Report Date: 06/13/1991

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0124	Name: NUCLEAR FUEL SERVICES, INC.
NRC Docket Number: 07000143	City: ERWIN
NRC Program Code: 21210	State: TN      Zip Code: 376509718
Responsible NRC Region: 2	

**Site of Event:**

Site Name      NR      State: TN

**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA      Zip Code: NA

**Other Information:**

NRC Reportable Event: U	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: Y
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed:

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: DEFECTIVE OR FAILED PART  
RLM - RADIOACTIVE MATERIAL REL.  
Cause: DEFECTIVE OR FAILED PART

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1      NOT REPORTED  
RLM  
1      NOT REPORTED

**Release of Material or Contamination Information:**

Type or Release or Contamination:	Activity:	Radionuclide:	Effect of Release or Contamination:
	Ci      GBq		
WATER	NR      NR	MFP	

**Source of Radiation:**

FCP

**Source Number: 1**

Source/Material: UNSEALED SOURCE OTHER	Radionuclide or Voltage (kVp/MeV): MFP
Device Name: NA	Activity: NR Ci      NR GBq
Manufacturer: NR	
Model Number: NR	
Serial Number: NR	

RLM

**Source Number: 1**

Source/Material: UNSEALED SOURCE OTHER	Radionuclide or Voltage (kVp/MeV): MFP
Device Name: NA	Activity: NR Ci      NR GBq
Manufacturer: NR	
Model Number: NR	
Serial Number: NR	



**References:**

<b>Reference Number:</b>	<b>Entry Date:</b>	<b>Retraction Date:</b>	<b>Coder Initials:</b>	<b>Reference Type:</b>
910482	09/22/1994		CDB	OLD ASSIGNED ITEM NUMBER
				- Unmarked Legacy Reference
NR	09/22/1994		CDB	DAILY REPORT
				- Unmarked Legacy Reference



Item Number: FC910768

Last Updated: 05/31/1995

**Narrative:**

INSPECTION REPORT OF FACILITIES NOTES ONE NON-CITED VIOLATION, FAILURE TO CORRECT FOR BETA SELF-ABSORPTION AND FAILURE TO ACCURATELY CORRECT ALPHA SELF ABSORPTION IN THE FACILITIES WASTE STREAM.

Event Date: 07/01/1991

Discovery Date: 07/01/1991

Report Date: 08/14/1991

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0124	Name: NUCLEAR FUEL SERVICES, INC.
NRC Docket Number: 07000143	City: ERWIN
NRC Program Code: 21210	State: TN Zip Code: 376509718
Responsible NRC Region: 2	

**Site of Event:**

Site Name ERWIN	State: TN
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**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: U	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: Y
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed:

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: NOT REPORTED

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
910364	09/22/1994		CDB	OLD ASSIGNED ITEM NUMBER
[REDACTED]				- Unmarked Legacy Reference
9108280143	09/22/1994		CDB	INSPECTION REPORT
[REDACTED]				- Unmarked Legacy Reference

Narrative:

AN INDIVIDUAL RECEIVED PUNCTURE A WOUND TO THE LEFT THUMB. A SURVEY OF THE WOUND REVEALED CONTAMINATION OF 170 DPM. INHALATION CHELATION THERAPY WAS ADMINISTERED.

Event Date: 09/05/1991

Discovery Date: 09/05/1991

Report Date: 09/05/1991

Licensee/Reporting Party Information:

Agreement State Regulated: NO Reciprocity: NONE
License Number: SNM-0124 Name: NUCLEAR FUEL SERVICES, INC.
NRC Docket Number: 07000143 City: ERWIN
NRC Program Code: 21210 State: TN Zip Code: 376509718
Responsible NRC Region: 2

Site of Event:

Site Name ERWIN State: TN

Additional Involved Party:

License Number: NA Name: NA
City: NA
State: NA Zip Code: NA

Other Information:

NRC Reportable Event: U Abnormal Occurrence: N
Agreement State Reportable Event: N Investigation: Y
Atomic Energy Act Material: Y Record Complete:
Consultant Hired: N Event Closed: Y

Event Cause:

EXP - OVEREXPOSURE
Cause: NOT REPORTED
FCP - FUEL CYCLE PROBLEMS
Cause: NOT REPORTED

Corrective Actions Information:

Action Number: Corrective Action:
EXP
1 NOT REPORTED
FCP
1 NOT REPORTED

Exposure Detail:

Person Exposure Dose: Type of Dose: Effect of Exposure:
Number: rem Sv
1 NR NR INTERNAL (CEDE), OCCUPATIONAL

Source of Radiation:

EXP

Source Number: 1
Source/Material: UNSEALED SOURCE SNM Radionuclide or Voltage (kVp/MeV): NR
Device Name: NA Activity: NR Ci NR GBq
Manufacturer: NR
Model Number: NR
Serial Number: NR

FCP

Source Number: 1
Source/Material: UNSEALED SOURCE SNM Radionuclide or Voltage (kVp/MeV): NR
Device Name: NA Activity: NR Ci NR GBq
Manufacturer: NR
Model Number: NR
Serial Number: NR

References:

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
910291	09/22/1994		CDB	OLD ASSIGNED ITEM NUMBER
				- Unmarked Legacy Reference
NR	09/22/1994		CDB	PRELIMINARY NOTIFICATION
				- Unmarked Legacy Reference

**Narrative:**

INSPECTION WHICH INCLUDED A FIRE DRILL FOUND TWO VIOLATIONS; FAILURE TO PROVIDE TRAINING FOR THE CAMPBELL COUNTY EMERGENCY SERVICE AND FAILURE TO PERFORM MONTHLY TEST OF FIRE PROTECTION SYSTEM MAIN SECTIONAL VALVES (NON-CITED).

UPDATE: INSPECTION REGARDING EMERGENCY PREPAREDNESS IDENTIFIED ONE VIOLATION CONCERNING THE FAILURE TO MAINTAIN AND IMPLEMENT THE TRAINING REQUIREMENTS OF AS-1101. AN UNRESOLVED ITEM - THE QUESTION OF THE FUNCTIONALITY OF THE CRITICALITY ALARM.

UPDATE: DISCOVERY ON 10/31/91 THAT THE NUCLEAR CRITICALITY MONITORING AND ALARM SYSTEM WOULD SATURATE IN ACCIDENTS PRODUCING > IE17 FISSIONS IN A SHORT (1E-3 SECONDS) BURST.

UPDATE: IT WAS DISCOVERED THAT THE DEVICE WHICH STOPS THE GM METERS FROM SATURATING WAS NOT HOOKED UP. LICENSEE REPAIRED ALL GM METERS.

UPDATE: THE LICENSEE DECLARED AN UNUSUAL EVENT DUE TO THE DISCOVERY THAT THE CRITICALITY ALARM COULD BECOME SATURATED AND NOT SOUND. ALL GM METERS ARE BEING REPLACED.

UPDATE: DISCUSSES INSPECTION REPORT FOR INSPECTION OF 09\28\91 AND ENFORCEMENT CONFERENCE OF 11/25/91. BOTH CONCERNING OPERABILITY OF CRITICALITY MONITORING SYSTEM. THE LICENSEE WAS FOUND TO HAVE FAILED TO "MAKE SURVEYS...TO EVALUATE THE EXTENT OF RADIATION HAZARDS..."

Event Date: 09/28/1991

Discovery Date: 09/28/1991

Report Date: 10/30/1991

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BABCOCK & WILCOX CO.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name CNFP	State: VA
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**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: Y
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: DEFECTIVE OR FAILED PART

**Corrective Actions Information:**

Action Number: FCP	Corrective Action:
1	NOT REPORTED

**Device/Associated Equipment:**

FCP

**Device Number: 1**

Device Name: ALARM, CRITICALITY	Model Number: NR
Manufacturer: NR	Serial Number: NR

**Device Number: 2**

Device Name: ALARM, CRITICALITY	Model Number: NR
Manufacturer: NR	Serial Number: NR

**Reporting Requirements:**

FCP

Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.

Mode Reported: Written

**References:**

<b>Reference Number:</b>	<b>Entry Date:</b>	<b>Retraction Date:</b>	<b>Coder Initials:</b>	<b>Reference Type:</b>
910141	09/22/1994		CDB	OLD ASSIGNED ITEM NUMBER
[REDACTED]	- Unmarked Legacy Reference			
910256	09/22/1994		CDB	OLD ASSIGNED ITEM NUMBER
[REDACTED]	- Unmarked Legacy Reference			
910258	09/22/1994		CDB	OLD ASSIGNED ITEM NUMBER
[REDACTED]	- Unmarked Legacy Reference			
910405	09/22/1994		CDB	OLD ASSIGNED ITEM NUMBER
[REDACTED]	- Unmarked Legacy Reference			
9201030031	09/22/1994		CDB	NOTICE OF VIOLATION
[REDACTED]	- Unmarked Legacy Reference			
9203230044	09/22/1994		CDB	DAILY REPORT
[REDACTED]	- Unmarked Legacy Reference			
NR	09/22/1994		CDB	INSPECTION REPORT
Official Use Only	- Unmarked Legacy Reference			

Item Number: FC911138

Last Updated: 07/25/1995

**Narrative:**

THE LICENSEE DISCOVERED THAT A ONE-MILLION GALLON STORAGE TANK AND A RECYCLE WATER RESERVOIR CONTINUED TO SHOW ELEVATED LEVELS OF ACTIVITY IN THE BOTTOMS. THE LEVELS AT THE TOP [REDACTED] ALSO EXCEED THE ACTION LEVEL. THE SOURCE IS BELIEVED TO BE RELATED TO THE JULY SCRUBBER PROBLEM

Event Date: 10/09/1991

Discovery Date: 10/09/1991

Report Date: 08/13/1992

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BABCOCK & WILCOX CO.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name LYNCHBURG	State: VA
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**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: N	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: Y
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS

Cause: NOT REPORTED

**Corrective Actions Information:**

Action Number: Corrective Action:  
 FCP  
 1 NOT REPORTED

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
920482	09/22/1994		CDB	OLD ASSIGNED ITEM NUMBER
[REDACTED]				- Unmarked Legacy Reference
9209300161	09/22/1994		CDB	LICENSEE REPORT
[REDACTED]				- Unmarked Legacy Reference

Item Number: FC911152

Last Updated: 07/25/1995

**Narrative:**

A GLOVEBOX, WHILE BEING MOVED, SLIPPED OFF SUPPORT AND RUPTURED. NASAL SMEARS TAKEN FROM EMPLOYEES WERE NEGATIVE. SKIN CONTAMINATION WAS ESTIMATED AT 1000 DPM/100 CM2. WHOLE BODY COUNTS WERE ESTIMATED AT 0.60, 0.72, 0.97 NANOci. FOR THE 3 INDIVIDUALS INVOLVED.

Event Date: 10/15/1991

Discovery Date: 10/15/1991

Report Date: 10/16/1991

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0124	Name: NUCLEAR FUEL SERVICES, INC.
NRC Docket Number: 07000143	City: ERWIN
NRC Program Code: 21210	State: TN Zip Code: 376509718
Responsible NRC Region: 2	

**Site of Event:**

Site Name ERWIN	State: TN
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**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: N	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: Y
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed: Y

**Event Cause:**

EXP - OVEREXPOSURE

Cause: NOT REPORTED

FCP - FUEL CYCLE PROBLEMS

Cause: NOT REPORTED

RLM - RADIOACTIVE MATERIAL REL.

Cause: NOT REPORTED

**Corrective Actions Information:**

Action Number:	Corrective Action:
EXP	
1	NOT REPORTED
FCP	
1	NOT REPORTED
RLM	
1	NOT REPORTED

**Release of Material or Contamination Information:**

Type or Release or Contamination:	Activity:	Radionuclide:	Effect of Release or Contamination:
	Ci GBq		
AIR	NR NR	NR	
SURFACE	NR NR	NR	

**Exposure Detail:**

Person Number:	Exposure Dose:	Type of Dose:	Effect of Exposure:
	rem Sv		
1	NR NR	SKIN, OCCUPATIONAL	

**Source of Radiation:**

EXP



**Source Number: 1**

Source/Material: UNSEALED SOURCE SNM Radionuclide or Voltage (kVp/MeV): NR  
 Device Name: NA Activity: NR Ci NR GBq  
 Manufacturer: NR  
 Model Number: NA  
 Serial Number: NA

FCP

**Source Number: 1**

Source/Material: UNSEALED SOURCE SNM Radionuclide or Voltage (kVp/MeV): NR  
 Device Name: NA Activity: NR Ci NR GBq  
 Manufacturer: NR  
 Model Number: NA  
 Serial Number: NA

RLM

**Source Number: 1**

Source/Material: UNSEALED SOURCE SNM Radionuclide or Voltage (kVp/MeV): NR  
 Device Name: NA Activity: NR Ci NR GBq  
 Manufacturer: NR  
 Model Number: NA  
 Serial Number: NA

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
910231	09/22/1994		CDB	OLD ASSIGNED ITEM NUMBER
				- Unmarked Legacy Reference
NR	09/22/1994		CDB	DAILY REPORT
				- Unmarked Legacy Reference



Item Number: FC911162

Last Updated: 10/10/1995

**Narrative:**

LICENSEE HAD FAILURE OF THEIR [REDACTED]. FAILURE WAS DUE TO A LOOSE CONNECTION.

Event Date: 10/17/1991

Discovery Date: 10/17/1991

Report Date: 10/17/1991

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0124	Name: NUCLEAR FUEL SERVICES, INC.
NRC Docket Number: 07000143	City: ERWIN
NRC Program Code: 21210	State: TN      Zip Code: 376509718
Responsible NRC Region: 2	

**Site of Event:**

Site Name: NR      State: TN

**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA      Zip Code: NA

**Other Information:**

NRC Reportable Event: Y	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation:
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: DEFECTIVE OR FAILED PART

**Reporting Requirements:**

FCP  
Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.  
Mode Reported: Telephone

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
910253	09/22/1994		CDB	OLD ASSIGNED ITEM NUMBER
[REDACTED]				- Unmarked Legacy Reference
NR	09/22/1994		CDB	DAILY REPORT
[REDACTED]				- Unmarked Legacy Reference

Item Number: FC911195

Last Updated: 10/11/1995

**Narrative:**

ONE VIOLATION NOTED. LICENSEE RELEASED SOLUTION CONTAINING URANIUM FROM A SAFE TO AN UNSAFE GEOMETRY TANK WITHOUT FIRST VERIFYING A SAFE CONCENTRATION. OPERATOR PUNCHED IN THE WRONG SAMPLE NUMBER. CRITICALITY MONITORS FOUND TO NOT HAVE SATURATION PROBLEM.

Event Date: 10/26/1991

Discovery Date: 10/26/1991

Report Date: 12/20/1991

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0124	Name: NUCLEAR FUEL SERVICES, INC.
NRC Docket Number: 07000143	City: ERWIN
NRC Program Code: 21210	State: TN      Zip Code: 376509718
Responsible NRC Region: 2	

**Site of Event:**

Site Name      NR	State:      TN
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**Additional Involved Party:**

License Number: NA	Name:      NA
	City:      NA
	State:      NA      Zip Code: NA

**Other Information:**

NRC Reportable Event:      Y	Abnormal Occurrence:      N
Agreement State Reportable Event:      N	Investigation:      Y
Atomic Energy Act Material:      Y	Record Complete:
Consultant Hired:      N	Event Closed:      Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS

Cause:      FAILURE TO FOLLOW PROCEDURE OR WRONG PROCEDURE USED

**Reporting Requirements:**

FCP

Reporting Requirement:      NRCB 91-01 - Loss of criticality safety controls.

Mode Reported:      Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
910453	09/22/1994		CDB	OLD ASSIGNED ITEM NUMBER
██████████				- Unmarked Legacy Reference
9201140173	09/22/1994		CDB	INSPECTION REPORT
██████████				- Unmarked Legacy Reference

Item Number: FC911248

Last Updated: 10/11/1995

**Narrative:**

RAFFINATE COLUMNS WERE RELEASED TO UNSAFE GEOMETRY TANKS BY MISTAKE. U/I CONTENT WAS [REDACTED] AND [REDACTED] (NORMAL RELEASE LIMIT [REDACTED]).

Event Date: 11/07/1991

Discovery Date: 11/07/1991

Report Date: 11/14/1991

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0124	Name: NUCLEAR FUEL SERVICES, INC.
NRC Docket Number: 07000143	City: ERWIN
NRC Program Code: 21210	State: TN Zip Code: 376509718
Responsible NRC Region: 2	

**Site of Event:**

Site Name NR State: TN

**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation:
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: FAILURE TO FOLLOW PROCEDURE OR WRONG PROCEDURE USED

**Reporting Requirements:**

FCP  
Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported: Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
910234	09/22/1994		CDB	OLD ASSIGNED ITEM NUMBER
[REDACTED]				- Unmarked Legacy Reference
NR	09/22/1994		CDB	DAILY REPORT
[REDACTED]				- Unmarked Legacy Reference

Item Number: FC911288

Last Updated: 10/11/1995

**Narrative:**

THE LICENSEE REPORTED THAT THE MONITOR LEADING TO UNFAVORABLE GEOMETRY TANK WENT INTO ALARM. IT WAS ASCERTAINED THAT ELECTRICAL STORM CAUSED MALFUNCTION OF ALARM.

Event Date: 11/21/1991

Discovery Date: 11/21/1991

Report Date: 11/21/1991

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BABCOCK & WILCOX CO.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name NNFD State: VA

**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation:
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: WEATHER OR AMBIENT CONDITION

**Reporting Requirements:**

FCP  
Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported: Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
910242	09/22/1994		CDB	OLD ASSIGNED ITEM NUMBER
[REDACTED]				- Unmarked Legacy Reference
NR	09/22/1994		CDB	DAILY REPORT
[REDACTED]				- Unmarked Legacy Reference

Item Number: FC911316

Last Updated: 10/11/1995

**Narrative:**

LICENSEE INSTALLED [REDACTED] AND DISCONNECTED THE [REDACTED]. IT WAS DISCOVERED THAT THE [REDACTED] COULD NOT BE HEARD INSIDE [REDACTED] BUILDINGS. THE [REDACTED] WAS REATTACHED AND THE [REDACTED] WILL BE MODIFIED.

Event Date: 12/02/1991

Discovery Date: 12/02/1991

Report Date: 12/03/1991

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BABCOCK & WILCOX CO.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name: NAVAL State: VA

**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: Y
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed: Y

**Event Cause:**

EQP - EQUIPMENT  
Cause: DESIGN, MANUFACTURING, OR INSTALLATION ERROR  
FCP - FUEL CYCLE PROBLEMS  
Cause: DESIGN, MANUFACTURING, OR INSTALLATION ERROR

**Reporting Requirements:**

EQP  
Reporting Requirement: 70.50(a) - Event that prevents immediate protective actions necessary to avoid exposures to radiation or radioactive materials that could exceed regulatory limits or releases of licensed material that could exceed regulatory limits.  
Mode Reported: Written

FCP  
Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported: Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
910443	09/22/1994		CDB	OLD ASSIGNED ITEM NUMBER
[REDACTED]				- Unmarked Legacy Reference
NR	09/22/1994		CDB	DAILY REPORT
[REDACTED]				- Unmarked Legacy Reference

Item Number: FC911379

Last Updated: 07/17/1995

**Narrative:**

THE LICENSEE REPORTED A LEAKING TRANSFER LINE. THE WELD WAS REPAIRED.

Event Date: 12/20/1991

Discovery Date: 12/20/1991

Report Date: 03/24/1992

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0124	Name: NUCLEAR FUEL SERVICES, INC.
NRC Docket Number: 07000143	City: ERWIN
NRC Program Code: 21210	State: TN      Zip Code: 376509718
Responsible NRC Region: 2	

**Site of Event:**

Site Name      ERWIN	State:      TN
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**Additional Involved Party:**

License Number: NA	Name:      NA
	City:      NA
	State:      NA      Zip Code: NA

**Other Information:**

NRC Reportable Event:      Y	Abnormal Occurrence:      N
Agreement State Reportable Event:      N	Investigation:      Y
Atomic Energy Act Material:      Y	Record Complete:      Y
Consultant Hired:      N	Event Closed:      Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: DEFECTIVE OR FAILED PART

RLM - RADIOACTIVE MATERIAL REL.  
Cause: DEFECTIVE OR FAILED PART

**Corrective Actions Information:**

Action Number:	Corrective Action:
FCP	
1	NOT REPORTED
RLM	
1	NOT REPORTED

**Release of Material or Contamination Information:**

Type or Release or Contamination:	Activity:	Radionuclide:	Effect of Release or Contamination:
	Ci      GBq		
SURFACE	NR      NR	PU-238	

**Source of Radiation:**

FCP

<b>Source Number:</b> 1			
Source/Material:	FUEL FABRICATION MATERIAL	Radionuclide or Voltage (kVp/MeV):	U-OXIDE
Device Name:	LINE, TRANSFER	Activity:	NR Ci      NR GBq
Manufacturer:	NR		
Model Number:	NR		
Serial Number:	NR		

RLM

<b>Source Number:</b> 1			
Source/Material:	FUEL FABRICATION MATERIAL	Radionuclide or Voltage (kVp/MeV):	U-OXIDE
Device Name:	LINE, TRANSFER	Activity:	NR Ci      NR GBq
Manufacturer:	NR		
Model Number:	NR		
Serial Number:	NR		

**Device/Associated Equipment:**



FCP

**Device Number: 1**

Device Name: LINE, TRANSFER

Manufacturer: NR

Model Number: NR

Serial Number: NR

RLM

**Device Number: 1**

Device Name: LINE, TRANSFER

Manufacturer: NR

Model Number: NR

Serial Number: NR

**Reporting Requirements:**

FCP

Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.

Mode Reported: Written

RLM

Reporting Requirement: 20.0405(a)(1)(iii) - old - (SUPERSEDED) THE 30 DAY WRITTEN REPORT OF LEVELS OF RADIATION OR CONCENTRATIONS OF RADIOACTIVE MATERIAL IN A RESTRICTED AREA IN EXCESS OF ANY OTHER APPLICABLE LIMIT IN THE LICENSE.

Mode Reported: Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
920227	09/22/1994		CDB	OLD ASSIGNED ITEM NUMBER
				- Unmarked Legacy Reference
9204140092	09/22/1994		CDB	INSPECTION REPORT
				- Unmarked Legacy Reference



Item Number: FC920130

Last Updated: 05/19/1995

**Narrative:**

THE LICENSEE REPORTED THAT A LEAK IN A PLASTIC BAG IN THE FACILITY CAUSED AN ALARM ON AN CONTAMINATION MONITOR. THE FACILITY WAS EVACUATED. THE LICENSEE ENSURED THAT THE BUILDING VENTILATION WAS NOT COMPROMISED PRIOR TO SURVEY AND DECONTAMINATION. THE PLASTIC BAG WAS STORED.

Event Date: 02/07/1992

Discovery Date: 02/07/1992

Report Date: 03/10/1992

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0124 Name: NUCLEAR FUEL SERVICES, INC.  
NRC Docket Number: 07000143 City: ERWIN  
NRC Program Code: 21210 State: TN Zip Code: 376509718  
Responsible NRC Region: 2

**Site of Event:**

Site Name ERWIN State: TN

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: Y  
Atomic Energy Act Material: Y Record Complete:  
Consultant Hired: N Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: DEFECTIVE OR FAILED PART  
RLM - RADIOACTIVE MATERIAL REL.  
Cause: DEFECTIVE OR FAILED PART

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 NOT REPORTED  
RLM  
1 NOT REPORTED

**Release of Material or Contamination Information:**

Type or Release or Contamination:	Activity:	Radionuclide:	Effect of Release or Contamination:
SURFACE	Ci GBq NR NR	U-NAT	

**Source of Radiation:**

FCP  
**Source Number: 1**  
Source/Material: UNSEALED SOURCE OTHER Radionuclide or Voltage (kVp/MeV): U-NAT  
Device Name: NA Activity: NR Ci NR GBq  
Manufacturer: NR  
Model Number: NR  
Serial Number: NR  
RLM  
**Source Number: 1**  
Source/Material: UNSEALED SOURCE OTHER Radionuclide or Voltage (kVp/MeV): U-NAT  
Device Name: NA Activity: NR Ci NR GBq  
Manufacturer: NR  
Model Number: NR  
Serial Number: NR



**Reporting Requirements:**

FCP

Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.

Mode Reported: Written

RLM

Reporting Requirement: 20.0405(a)(1)(iii) - old - (SUPERSEDED) THE 30 DAY WRITTEN REPORT OF LEVELS OF RADIATION OR CONCENTRATIONS OF RADIOACTIVE MATERIAL IN A RESTRICTED AREA IN EXCESS OF ANY OTHER APPLICABLE LIMIT IN THE LICENSE.

Mode Reported: Written

**References:**

<b>Reference Number:</b>	<b>Entry Date:</b>	<b>Retraction Date:</b>	<b>Coder Initials:</b>	<b>Reference Type:</b>
920123	12/07/1994		CDB	OLD ASSIGNED ITEM NUMBER
				- Unmarked Legacy Reference
9204080034	12/07/1994		CDB	INSPECTION REPORT
				- Unmarked Legacy Reference



Item Number: FC920181

Last Updated: 02/27/1998

**Narrative:**

THE LICENSEE REPORTED A SHIPPING ERROR THAT CAUSED 250 SHIPMENTS TO [REDACTED] TO EXCEED A2 LIMITS. THE CONTAINERS USED WERE NOT APPROVED FOR THE QUANTITIES SHIPPED. DUE TO FAILURE OF THE COMPUTER SOFTWARE, NOT ALL [REDACTED] WAS ACCOUNTED FOR. THE TOTAL AMOUNT SHIPPED WAS [REDACTED], NOT [REDACTED] AS PLANNED.

Event Date: 02/24/1992

Discovery Date: 02/24/1992

Report Date: 02/25/1992

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0124	Name: NUCLEAR FUEL SERVICES, INC.
NRC Docket Number: 07000143	City: ERWIN
NRC Program Code: 21210	State: TN      Zip Code: 376509718
Responsible NRC Region: 2	

**Site of Event:**

Site Name      ERWIN      State:      TN

**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA      Zip Code: NA

**Other Information:**

NRC Reportable Event: U	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: Y
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS

Cause: DESIGN, MANUFACTURING, OR INSTALLATION ERROR

TRS - TRANSPORTATION

Cause: DESIGN, MANUFACTURING, OR INSTALLATION ERROR

**Corrective Actions Information:**

Action Number:	Corrective Action:
FCP	
1	NOT REPORTED
TRS	
1	NOT REPORTED

**Source of Radiation:**

FCP

<b>Source Number:</b> 1		
Source/Material:	FUEL FABRICATION MATERIAL	Radionuclide or Voltage (kVp/MeV): PU-241
Device Name:	CONTAINER, SHIPPING	Activity: NR Ci      NR GBq
Manufacturer:	NR	
Model Number:	NR	
Serial Number:	NR	

TRS

<b>Source Number:</b> 1		
Source/Material:	FUEL FABRICATION MATERIAL	Radionuclide or Voltage (kVp/MeV): PU-241
Device Name:	CONTAINER, SHIPPING	Activity: NR Ci      NR GBq
Manufacturer:	NR	
Model Number:	NR	
Serial Number:	NR	

**Device/Associated Equipment:**

FCP



**Device Number: 1**

Device Name: CONTAINER, SHIPPING

Manufacturer: NR

Model Number: NA

Serial Number: NA

TRS

**Device Number: 1**

Device Name: CONTAINER, SHIPPING

Manufacturer: NR

Model Number: NA

Serial Number: NA

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
200000	12/07/1994		CDB	OLD REGIONAL LOG NUMBER AS SOURCE
				- Unmarked Legacy Reference
920037	12/07/1994		CDB	OLD ASSIGNED ITEM NUMBER
				- Unmarked Legacy Reference



Item Number: FC920208

Last Updated: 05/19/1995

**Narrative:**

ON 03/12/92 A WORKER RECEIVED AN ESTIMATED 57.97 MPC HOURS WHILE PLACING A MEASURING TAPE ON AN EVAPORATOR COLUMN. ON 03/16/92 A WORKER RECEIVED AN ESTIMATED 112 MPC HOURS WHILE CLEANING AN EVAPORATOR COLUMN. ON 03/24/92 THERE WAS AN UNKNOWN EXPOSURE; BIOASSAY RESULTS WERE NOT AVAILABLE. EVEN ASSUMING NO RESPIRATORS WERE WORN THESE EXPOSURES WOULD BE MINIMAL AND NOT OVEREXPOSURES.

Event Date: 03/01/1992

Discovery Date: 03/01/1992

Report Date: 04/21/1992

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BABCOCK & WILCOX CO.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name	NEWPORT NEWS FD	State:	VA
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**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event:	N	Abnormal Occurrence:	N
Agreement State Reportable Event:	N	Investigation:	Y
Atomic Energy Act Material:	Y	Record Complete:	
Consultant Hired:	N	Event Closed:	

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: NOT REPORTED

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 NOT REPORTED

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
920217	12/07/1994		CDB	OLD ASSIGNED ITEM NUMBER
[REDACTED]				- Unmarked Legacy Reference
9205120229	12/07/1994		CDB	INSPECTION REPORT
[REDACTED]				- Unmarked Legacy Reference

Item Number: FC920231

Last Updated: 05/19/1995

**Narrative:**

A DISCHARGE LINE FOR THE RADIOACTIVE SAMPLE SINK WASTE COLLECTION SUMP WAS DISCONNECTED. THE WASTE WATER WAS RELEASED ONTO THE GROUND. THE DISCHARGE WAS CONTAINED IN THE CONTROLLED AREA.

Event Date: 03/05/1992

Discovery Date: 03/05/1992

Report Date: 04/27/1992

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0124	Name: NUCLEAR FUEL SERVICES, INC.
NRC Docket Number: 07000143	City: ERWIN
NRC Program Code: 21210	State: TN Zip Code: 376509718
Responsible NRC Region: 2	

**Site of Event:**

Site Name ERWIN	State: TN
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**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: Y
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: DEFECTIVE OR FAILED PART  
RLM - RADIOACTIVE MATERIAL REL.  
Cause: DEFECTIVE OR FAILED PART

**Corrective Actions Information:**

Action Number:	Corrective Action:
FCP	
1	NOT REPORTED
RLM	
1	NOT REPORTED

**Release of Material or Contamination Information:**

Type or Release or Contamination:	Activity:	Radionuclide:	Effect of Release or Contamination:
SURFACE	Ci GBq NR NR	U-NAT	

**Source of Radiation:**

FCP

<b>Source Number:</b> 1		
Source/Material: UNSEALED SOURCE OTHER	Radionuclide or Voltage (kVp/MeV): U-NAT	
Device Name: NA	Activity: U-NAT Ci	GBq
Manufacturer: NR		
Model Number: NA		
Serial Number: NA		

RLM

<b>Source Number:</b> 1		
Source/Material: UNSEALED SOURCE OTHER	Radionuclide or Voltage (kVp/MeV): U-NAT	
Device Name: NA	Activity: U-NAT Ci	GBq
Manufacturer: NR		
Model Number: NA		
Serial Number: NA		

**Reporting Requirements:**



FCP

Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.  
Mode Reported: Written

RLM

Reporting Requirement: 20.0405(a)(1)(iii) - old - (SUPERSEDED) THE 30 DAY WRITTEN REPORT OF LEVELS OF RADIATION OR CONCENTRATIONS OF RADIOACTIVE MATERIAL IN A RESTRICTED AREA IN EXCESS OF ANY OTHER APPLICABLE LIMIT IN THE LICENSE.  
Mode Reported: Written

**References:**

<b>Reference Number:</b>	<b>Entry Date:</b>	<b>Retraction Date:</b>	<b>Coder Initials:</b>	<b>Reference Type:</b>
920264	12/07/1994		CDB	OLD ASSIGNED ITEM NUMBER
	- Unmarked Legacy Reference			
9205120154	12/07/1994		CDB	INSPECTION REPORT
	- Unmarked Legacy Reference			



Item Number: FC920321

Last Updated: 03/28/1995

**Narrative:**

AN INSPECTION NOTED A VIOLATION IN WHICH THE LICENSEE DID NOT MEET POSTED STATION LIMITS FOR THE SEPARATION REQUIREMENTS OF THE [REDACTED]. TWO OF THREE BOTTLES HAD BEEN LESS THAN THE REQUIRED [REDACTED] APART.

Event Date: 03/31/1992

Discovery Date: 03/31/1992

Report Date: 05/31/1992

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0124	Name: NUCLEAR FUEL SERVICES, INC.
NRC Docket Number: 07000143	City: ERWIN
NRC Program Code: 21210	State: TN      Zip Code: 376509718
Responsible NRC Region: 2	

**Site of Event:**

Site Name      ERWIN      State:      TN

**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA      Zip Code: NA

**Other Information:**

NRC Reportable Event: N	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: Y
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause:      MANAGEMENT DEFICIENCY

**Corrective Actions Information:**

Action Number:      Corrective Action:  
FCP  
1      NOT REPORTED

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
920361	12/07/1994		CDB	OLD ASSIGNED ITEM NUMBER
[REDACTED]				- Unmarked Legacy Reference
9206150084	12/07/1994		CDB	INSPECTION REPORT
[REDACTED]				- Unmarked Legacy Reference

Item Number: FC920354

Last Updated: 10/10/1995

**Narrative:**

THE LICENSEE REPORTED THAT TWO ELECTRICALLY OPERATED VALVES IN THE WASTE LINE TO THE RECEIVING TANK FAILED TO CLOSE AT LOW RADIATION LEVELS (FAIL SAFE FUNCTION). THE LICENSEE EVALUATED USE OF THE [REDACTED] FOR THESE VALVES.

Event Date: 04/07/1992

Discovery Date: 04/07/1992

Report Date: 04/08/1992

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BABCOCK & WILCOX CO.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name NNFD State: VA

**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: Y
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: DEFECTIVE OR FAILED PART

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 ENGINEERING CHANGE TO SYSTEM

**Source of Radiation:**

FCP

<b>Source Number:</b> 1			
Source/Material: UNSEALED SOURCE NORM	Radionuclide or Voltage (kVp/MeV): U-NAT		
Device Name: LINE, WASTE	Activity: NR Ci	NR	GBq
Manufacturer: NR			
Model Number: NA			
Serial Number: NA			

**Device/Associated Equipment:**

FCP

<b>Device Number:</b> 1			
Device Name: LINE, WASTE	Model Number: NR		
Manufacturer: NR	Serial Number: NR		
<b>Device Number:</b> 2			
Device Name: VALVE, OTHER	Model Number: NR		
Manufacturer: NR	Serial Number: NR		

**Reporting Requirements:**

FCP  
Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.  
Mode Reported: Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Code Initials:	Reference Type:
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Reference Number.	Entry Date.	Refraction Date.	[REDACTED]	Reference Type.
200000	12/07/1994		CDB	OLD REGIONAL LOG NUMBER AS SOURCE
[REDACTED]	- Unmarked Legacy Reference			
920116	12/07/1994		CDB	OLD ASSIGNED ITEM NUMBER
[REDACTED]	- Unmarked Legacy Reference			



Item Number: FC920389

Last Updated: 05/31/1995

**Narrative:**

THE LICENSEE WAS CITED FOR FAILURE TO PROVIDE AN APPROVED WRITTEN PROCEDURE TO DESCRIBE THE LOCATION OF CRITICALITY DOSIMETERS AND THE PROCESS FOR THEIR COLLECTION IN THE EVENT OF AN ACCIDENT.

UPDATE: ON 6/19/92, AN INSPECTION NOTED THAT THE LICENSEE STILL HAD NOT PREPARED THE REQUIRED PROCEDURE.

Event Date: 04/20/1992

Discovery Date: 04/20/1992

Report Date: 05/27/1992

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BABCOCK & WILCOX CO.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name LYNCHBURG State: VA

**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: N	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: Y
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: LACK OF PROCEDURE

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 NOT REPORTED

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
920602	12/07/1994		CDB	OLD ASSIGNED ITEM NUMBER
[REDACTED]				- Unmarked Legacy Reference
9212300366	12/07/1994		CDB	INSPECTION REPORT
[REDACTED]				- Unmarked Legacy Reference

Item Number: FC920397

Last Updated: 05/24/1995

**Narrative:**

THE LICENSEE REPORTED THAT AN EMERGENCY EVACUATION SYSTEM ALARM LOCATED IN [REDACTED] WAS FOUND INOPERABLE DURING A QUARTERLY SURVEILLANCE. THIS WAS CAUSED BY A BLOWN FUSE WHICH WAS REPLACED ALONG WITH ALL OTHER SIMILAR FUSES.

Event Date: 04/23/1992

Discovery Date: 04/23/1992

Report Date: 04/23/1992

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BABCOCK & WILCOX CO.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name NNFD State: VA

**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: Y
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: DEFECTIVE OR FAILED PART

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 NOT REPORTED

**Device/Associated Equipment:**

FCP

**Device Number: 1**

Device Name: ALARM, OTHER	Model Number: NR
Manufacturer: NR	Serial Number: NR

**Device Number: 2**

Device Name: FUSE	Model Number: NR
Manufacturer: NR	Serial Number: NR

**Reporting Requirements:**

FCP

Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.  
Mode Reported: Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
200000	12/07/1994		CDB	OLD REGIONAL LOG NUMBER AS SOURCE
[REDACTED]				- Unmarked Legacy Reference
920263	12/07/1994		CDB	OLD ASSIGNED ITEM NUMBER
[REDACTED]				- Unmarked Legacy Reference
920272	12/07/1994		CDB	OLD ASSIGNED ITEM NUMBER
[REDACTED]				- Unmarked Legacy Reference



Item Number: FC920439

Last Updated: 05/30/1995

**Narrative:**

THE LICENSEE RESPONDED TO A NOTICE OF VIOLATION. THE LICENSEE WAS NOT ABLE TO NOTIFY INDIVIDUALS OF THEIR RADIATION EXPOSURE UPON TERMINATION OF EMPLOYMENT WITHIN THE REQUIRED TIME DUE TO A HIGH NUMBER OF LAYOFFS WHICH TAXED THE REPORTING SYSTEM.

Event Date: 05/04/1992

Discovery Date: 05/04/1992

Report Date: 06/02/1992

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0124	Name: NUCLEAR FUEL SERVICES, INC.
NRC Docket Number: 07000143	City: ERWIN
NRC Program Code: 21210	State: TN Zip Code: 376509718
Responsible NRC Region: 2	

**Site of Event:**

Site Name ERWIN	State: TN
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**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: N	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: Y
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed:

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: MANAGEMENT DEFICIENCY

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 NOT REPORTED

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
920327	12/07/1994		CDB	OLD ASSIGNED ITEM NUMBER
[REDACTED]				- Unmarked Legacy Reference
9206110287	12/07/1994		CDB	LICENSEE REPORT
[REDACTED]				- Unmarked Legacy Reference

Item Number: FC920500

Last Updated: 05/19/1995

**Narrative:**

THE LICENSEE REPORTED THAT AN INCINERATOR SCRUBBER RECIRCULATION LINE BROKE AND SPRAYED RADIOACTIVE WATER ON THE WALL AND FLOOR OF THE ENCLOSURE. THE SPILL WAS CONTAINED AND THE AREA WAS DECONTAMINATED.

Event Date: 05/21/1992

Discovery Date: 05/21/1992

Report Date: 05/21/1992

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0124	Name: NUCLEAR FUEL SERVICES, INC.
NRC Docket Number: 07000143	City: ERWIN
NRC Program Code: 21210	State: TN Zip Code: 376509718
Responsible NRC Region: 2	

**Site of Event:**

Site Name ERWIN	State: TN
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**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: Y
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: DEFECTIVE OR FAILED PART  
RLM - RADIOACTIVE MATERIAL REL.  
Cause: DEFECTIVE OR FAILED PART

**Corrective Actions Information:**

Action Number:	Corrective Action:
FCP	
1	NOT REPORTED
RLM	
1	NOT REPORTED

**Release of Material or Contamination Information:**

Type or Release or Contamination:	Activity:	Radionuclide:	Effect of Release or Contamination:
	Ci GBq		
SURFACE	NR NR	NR	

**Source of Radiation:**

FCP

<b>Source Number:</b> 1			
Source/Material:	UNSEALED SOURCE OTHER	Radionuclide or Voltage (kVp/MeV):	NR
Device Name:	LINE, RECIRCULATION	Activity:	NR Ci NR GBq
Manufacturer:	NR		
Model Number:	NR		
Serial Number:	NR		

RLM

<b>Source Number:</b> 1			
Source/Material:	UNSEALED SOURCE OTHER	Radionuclide or Voltage (kVp/MeV):	NR
Device Name:	LINE, RECIRCULATION	Activity:	NR Ci NR GBq
Manufacturer:	NR		
Model Number:	NR		
Serial Number:	NR		

**Device/Associated Equipment:**



FCP

**Device Number: 1**

Device Name: LINE, RECIRCULATION

Manufacturer: NR

Model Number: NR

Serial Number: NR

RLM

**Device Number: 1**

Device Name: LINE, RECIRCULATION

Manufacturer: NR

Model Number: NR

Serial Number: NR

**Reporting Requirements:**

FCP

Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.

Mode Reported: Written

RLM

Reporting Requirement: 20.0405(a)(1)(iii) - old - (SUPERSEDED) THE 30 DAY WRITTEN REPORT OF LEVELS OF RADIATION OR CONCENTRATIONS OF RADIOACTIVE MATERIAL IN A RESTRICTED AREA IN EXCESS OF ANY OTHER APPLICABLE LIMIT IN THE LICENSE.

Mode Reported: Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
200000	12/07/1994		CDB	OLD REGIONAL LOG NUMBER AS SOURCE
				- Unmarked Legacy Reference
920265	12/07/1994		CDB	OLD ASSIGNED ITEM NUMBER
				- Unmarked Legacy Reference



Item Number: FC920530

Last Updated: 05/19/1995

**Narrative:**

THE LICENSEE REPORTED THAT AN INSPECTION WAS CONDUCTED DUE TO AN INCIDENT WHEN A PLANT MANAGER WAS INFORMED THAT [REDACTED] CONTAINER LABELS MIGHT HAVE BEEN DELIBERATELY FALSIFIED.

Event Date: 06/01/1992

Discovery Date: 06/01/1992

Report Date: 08/14/1992

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BABCOCK & WILCOX CO.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name LYNCHBURG	State: VA
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**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: Y
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: INTENTIONAL VIOLATION

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 NOT REPORTED

**Source of Radiation:**

FCP

<b>Source Number:</b> 1			
Source/Material: UNSEALED SOURCE OTHER	Radionuclide or Voltage (kVp/MeV): SNM		
Device Name: CONTAINER, OTHER	Activity: NR Ci	NR	GBq
Manufacturer: NR			
Model Number: NR			
Serial Number: NR			

**Device/Associated Equipment:**

FCP

<b>Device Number:</b> 1			
Device Name: CONTAINER, OTHER	Model Number: NR		
Manufacturer: NR	Serial Number: NR		

**Reporting Requirements:**

FCP  
Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported: Written

**References:**

<b>Reference Number:</b> 920408	<b>Entry Date:</b> 12/07/1994	<b>Retraction Date:</b>	<b>Coder Initials:</b> CDB	<b>Reference Type:</b> OLD ASSIGNED ITEM NUMBER
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[REDACTED] - Unmarked Legacy Reference

9208310118

12/07/1994

[REDACTED]

CDB

INSPECTION REPORT

[REDACTED]

- Unmarked Legacy Reference

[REDACTED]

Item Number: FC920608

Last Updated: 05/30/1995

**Narrative:**

THE LICENSEE REPORTED AN INSPECTION BECAUSE THEIR ESTIMATES FOR LIQUID EFFLUENT CONCENTRATIONS WERE BIASED 4 TO 7 TIMES LOWER THAN THE CONCENTRATIONS REPORTED BY THE INDEPENDENT VENDOR OR THE STATE OF VIRGINIA.

Event Date: 06/22/1992

Discovery Date: 06/22/1992

Report Date: 10/22/1992

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BABCOCK & WILCOX CO.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name LYNCHBURG	State: VA
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**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: Y
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS

Cause: NOT REPORTED

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 NOT REPORTED

**Device/Associated Equipment:**

FCP

<b>Device Number: 1</b>			
Device Name: EFFLUENT SYSTEM	Model Number: NR		
Manufacturer: NR	Serial Number: NR		

**Reporting Requirements:**

FCP

Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.  
Mode Reported: Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
920566	12/07/1994		CDB	OLD ASSIGNED ITEM NUMBER
[REDACTED]				- Unmarked Legacy Reference
9211030070	12/07/1994		CDB	INSPECTION REPORT
[REDACTED]				- Unmarked Legacy Reference

Item Number: FC920701

Last Updated: 03/07/1995

**Narrative:**

LIGHTNING STRUCK AT THE B&W [REDACTED] PLANT CAUSING THE ACTIVATION OF THE [REDACTED] FIRE SYSTEM AND THE EVACUATION ALARM SYSTEM. AFTER FACILITY WAS CLEARED, ALL PERSONNEL RETURNED.

Event Date: 07/15/1992

Discovery Date: 07/15/1992

Report Date: 07/16/1992

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BABCOCK & WILCOX CO.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name LYNCHBURG State: VA

**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: Y
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: WEATHER OR AMBIENT CONDITION

**Corrective Actions Information:**

Action Number:	Corrective Action:
FCP	
1	NOT REPORTED

**Reporting Requirements:**

FCP

Reporting Requirement:	NRCB 91-01 - Loss of criticality safety controls.
Mode Reported:	Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
200000	12/07/1994		CDB	OLD REGIONAL LOG NUMBER AS SOURCE
[REDACTED]				- Unmarked Legacy Reference
920381	12/07/1994		CDB	OLD ASSIGNED ITEM NUMBER
[REDACTED]				- Unmarked Legacy Reference

Item Number: FC920719

Last Updated: 05/19/1995

**Narrative:**

THE LICENSEE REPORTED THAT READINGS BELOW THE REGULATORY RELEASE LIMIT WERE DETECTED IN A SMALL STREAM ON SITE. FIVE TO 10 GALLONS PER MINUTE OF LEAKAGE WAS ESTIMATED TO BE LEAVING THE POND. THE LICENSEE FOUND THE HIGHEST ACTIVITY OF 6 E-7 MICROCI PER MILLILITER AT THE DISCHARGE OF THE STORM DRAIN LOCATED NEXT TO POND [REDACTED] THE LICENSEE COMPLETED THE DREDGING OF THE WEST END OF POND AS PART OF THEIR DECOMMISSIONING ACTIVITIES.

Event Date: 07/20/1992

Discovery Date: 07/20/1992

Report Date: 07/21/1992

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0124	Name: NUCLEAR FUEL SERVICES, INC.
NRC Docket Number: 07000143	City: ERWIN
NRC Program Code: 21210	State: TN      Zip Code: 376509718
Responsible NRC Region: 2	

**Site of Event:**

Site Name      ERWIN	State:      TN
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**Additional Involved Party:**

License Number: NA	Name:      NA
	City:      NA
	State:      NA      Zip Code: NA

**Other Information:**

NRC Reportable Event:      N	Abnormal Occurrence:      N
Agreement State Reportable Event:      N	Investigation:      Y
Atomic Energy Act Material:      Y	Record Complete:
Consultant Hired:      N	Event Closed:

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: NOT REPORTED

RLM - RADIOACTIVE MATERIAL REL.  
Cause: NOT REPORTED

**Corrective Actions Information:**

Action Number:	Corrective Action:
FCP	
1	NOT REPORTED
RLM	
1	NOT REPORTED

**Release of Material or Contamination Information:**

Type or Release or Contamination:	Activity:	Radionuclide:	Effect of Release or Contamination:
	Ci      GBq		
WATER	NR      NR	NR	

**Source of Radiation:**

FCP

<b>Source Number:</b> 1			
Source/Material:	UNSEALED SOURCE OTHER	Radionuclide or Voltage (kVp/MeV):	NR
Device Name:	NA	Activity:	NR Ci      NR GBq
Manufacturer:	NR		
Model Number:	NA		
Serial Number:	NA		

RLM



**Source Number:** 1

Source/Material: UNSEALED SOURCE OTHER Radionuclide or Voltage (kVp/MeV): NR  
Device Name: NA Activity: NR Ci NR GBq  
Manufacturer: NR  
Model Number: NA  
Serial Number: NA

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
920435	12/07/1994		CDB	OLD ASSIGNED ITEM NUMBER
				- Unmarked Legacy Reference
920439	12/07/1994		CDB	OLD ASSIGNED ITEM NUMBER
				- Unmarked Legacy Reference
9209220304	12/07/1994		CDB	DAILY REPORT
				- Unmarked Legacy Reference



Item Number: FC920804

Last Updated: 05/18/1998

**Narrative:**

EVACUATION ALARM WAS SOUNDED WHEN A DETECTOR PAIR HAD A LOW AND A HIGH ALARM. SYSTEM LOGIC THEN ACTIVATES THE EVACUATION ALARM.

Event Date: 08/21/1992

Discovery Date: 08/21/1992

Report Date: 08/21/1992

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BABCOCK & WILCOX CO.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name LYNCHBURG State: VA

**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: N	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: Y
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed: Y

**Event Cause:**

EQP - EQUIPMENT  
Cause: DEFECTIVE OR FAILED PART  
FCP - FUEL CYCLE PROBLEMS  
Cause: DEFECTIVE OR FAILED PART

**Corrective Actions Information:**

Action Number:	Corrective Action:
EQP	
1	NOT REPORTED
FCP	
1	NOT REPORTED

**Source of Radiation:**

EQP

<b>Source Number:</b> 1			
Source/Material:	UNSEALED SOURCE OTHER	Radionuclide or Voltage (kVp/MeV):	U-NAT
Device Name:	NA	Activity:	NR Ci NR GBq
Manufacturer:	NR	Problem with Source:	
Model Number:	NR		
Serial Number:	NR		

FCP

<b>Source Number:</b> 1			
Source/Material:	UNSEALED SOURCE OTHER	Radionuclide or Voltage (kVp/MeV):	U-NAT
Device Name:	NA	Activity:	NR Ci NR GBq
Manufacturer:	NR		
Model Number:	NR		
Serial Number:	NR		

**Device/Associated Equipment:**

EQP



**Device Number:** 1

Device Name: DETECTOR, OTHER

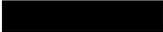
Manufacturer: NR

Model Number: NR

Serial Number: NR

Problem with Equipment:

**References:**

<b>Reference Number:</b>	<b>Entry Date:</b>	<b>Retraction Date:</b>	<b>Coder Initials:</b>	<b>Reference Type:</b>
920489	12/07/1994		CDB	OLD ASSIGNED ITEM NUMBER
				- Unmarked Legacy Reference
9209220156	12/07/1994		CDB	INSPECTION REPORT
				- Unmarked Legacy Reference



Item Number: FC920815

Last Updated: 05/19/1995

**Narrative:**

THE LICENSEE REPORTED THAT A LEAK IN THE FACILITY ROOF LEAD TO A COLLECTION OF RAIN WATER ON THE FLOOR WHICH RAN OUT UNDER A ROLLUP DOOR AND INTO A STORM SEWER. THE STORM SEWER WAS CLOSED OFF AND SAMPLED. SAMPLE FOUND ONLY 4.97 E-10 MCI/L OF .

Event Date: 08/26/1992

Discovery Date: 08/26/1992

Report Date: 09/24/1992

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0124	Name: NUCLEAR FUEL SERVICES, INC.
NRC Docket Number: 07000143	City: ERWIN
NRC Program Code: 21210	State: TN Zip Code: 376509718
Responsible NRC Region: 2	

**Site of Event:**

Site Name ERWIN	State: TN
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**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: Y
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: DEFECTIVE OR FAILED PART  
RLM - RADIOACTIVE MATERIAL REL.  
Cause: DEFECTIVE OR FAILED PART

**Corrective Actions Information:**

Action Number:	Corrective Action:
FCP	
1	NOT REPORTED
RLM	
1	NOT REPORTED

**Release of Material or Contamination Information:**

Type or Release or Contamination:	Activity:	Radionuclide:	Effect of Release or Contamination:
	Ci GBq		
WATER	NR NR	U-235	

**Source of Radiation:**

FCP			
<b>Source Number:</b>	1		
Source/Material:	UNSEALED SOURCE SNM	Radionuclide or Voltage (kVp/MeV):	U-235
Device Name:	NA	Activity:	NR Ci NR GBq
Manufacturer:	NR		
Model Number:	NA		
Serial Number:	NA		
RLM			
<b>Source Number:</b>	1		
Source/Material:	UNSEALED SOURCE SNM	Radionuclide or Voltage (kVp/MeV):	U-235
Device Name:	NA	Activity:	NR Ci NR GBq
Manufacturer:	NR		
Model Number:	NA		
Serial Number:	NA		



**Reporting Requirements:**

FCP

Reporting Requirement: 70.50(b)(2)(ii)

Mode Reported: Written

RLM

Reporting Requirement: 20.0405(a)(1)(iii) - old - (SUPERSEDED) THE 30 DAY WRITTEN REPORT OF LEVELS OF RADIATION OR CONCENTRATIONS OF RADIOACTIVE MATERIAL IN A RESTRICTED AREA IN EXCESS OF ANY OTHER APPLICABLE LIMIT IN THE LICENSE.

Mode Reported: Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
920516	12/07/1994		CDB	OLD ASSIGNED ITEM NUMBER
	- Unmarked Legacy Reference			
9210060121	12/07/1994		CDB	INSPECTION REPORT
	- Unmarked Legacy Reference			



Item Number: FC920855

Last Updated: 05/30/1995

**Narrative:**

THE LICENSEE REPORTED THAT AN EXPLOSION AND A FIRE IN [REDACTED] AT NFS CAUSED NO INJURIES, RELEASES, OR OVEREXPOSURES. THE LICENSEE RESTARTED HIGH ENRCHED [REDACTED] COVERY (NOTED 9/18/92). UPDATE: THE LICENSEE HAD AN UNANNOUNCED INSPECTION ON 03/04/94 TO REVIEW CORRECTIVE ACTIONS TAKEN IN RESPONSE TO PREVIOUSLY IDENTIFIED VIOLATIONS.

Event Date: 09/10/1992

Discovery Date: 09/10/1992

Report Date: 09/10/1992

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0124 Name: NUCLEAR FUEL SERVICES, INC.  
NRC Docket Number: 07000143 City: ERWIN  
NRC Program Code: 21210 State: TN Zip Code: 376509718  
Responsible NRC Region: 2

**Site of Event:**

Site Name ERWIN State: TN

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: Y  
Atomic Energy Act Material: Y Record Complete:  
Consultant Hired: N Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: OTHER

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 NOT REPORTED

**Source of Radiation:**

FCP

Source Number: 1

Source/Material: UNSEALED SOURCE OTHER Radionuclide or Voltage (kVp/MeV): NR  
Device Name: TRAY, DISSOLVER Activity: NR Ci NR GBq  
Manufacturer: NR  
Model Number: NR  
Serial Number: NR

**Device/Associated Equipment:**

FCP

Device Number: 1

Device Name: TRAY, DISSOLVER Model Number: NR  
Manufacturer: NR Serial Number: NR

**Reporting Requirements:**

FCP

Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported: Written

**References:**

Reference Number: Entry Date: Retraction Date: Coder Initials: Reference Type:  
200000 03/30/1994 CDB OLD REGIONAL LOG NUMBER AS SOURCE

Official Use Only - Unmarked Legacy Reference

920432	03/30/1994	[REDACTED]	CDB	OLD ASSIGNED ITEM NUMBER
[REDACTED]	- Unmarked Legacy Reference			
9404120176	04/29/1994		NB	NRC LETTER
[REDACTED]	- Unmarked Legacy Reference			
9404120179	04/29/1994		NB	INSPECTION REPORT
[REDACTED]	- Unmarked Legacy Reference			

Item Number: FC920949

Last Updated: 01/27/1995

**Narrative:**

THE LICENSEE REPORTED THAT THE SECOND OF TWO IN-LINE MONITORS ALARMED. THIS CAUSED THE AUTOMATIC CLOSING OF A VALVE IN THE URANIUM RECOVERY AQUEOUS WASTE LINE. THE ALARM WAS CAUSED BY AN ACCUMULATION OF SLUDGE IN THE MONITOR POT. THE ALARM FUNCTIONED AS DESIGNED.

Event Date: 10/09/1992

Discovery Date: 10/09/1992

Report Date: 11/13/1992

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BABCOCK & WILCOX CO.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name LYNCHBURG	State: VA
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**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: Y
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS

Cause: NOT REPORTED

**Corrective Actions Information:**

Action Number: Corrective Action:  
 FCP  
 1 NOT REPORTED

**Source of Radiation:**

FCP

Source Number: 1

Source/Material: UNSEALED SOURCE SNM	Radionuclide or Voltage (kVp/MeV): U-235
Device Name: LINE, WASTE, URANIUM RECOVERY	Activity: NR Ci NR GBq
Manufacturer: NR	
Model Number: NA	
Serial Number: NA	

**Device/Associated Equipment:**

FCP

Device Number: 1

Device Name: LINE, WASTE, URANIUM RECOVERY	Model Number: NR
Manufacturer: NR	Serial Number: NR

Device Number: 2

Device Name: VALVE, OTHER	Model Number: NR
Manufacturer: NR	Serial Number: NR

**Reporting Requirements:**

FCP

Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
 Mode Reported: Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Code Initials:	Reference Type:
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Reference Number	Entry Date	Refraction Date	[REDACTED]	Reference Type
920552	12/07/1994		CDB	OLD ASSIGNED ITEM NUMBER
[REDACTED]	- Unmarked Legacy Reference			
9211200070	12/07/1994		CDB	INSPECTION REPORT
[REDACTED]	- Unmarked Legacy Reference			





Item Number: FC921008

Last Updated: 10/10/1995

**Narrative:**

THE LICENSEE REPORTED THEIR DISCOVERY THAT A GLASS COLUMN CONTAINING [REDACTED] WAS SHATTERED. THE GLASS COLUMN [REDACTED] IS USED TO REMOVE URANIUM FROM EFFLUENT LIQUID. A TYPICAL AMOUNT OF URANIUM IN THE SYSTEM IS [REDACTED].

Event Date: 10/26/1992

Discovery Date: 10/26/1992

Report Date: 10/26/1992

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0124	Name: NUCLEAR FUEL SERVICES, INC.
NRC Docket Number: 07000143	City: ERWIN
NRC Program Code: 21210	State: TN      Zip Code: 376509718
Responsible NRC Region: 2	

**Site of Event:**

Site Name      ERWIN	State:      TN
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**Additional Involved Party:**

License Number: NA	Name:      NA
	City:      NA
	State:      NA      Zip Code: NA

**Other Information:**

NRC Reportable Event:      Y	Abnormal Occurrence:      N
Agreement State Reportable Event:      N	Investigation:      Y
Atomic Energy Act Material:      Y	Record Complete:
Consultant Hired:      N	Event Closed:      Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: DEFECTIVE OR FAILED PART  
RLM - RADIOACTIVE MATERIAL REL.  
Cause: DEFECTIVE OR FAILED PART

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1      NOT REPORTED  
RLM  
1      NOT REPORTED

**Release of Material or Contamination Information:**

Type or Release or Contamination:	Activity: Ci      GBq	Radionuclide:	Effect of Release or Contamination:
SURFACE	NR      NR	U-NAT	

**Source of Radiation:**

FCP  
**Source Number: 1**  
Source/Material: UNSEALED SOURCE OTHER      Radionuclide or Voltage (kVp/MeV): U-NAT  
Device Name: DRY ION RESIN      Activity:      NR Ci      NR GBq  
Manufacturer: NR  
Model Number: NR  
Serial Number: NR

RLM  
**Source Number: 1**  
Source/Material: UNSEALED SOURCE OTHER      Radionuclide or Voltage (kVp/MeV): U-NAT  
Device Name: DRY ION RESIN      Activity:      NR Ci      NR GBq  
Manufacturer: NR  
Model Number: NR  
Serial Number: NR



**Device/Associated Equipment:**

FCP

**Device Number: 1**

Device Name: DRY ION RESIN  
Manufacturer: NR

Model Number: NR  
Serial Number: NR

RLM

**Device Number: 1**

Device Name: DRY ION RESIN  
Manufacturer: NR

Model Number: NR  
Serial Number: NR

**Reporting Requirements:**

FCP

Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.  
Mode Reported: Written

RLM

Reporting Requirement: 20.0405(a)(1)(iii) - old - (SUPERSEDED) THE 30 DAY WRITTEN REPORT OF LEVELS OF RADIATION OR CONCENTRATIONS OF RADIOACTIVE MATERIAL IN A RESTRICTED AREA IN EXCESS OF ANY OTHER APPLICABLE LIMIT IN THE LICENSE.  
Mode Reported: Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
200000	12/07/1994		CDB	OLD REGIONAL LOG NUMBER AS SOURCE
				- Unmarked Legacy Reference
920544	12/07/1994		CDB	OLD ASSIGNED ITEM NUMBER
				- Unmarked Legacy Reference



Item Number: FC921017

Last Updated: 02/13/1995

**Narrative:**

BETWEEN 10/28/92 AND 11/11/92 THE LICENSEE FAILED TO REPORT TO NUCLEAR CRITICALITY SAFETY THAT A MEASURING SYSTEM REQUIRED FOR NUCLEAR CRITICALITY SAFETY WAS FUNCTIONING IN A QUESTIONABLE MANNER.

Event Date: 10/28/1992

Discovery Date: 10/28/1992

Report Date: 12/12/1992

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO

Reciprocity: NONE

License Number: SNM-0042

Name: BABCOCK & WILCOX CO.

NRC Docket Number: 07000027

City: LYNCHBURG

NRC Program Code: 21210

State: VA Zip Code: 24505-0785

Responsible NRC Region: 2

**Site of Event:**

Site Name LYNCHBURG

State: VA

**Additional Involved Party:**

License Number: NA

Name: NA

City: NA

State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y

Abnormal Occurrence: N

Agreement State Reportable Event: N

Investigation: Y

Atomic Energy Act Material: Y

Record Complete:

Consultant Hired: N

Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS

Cause: MANAGEMENT DEFICIENCY

**Corrective Actions Information:**

Action Number: Corrective Action:

FCP

1 NOT REPORTED

**Reporting Requirements:**

FCP

Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.

Mode Reported: Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
920601	12/07/1994		CDB	OLD ASSIGNED ITEM NUMBER

[Redacted] - Unmarked Legacy Reference

9212300113	12/07/1994		CDB	INSPECTION REPORT
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[Redacted] - Unmarked Legacy Reference



Item Number: FC921044

Last Updated: 10/10/1995

**Narrative:**

AN INSPECTION REPORT DETAILED SEVERAL INCIDENTS INCLUDING AN EXPLOSION AND A FIRE IN THE [REDACTED]. THE ONLY EVENT NOT REPORTED ELSEWHERE IS THE DISCOVERY OF THE FAILURE OF THE IN-LINE MONITOR ISOLATION VALVES FOR THE [REDACTED] TANKS.

Event Date: 11/09/1992

Discovery Date: 11/09/1992

Report Date: 11/25/1992

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0124	Name: NUCLEAR FUEL SERVICES, INC.
NRC Docket Number: 07000143	City: ERWIN
NRC Program Code: 21210	State: TN      Zip Code: 376509718
Responsible NRC Region: 2	

**Site of Event:**

Site Name      ERWIN	State:      TN
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**Additional Involved Party:**

License Number: NA	Name:      NA
	City:      NA
	State:      NA      Zip Code: NA

**Other Information:**

NRC Reportable Event:      Y	Abnormal Occurrence:      N
Agreement State Reportable Event:      N	Investigation:      Y
Atomic Energy Act Material:      Y	Record Complete:
Consultant Hired:      N	Event Closed:      Y

**Event Cause:**

EQP - EQUIPMENT  
Cause: DEFECTIVE OR FAILED PART  
FCP - FUEL CYCLE PROBLEMS  
Cause: DEFECTIVE OR FAILED PART

**Corrective Actions Information:**

Action Number:	Corrective Action:
EQP	
1	NOT REPORTED
FCP	
1	NOT REPORTED

**Source of Radiation:**

EQP

<b>Source Number:</b> 1			
Source/Material:	UNSEALED SOURCE OTHER	Radionuclide or Voltage (kVp/MeV):	U-NAT
Device Name:	TANK	Activity:	NR Ci      NR GBq
Manufacturer:	NR	Problem with Source:	
Model Number:	NA		
Serial Number:	NA		

FCP

<b>Source Number:</b> 1			
Source/Material:	UNSEALED SOURCE OTHER	Radionuclide or Voltage (kVp/MeV):	U-NAT
Device Name:	TANK	Activity:	NR Ci      NR GBq
Manufacturer:	NR		
Model Number:	NA		
Serial Number:	NA		

**Device/Associated Equipment:**

EQP



**Device Number: 1**

Device Name: TANK  
Manufacturer: NR

Model Number: NR  
Serial Number: NR  
Problem with Equipment:

**Device Number: 2**

Device Name: VALVE, OTHER  
Manufacturer: NR

Model Number: NR  
Serial Number: NR  
Problem with Equipment:

FCP

**Device Number: 1**

Device Name: TANK  
Manufacturer: NR

Model Number: NR  
Serial Number: NR

**Device Number: 2**

Device Name: VALVE, OTHER  
Manufacturer: NR

Model Number: NR  
Serial Number: NR

**Reporting Requirements:**

EQP

Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.  
Mode Reported: Written

FCP

Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported: Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
920572	12/07/1994		CDB	OLD ASSIGNED ITEM NUMBER
				- Unmarked Legacy Reference
9212140010	12/07/1994		CDB	INSPECTION REPORT
				- Unmarked Legacy Reference



Item Number: FC921085

Last Updated: 05/19/1995

**Narrative:**

THE LICENSEE REPONDED TO A VIOLATION; AN OUTSIDE CONTRACTOR REMOVED SOIL AT THE POND DECOMMISSIONING AREA WHICH WAS CONTAMINATED WITH RADIOACTIVE MATERIAL. THE CONTRACTOR DID NOT HAVE A RADIATION WORK PERMIT.

Event Date: 11/25/1992

Discovery Date: 11/25/1992

Report Date: 12/22/1992

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0124	Name: NUCLEAR FUEL SERVICES, INC.
NRC Docket Number: 07000143	City: ERWIN
NRC Program Code: 21210	State: TN      Zip Code: 376509718
Responsible NRC Region: 2	

**Site of Event:**

Site Name      ERWIN	State:      TN
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**Additional Involved Party:**

License Number: NA	Name:      NA
	City:      NA
	State:      NA      Zip Code: NA

**Other Information:**

NRC Reportable Event:      N	Abnormal Occurrence:      N
Agreement State Reportable Event:      N	Investigation:      Y
Atomic Energy Act Material:      Y	Record Complete:
Consultant Hired:      N	Event Closed:

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS

Cause:      FAILURE TO FOLLOW PROCEDURE OR WRONG PROCEDURE USED

**Corrective Actions Information:**

Action Number:      Corrective Action:

FCP

1      NOT REPORTED

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
3212290266	12/07/1994		CDB	LICENSEE REPORT
[REDACTED]				- Unmarked Legacy Reference
920577	12/07/1994		CDB	OLD ASSIGNED ITEM NUMBER
[REDACTED]				- Unmarked Legacy Reference

Item Number: FC921101

Last Updated: 05/24/1995

**Narrative:**

AN EMPLOYEE WAS SPRAYED WITH AN ACID/URANIUM MIXTURE ON DECEMBER 3. HE WAS RUSHED TO THE HOSPITAL WITH BURNS AND WAS NOT SURVEYED FOR CONTAMINATION. WHEN HE RETURNED TO WORK ON DECEMBER 5, HE WAS CONTAMINATED. UPDATE: UNANNOUNCED INSPECTION ON 03/04/94 TO REVIEW LICENSEE'S CORRECTIVE ACTIONS TAKEN IN RESPONSE TO PREVIOUSLY IDENTIFIED VIOLATION. UPDATE: LICENSEE RESPONDS TO NOTICE OF VIOLATION. CORRECTIVE ACTIONS: SURVEYS WERE CONDUCTED, OPERATORS WERE RE-INSTRUCTED AND PROCEDURES WERE UNDER REVISION.

Event Date: 12/03/1992

Discovery Date: 12/03/1992

Report Date: 02/03/1993

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0124	Name: NUCLEAR FUEL SERVICES, INC.
NRC Docket Number: 07000143	City: ERWIN
NRC Program Code: 21210	State: TN      Zip Code: 376509718
Responsible NRC Region: 2	

**Site of Event:**

Site Name      ERWIN      State:      TN

**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA      Zip Code: NA

**Other Information:**

NRC Reportable Event:	Y	Abnormal Occurrence:	N
Agreement State Reportable Event:	N	Investigation:	Y
Atomic Energy Act Material:	Y	Record Complete:	
Consultant Hired:	N	Event Closed:	Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS

Cause: FAILURE TO FOLLOW PROCEDURE OR WRONG PROCEDURE USED

RLM - RADIOACTIVE MATERIAL REL.

Cause: FAILURE TO FOLLOW PROCEDURE OR WRONG PROCEDURE USED

**Corrective Actions Information:**

Action Number:	Corrective Action:
FCP	
1	PERSONNEL RECEIVED ADDITIONAL TRAINING
RLM	
1	PERSONNEL RECEIVED ADDITIONAL TRAINING

**Release of Material or Contamination Information:**

Type or Release or Contamination:	Activity:	Radionuclide:	Effect of Release or Contamination:
	Ci      GBq		
SURFACE	NR      NR	U-NAT	

**Reporting Requirements:**

FCP

Reporting Requirement: 20.0405(a)(1)(iii) - old - (SUPERSEDED) THE 30 DAY WRITTEN REPORT OF LEVELS OF RADIATION OR CONCENTRATIONS OF RADIOACTIVE MATERIAL IN A RESTRICTED AREA IN EXCESS OF ANY OTHER APPLICABLE LIMIT IN THE LICENSE.

Mode Reported:

RLM

Reporting Requirement: 20.0405(a)(1)(iii) - old - (SUPERSEDED) THE 30 DAY WRITTEN REPORT OF LEVELS OF RADIATION OR CONCENTRATIONS OF RADIOACTIVE MATERIAL IN A RESTRICTED AREA IN EXCESS OF ANY OTHER APPLICABLE LIMIT IN THE LICENSE.

Mode Reported: Written

**References:**

Reference Number:    Entry Date:    Retraction Date:    Coder Initials:    Reference Type:

200000	03/30/1994	[REDACTED]	CDB	OLD REGIONAL LOG NUMBER AS SOURCE
[REDACTED]	- Unmarked Legacy Reference			
920618	03/30/1994	[REDACTED]	CDB	OLD ASSIGNED ITEM NUMBER
[REDACTED]	- Unmarked Legacy Reference			
9404120176	04/29/1994	[REDACTED]	NB	NRC LETTER
[REDACTED]	- Unmarked Legacy Reference			
9404120179	04/29/1994	[REDACTED]	NB	INSPECTION REPORT
[REDACTED]	- Unmarked Legacy Reference			
9303110204	07/15/1994	[REDACTED]	NB	LICENSEE REPORT
[REDACTED]	- Unmarked Legacy Reference			



Item Number: FC940619

Last Updated: 04/27/1995

**Narrative:**

COMMERCIAL [REDACTED] WERE LOST TO THE CRITICALITY ALARM SYSTEM FOR APPROXIMATELY [REDACTED]. COMMERCIAL POWER WAS RESTORED AT 1730 EDT AND WAS LOST BECAUSE OF A FAULTY BREAKER. [REDACTED] WILL BE RESTORED AT 0800 EDT ON 070394 [REDACTED].

Event Date: 07/02/1994

Discovery Date: 07/02/1994

Report Date: 07/02/1994

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0124 Name: NUCLEAR FUEL SERVICES, INC.  
NRC Docket Number: 07000143 City: ERWIN  
NRC Program Code: 21210 State: TN Zip Code: 376509718  
Responsible NRC Region: 2

**Site of Event:**

Site Name ERWIN State: TN

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: N  
Atomic Energy Act Material: Y Record Complete:  
Consultant Hired: N Event Closed: Y

**Event Cause:**

EQP - EQUIPMENT  
Cause: DEFECTIVE OR FAILED PART  
FCP - FUEL CYCLE PROBLEMS  
Cause: DEFECTIVE OR FAILED PART

**Corrective Actions Information:**

Action Number: Corrective Action:  
EQP  
1 NOT REPORTED  
FCP  
1 NOT REPORTED

**Device/Associated Equipment:**

EQP  
**Device Number: 1**  
Device Name: ALARM, CRITICALITY Model Number: NR  
Manufacturer: NR Serial Number: NR  
Problem with Equipment:

**Device Number: 2**  
Device Name: BREAKER Model Number: NR  
Manufacturer: NR Serial Number: NR  
Problem with Equipment:

FCP  
**Device Number: 1**  
Device Name: ALARM, CRITICALITY Model Number: NR  
Manufacturer: NR Serial Number: NR

**Device Number: 2**  
Device Name: BREAKER Model Number: NR  
Manufacturer: NR Serial Number: NR

**Reporting Requirements:**



EQP

Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.  
Mode Reported: Telephone

FCP

Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported: Telephone

**References:**

<b>Reference Number:</b>	<b>Entry Date:</b>	<b>Retraction Date:</b>	<b>Coder Initials:</b>	<b>Reference Type:</b>
EN27479	07/07/1994		NB	EVENT NOTIFICATION

 - Unmarked Legacy Reference



Item Number: FC940631

Last Updated: 07/27/1994

**Narrative:**

FROM 1988 TO 1993, THE LICENSEE COULD NOT VERIFY COMPLIANCE WITH POSTED NUCLEAR CRITICALITY SAFETY LIMITS FOR [REDACTED] WASHING STATION AND TERMINATION OF OPERATIONS DID NOT OCCUR.

Event Date: 04/19/1993

Discovery Date: 04/19/1993

Report Date: 04/19/1993

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO

Reciprocity: NONE

License Number: SNM-0042

Name: BABCOCK & WILCOX CO.

NRC Docket Number: 07000027

City: LYNCHBURG

NRC Program Code: 21210

State: VA Zip Code: 24505-0785

Responsible NRC Region: 2

**Site of Event:**

Site Name LYNCHBURG

State: VA

**Additional Involved Party:**

License Number: NA

Name: NA

City: NA

State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: N

Investigation: N

Atomic Energy Act Material: Y

Record Complete:

Consultant Hired: N

Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS

Cause: MANAGEMENT DEFICIENCY

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
9307130262	07/27/1994		DRL	LICENSEE REPORT

[REDACTED] - Unmarked Legacy Reference

Item Number: FC940778

Last Updated: 05/03/1994

**Narrative:**

THE LICENSEE NOTIFIED REGION II THAT AN ANALYTICAL ERROR RESULTED IN THE PLACEMENT OF TOO MUCH (EXCEEDING [REDACTED] MATERIAL BEING STORED IN THREE OUT OF 4 DRUMS. THE MATERIAL WAS [REDACTED]. CORRECTIVE ACTION WAS TAKEN BY SPLITTING THE CONTENTS OF THE FOUR DRUMS INTO FIVE DRUMS.

UPDATE: NRC INSPECTION REPORTS.

Event Date: 02/02/1994

Discovery Date: 02/02/1994

Report Date: 02/04/1994

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BABCOCK & WILCOX CO.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name LYNCHBURG State: VA

**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation:
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: DEFECTIVE OR INADEQUATE PROCEDURE

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 ENGINEERING CHANGE TO SYSTEM

**Source of Radiation:**

FCP

<b>Source Number:</b> 1		
Source/Material: UNSEALED SOURCE SNM	Radionuclide or Voltage (kVp/MeV): U-235	
Device Name: CONTAINER, DRUM	Activity: NR Ci	NR GBq
Manufacturer: NR		
Model Number: NR		
Serial Number: NR		

**Device/Associated Equipment:**

FCP

<b>Device Number:</b> 1		
Device Name: CONTAINER, DRUM	Model Number: NR	
Manufacturer: NR	Serial Number: NR	

**Reporting Requirements:**

FCP  
Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported:

**References:**

<b>Reference Number:</b>	<b>Entry Date:</b>	<b>Retraction Date:</b>	<b>Coder Initials:</b>	<b>Reference Type:</b>
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EN26741	04/12/1994	[REDACTED]	MEH	EVENT NOTIFICATION
[REDACTED]	- Unmarked Legacy Reference			
9403280105	05/03/1994	[REDACTED]	MEH	NRC LETTER
[REDACTED]	- Unmarked Legacy Reference			
9403280115	05/03/1994	[REDACTED]	MEH	INSPECTION REPORT
[REDACTED]	- Unmarked Legacy Reference			

Item Number: FC940780

Last Updated: 04/12/1994

**Narrative:**

THE LICENSEE NOTIFIED REGION II THAT WATER WAS LEAKING INTO TWO CONTROLLED AREAS. THE WATER WAS NOT PRESENTLY A THREAT TO THE . CORRECTIVE ACTIONS WERE TAKEN TO REMOVE WATER AND TO CLEAR THE DRAINS OF ICE WHICH HAD ACCUMULATED DUE TO ICE STORMS.

Event Date: 02/11/1994

Discovery Date: 02/11/1994

Report Date: 02/11/1994

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BABCOCK & WILCOX CO.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name LYNCHBURG	State: VA
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**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation:
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed: Y

**Event Cause:**

EQP - EQUIPMENT  
Cause: WEATHER OR AMBIENT CONDITION  
FCP - FUEL CYCLE PROBLEMS  
Cause: WEATHER OR AMBIENT CONDITION

**Corrective Actions Information:**

Action Number: Corrective Action:  
EQP  
1 REPAIRS MADE WITHOUT ENGINEERING CHANGE TO SYSTEM  
FCP  
1 REPAIRS MADE WITHOUT ENGINEERING CHANGE TO SYSTEM

**Source of Radiation:**

EQP  
**Source Number: 1**  
Source/Material: UNSEALED SOURCE SNM Radionuclide or Voltage (kVp/MeV): NR  
Device Name: NA Activity: NR Ci NR GBq  
Manufacturer: NR Problem with Source:  
Model Number: NA  
Serial Number: NA

FCP  
**Source Number: 1**  
Source/Material: UNSEALED SOURCE SNM Radionuclide or Voltage (kVp/MeV): NR  
Device Name: NA Activity: NR Ci NR GBq  
Manufacturer: NR  
Model Number: NA  
Serial Number: NA

**Reporting Requirements:**

EQP  
Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.  
Mode Reported:



FCP

Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported: Telephone

**References:**

<b>Reference Number:</b>	<b>Entry Date:</b>	<b>Retraction Date:</b>	<b>Coder Initials:</b>	<b>Reference Type:</b>
EN26774	04/12/1994		MEH	EVENT NOTIFICATION

 - Unmarked Legacy Reference



Item Number: FC940827

Last Updated: 02/01/1995

**Narrative:**

THE LICENSEE REPORTED THAT THE PLANT EVACUATED FOR 20 MINUTES DUE TO SEVERE ELECTRICAL STORM DAMAGING ONE UNIT EVACUATION ALARM AND CAUSING THE OTHER EVACUATION ALARM TO ACTIVATE. NO ONE WAS INJURED. RADIATION PROTECTION REPORTED THERE WAS NO EVIDENCE OF HIGH RADIATION LEVELS. DAMAGE TO 3 CRITICALITY ACCIDENT MONITORS WAS IDENTIFIED.

Event Date: 07/02/1993

Discovery Date: 07/02/1993

Report Date: 07/07/1993

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BABCOCK & WILCOX CO.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name LYNCHBURG State: VA

**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation:
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed: Y

**Event Cause:**

EQP - EQUIPMENT  
Cause: WEATHER OR AMBIENT CONDITION

FCP - FUEL CYCLE PROBLEMS  
Cause: WEATHER OR AMBIENT CONDITION

**Corrective Actions Information:**

Action Number:	Corrective Action:
EQP	
1	NOT REPORTED
FCP	
1	NOT REPORTED

**Device/Associated Equipment:**

EQP

<b>Device Number: 1</b>	
Device Name: ALARM, OTHER	Model Number: NR
Manufacturer: NR	Serial Number: NR
	Problem with Equipment:

FCP

<b>Device Number: 1</b>	
Device Name: ALARM, OTHER	Model Number: NR
Manufacturer: NR	Serial Number: NR

**Reporting Requirements:**

EQP

Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.  
Mode Reported:

FCP

Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported: Telephone



**References:**

<b>Reference Number:</b>	<b>Entry Date:</b>	<b>Retraction Date:</b>	<b>Coder Initials:</b>	<b>Reference Type:</b>
EN25750	03/31/1994		NB	EVENT NOTIFICATION
	- Unmarked Legacy Reference			
9308270207	05/02/1994		NB	NRC LETTER
	- Unmarked Legacy Reference			
9308270210	05/02/1994		NB	INSPECTION REPORT
	- Unmarked Legacy Reference			



Item Number: FC940828

Last Updated: 03/31/1994

**Narrative:**

CRITICALITY SAFETY CONTROL FOR THE HOOD OPERATION REQUIRES THAT THERE CAN NOT BE MORE THAN [REDACTED] BOTTLES INSIDE THE HOOD WITH MORE THAN A TOTAL QUANTITY OF [REDACTED] INSIDE THEM. NRC RESIDENT INSPECTOR IDENTIFIED TO THE OPERATOR THAT [REDACTED] BOTTLE WAS [REDACTED] BOTTLE INSIDE THE HOOD WAS OVER [REDACTED] THUS VIOLATING THE LIMIT [REDACTED] TOTAL. RUN IN OPERATION WAS ALLOWED TO BE COMPLETED. PROCEDURES WILL BE MODIFIED.

Event Date: 06/02/1993

Discovery Date: 06/02/1993

Report Date: 06/03/1993

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BABCOCK & WILCOX CO.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name LYNCHBURG State: VA

**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation:
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: DEFECTIVE OR INADEQUATE PROCEDURE

**Corrective Actions Information:**

Action Number: Corrective Action:

FCP

1	PROCEDURE MODIFIED
2	PERSONNEL RECEIVED ADDITIONAL TRAINING

**Reporting Requirements:**

FCP  
Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported:

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN25603	03/31/1994		NB	EVENT NOTIFICATION

[REDACTED] - Unmarked Legacy Reference

Item Number: FC940829

Last Updated: 07/27/1994

**Narrative:**

Licensee performed handling of [redacted] components before physical restraints were in place to prevent an unplanned criticality. It was found that the final approval documents required to perform the operation, had not been completed and the unapproved activity was in progress without the routine use of the physical restraints. Operation was stopped and will not resume until approval document is completed, operators are trained, and restraints are in place.

Update: Licensee replies to Notice of Violation. The following corrective actions will be implemented:(1) Integrate safety and manufacturing change control systems;(2) Improve LER communication and interaction systems; and (3) Increase sensitivity to awareness of LER responsibilities with training.

Event Date: 04/20/1993

Discovery Date: 04/20/1993

Report Date: 04/21/1993

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BABCOCK & WILCOX CO.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name LYNCHBURG State: VA

**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation:
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS

Cause: FAILURE TO FOLLOW PROCEDURE OR WRONG PROCEDURE USED

**Corrective Actions Information:**

Action Number: Corrective Action:

FCP

1	NEW PROCEDURE WRITTEN
2	PERSONNEL RECEIVED ADDITIONAL TRAINING

**Reporting Requirements:**

FCP  
Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported:

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN25429	03/31/1994		NB	EVENT NOTIFICATION
[redacted]				- Unmarked Legacy Reference
MR2930042	03/31/1994		NB	MORNING REPORT
[redacted]				- Unmarked Legacy Reference
9307130262	07/27/1994		NB	LICENSEE REPORT
[redacted]				- Unmarked Legacy Reference

Item Number: FC940830

Last Updated: 03/31/1994

**Narrative:**

THE LICENSEE REPORTED THAT THEY HAD IDENTIFIED AN UNSAFE CONDITION DURING A PRACTICE RUN FOR A NEW PROCESS. NUCLEAR CRITICALITY SAFETY LIMIT COULD NOT BE VERIFIED TO BE MET IN THE [REDACTED] AREA. A NUCLEAR CRITICALITY POSTING AT THIS WORK STATION LIMITED THE CONCENTRATION OF [REDACTED] TO [REDACTED] OF HIGHLY ENRICHED U-235. IF HIGHLY ENRICHED U-235 WERE BEING PROCESSED THE OPERATORS COULD NOT VERIFY COMPLIANCE WITH THIS LIMIT. OPERATIONS HAVE BEEN SHUTDOWN TO DETERMINE WHAT THE NUCLEAR CRITICALITY POSTING SHOULD READ FOR COMPLIANCE.

Event Date: 04/16/1993

Discovery Date: 04/16/1993

Report Date: 04/16/1993

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BABCOCK & WILCOX CO.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA      Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name	LYNCHBURG	State:	VA
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**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA      Zip Code: NA

**Other Information:**

NRC Reportable Event:	Y	Abnormal Occurrence:	N
Agreement State Reportable Event:	N	Investigation:	
Atomic Energy Act Material:	Y	Record Complete:	
Consultant Hired:	N	Event Closed:	Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: INADEQUATE TRAINING

**Corrective Actions Information:**

Action Number:	Corrective Action:
FCP	
1	NOT REPORTED

**Reporting Requirements:**

FCP  
Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported:

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN25405	03/31/1994		NB	EVENT NOTIFICATION

[REDACTED] - Unmarked Legacy Reference

Item Number: FC940831

Last Updated: 03/31/1994

**Narrative:**

CRITICALITY SAFETY EVALUATION WAS FOUND TO BE INCORRECT, THEREFORE PROPER CRITICALITY CONTROL MIGHT NOT HAVE OCCURRED. ANS 8.5-1979 SETS CONCENTRATION LIMIT OF [REDACTED] OF URANIUM IN ANY CONCENTRATION FROM [REDACTED] ENRICHMENT. LICENSEE MUST OBSERVE THIS LIMIT FOR UNFAVORABLE GEOMETRY TANKS WHICH UTILIZE RASCHIG RINGS [REDACTED]. LICENSEE DETERMINED CONCENTRATION LIMITS STATED IN THEIR OPERATING AND SAFETY PROCEDURES WAS [REDACTED] OF U-235. THEY ARE CORRECTING THEIR PROCEDURES.

Event Date: 02/26/1993

Discovery Date: 02/26/1993

Report Date: 02/26/1993

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BABCOCK & WILCOX CO.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name	LYNCHBURG	State:	VA
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**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event:	Y	Abnormal Occurrence:	N
Agreement State Reportable Event:	N	Investigation:	
Atomic Energy Act Material:	Y	Record Complete:	
Consultant Hired:	N	Event Closed:	Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: NOT REPORTED

**Corrective Actions Information:**

Action Number:	Corrective Action:
FCP	
1	PROCEDURE MODIFIED

**Reporting Requirements:**

FCP  
Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported:

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN25145	03/31/1994		NB	EVENT NOTIFICATION

[REDACTED] - Unmarked Legacy Reference

Item Number: FC940832

Last Updated: 03/31/1994

**Narrative:**

THE LICENSEE REPORTED THAT THEY DISCOVERED THAT THE SIGNS WERE STILL NOT POSTED ON THE 55 GALLON DRUMS THAT CONTAIN [REDACTED] AND WASTE, PER NUCLEAR CRITICALITY SAFETY REQUIREMENTS. SIGNS ARE BEING PREPARED FOR POSTING IN THE DRUM COUNT AREA, AND AREA WILL BE BACK IN OPERATION ON 01/28/93.

Event Date: 01/27/1993

Discovery Date: 01/27/1993

Report Date: 01/27/1993

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BABCOCK & WILCOX CO.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name LYNCHBURG	State: VA
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**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation:
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS

Cause: FAILURE TO FOLLOW PROCEDURE OR WRONG PROCEDURE USED

**Corrective Actions Information:**

Action Number: FCP	Corrective Action:
1	NOT REPORTED

**Reporting Requirements:**

FCP

Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported:

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN24956	03/31/1994		NB	EVENT NOTIFICATION

[REDACTED] - Unmarked Legacy Reference

Item Number: FC940834

Last Updated: 01/12/1996

**Narrative:**

A [REDACTED] COMPONENT WAS BEING PROCESSED AND WAS PLACED IN A FURNACE FOR WHICH A NUCLEAR CRITICALITY SAFETY (NCS) EVALUATION HAD NOT BEEN PERFORMED. THE IDENTITY OF THE COMPONENT DID NOT APPEAR ON THE NCS POSTED SIGN. LICENSEE IMMEDIATELY REMOVED THE COMPONENT FROM THE FURNACE AND PLACED IT IN SAFE STORAGE. NO PERSONNEL EXPOSED. NO RELEASE OF MATERIAL TO ATMOSPHERE.

Event Date: 02/18/1994

Discovery Date: 02/18/1994

Report Date: 02/18/1994

**Licensee/Reporting Party Information:**

Agreement State Regulated:	NO	Reciprocity:	NONE
License Number:	SNM-0042	Name:	BABCOCK & WILCOX CO.
NRC Docket Number:	07000027	City:	LYNCHBURG
NRC Program Code:	21210	State:	VA Zip Code: 24505-0785
Responsible NRC Region:	2		

**Site of Event:**

Site Name LYNCHBURG State: VA

**Additional Involved Party:**

License Number:	NA	Name:	NA
		City:	NA
		State:	NA Zip Code: NA

**Other Information:**

NRC Reportable Event:	Y	Abnormal Occurrence:	N
Agreement State Reportable Event:	N	Investigation:	
Atomic Energy Act Material:	Y	Record Complete:	
Consultant Hired:	N	Event Closed:	Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: MANAGEMENT DEFICIENCY

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 NOT REPORTED

**Reporting Requirements:**

FCP  
Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported:

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN26816	03/31/1994		NB	EVENT NOTIFICATION

[REDACTED] - Unmarked Legacy Reference

Item Number: FC940839

Last Updated: 10/11/1995

**Narrative:**

AN ALERT WAS DECLARED WHEN A FIRE OCCURRED ON TOP OF BUILDING [REDACTED] DURING MAINTENANCE WORK ON THE ROOF. THE BUILDING CONTAINS THE [REDACTED].

NO RADIOACTIVE MATERIALS WERE RELEASED. NO EVACUATIONS ORDERED.

PRELIMINARY RADIATION SURVEYS INDICATE THAT NO PERSONNEL CONTAMINATION OR RADIATION RELEASES OCCURRED.

Event Date: 10/13/1993

Discovery Date: 10/13/1993

Report Date: 10/13/1993

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0124	Name: NUCLEAR FUEL SERVICES, INC.
NRC Docket Number: 07000143	City: ERWIN
NRC Program Code: 21210	State: TN      Zip Code: 376509718
Responsible NRC Region: 2	

**Site of Event:**

Site Name      ERWIN      State:      TN

**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA      Zip Code: NA

**Other Information:**

NRC Reportable Event: Y	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation:
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: EXTERNAL FIRE OR EXPLOSION

**Corrective Actions Information:**

Action Number:	Corrective Action:
FCP	
1	NOT REPORTED

**Reporting Requirements:**

FCP

Reporting Requirement: 70.50(a) - Event that prevents immediate protective actions necessary to avoid exposures to radiation or radioactive materials that could exceed regulatory limits or releases of licensed material that could exceed regulatory limits.

Mode Reported: Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN26215	03/31/1994		NB	EVENT NOTIFICATION

[REDACTED] - Unmarked Legacy Reference

Item Number: FC940840

Last Updated: 04/29/1994

**Narrative:**

DURING AN INSPECTION A PROBLEM WAS NOTED WITH THE CONTROL OF RADIATION WORK PERMIT POSTINGS. THE INSPECTOR FOUND THAT THE BARRIER TAPE USED TO IDENTIFY THE EDGE OF THE BOUNDARY WAS NOT IN PLACE AT ENTRANCE OF ROOM. THE INSPECTOR FOUND THE BARRIER TAPE, WITH THE REQUIRED RWP TAPED TO IT, LAYING DOWN BEHIND ONE OF THE FIRE EXTINGUISHERS IN THE [REDACTED] ROOM. THE MANAGER HAD THE BARRIER PROPERLY REESTABLISHED. AN UNANNOUNCED INSPECTION ON 03/04/94 TO REVIEW THE LICENSEE'S CORRECTIVE ACTIONS TAKEN IN RESPONSE TO PREVIOUSLY IDENTIFIED VIOLATIONS.

Event Date: 09/02/1993

Discovery Date: 09/02/1993

Report Date: 09/02/1993

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0124	Name: NUCLEAR FUEL SERVICES, INC.
NRC Docket Number: 07000143	City: ERWIN
NRC Program Code: 21210	State: TN      Zip Code: 376509718
Responsible NRC Region: 2	

**Site of Event:**

Site Name      ERWIN	State:      TN
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**Additional Involved Party:**

License Number: NA	Name:      NA
	City:      NA
	State:      NA      Zip Code: NA

**Other Information:**

NRC Reportable Event:      Y	Abnormal Occurrence:      N
Agreement State Reportable Event:      N	Investigation:
Atomic Energy Act Material:      Y	Record Complete:
Consultant Hired:      N	Event Closed:      Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS

Cause:      FAILURE TO FOLLOW PROCEDURE OR WRONG PROCEDURE USED

**Corrective Actions Information:**

Action Number:      Corrective Action:
FCP
1      NOT REPORTED

**Reporting Requirements:**

FCP

Reporting Requirement:      NRCB 91-01 - Loss of criticality safety controls.

Mode Reported:

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
9310130001	03/31/1994		NB	OTHER
[REDACTED]				- Unmarked Legacy Reference
9310130002	03/31/1994		NB	NOTICE OF VIOLATION
[REDACTED]				- Unmarked Legacy Reference
9310130003	03/31/1994		NB	INSPECTION REPORT
[REDACTED]				- Unmarked Legacy Reference
9404120176	04/29/1994		NB	NRC LETTER
[REDACTED]				- Unmarked Legacy Reference
9404120179	04/29/1994		NB	INSPECTION REPORT
[REDACTED]				- Unmarked Legacy Reference

Item Number: FC940841

Last Updated: 07/19/1994

**Narrative:**

CRITICALITY SAFETY LIMITS EXCEEDED FOR THE QUANTITY OF [REDACTED] IN A [REDACTED] TANK. ANALYSIS OF THE RECOVERED WASTE REVEALED THE TOTAL CONTENT OF THE TANK HAD BEEN BETWEEN [REDACTED] OF HIGHLY ENRICHED (97%) URANIUM IN THE FORM OF [REDACTED]. CRITICALITY SAFETY LIMIT IS [REDACTED]. LICENSEE RESPONDS TO VIOLATION AND OUTLINES CORRECTIVE ACTIONS TO BE TAKEN.

UPDATE: UNANNOUNCED INSPECTION ON 03/04/94 TO REVIEW THE LICENSEE'S CORRECTIVE ACTIONS TAKEN IN RESPONSE TO PREVIOUSLY IDENTIFIED VIOLATIONS.

Event Date: 05/20/1993

Discovery Date: 05/20/1993

Report Date: 05/20/1993

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0124 Name: NUCLEAR FUEL SERVICES, INC.  
NRC Docket Number: 07000143 City: ERWIN  
NRC Program Code: 21210 State: TN Zip Code: 376509718  
Responsible NRC Region: 2

**Site of Event:**

Site Name ERWIN State: TN

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation:  
Atomic Energy Act Material: Y Record Complete:  
Consultant Hired: N Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: NOT REPORTED

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 REPAIRS MADE WITH ENGINEERING CHANGE TO SYSTEM

**Source of Radiation:**

FCP  
Source Number: 1  
Source/Material: UNSEALED SOURCE SNM Radionuclide or Voltage (kVp/MeV): U-235  
Device Name: TANK, WASTE RECOVERY Activity: NR Ci NR GBq  
Manufacturer: NR  
Model Number: NR  
Serial Number: NR

**Device/Associated Equipment:**

FCP  
Device Number: 1  
Device Name: TANK, WASTE RECOVERY Model Number: NR  
Manufacturer: NR Serial Number: NR

**Reporting Requirements:**

FCP  
Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported:

**References:**

Reference Number: Entry Date: Retraction Date: Coder Initials: Reference Type:

9309230161	03/31/1994	NB	OTHER
[REDACTED]	- Unmarked Legacy Reference		
EN25541	03/31/1994	NB	EVENT NOTIFICATION
[REDACTED]	- Unmarked Legacy Reference		
MR2930055	03/31/1994	NB	MORNING REPORT
[REDACTED]	- Unmarked Legacy Reference		
9404120176	04/29/1994	NB	NRC LETTER
[REDACTED]	- Unmarked Legacy Reference		
9404120179	04/29/1994	NB	INSPECTION REPORT
[REDACTED]	- Unmarked Legacy Reference		
9307120070	07/19/1994	NB	NRC LETTER
[REDACTED]	- Unmarked Legacy Reference		
9307120073	07/19/1994	NB	INSPECTION REPORT
[REDACTED]	- Unmarked Legacy Reference		

Item Number: FC940842

Last Updated: 04/29/1994

**Narrative:**

SOIL IN TWO 55 GALLON DRUMS POTENTIALLY EXCEEDS NUCLEAR SAFETY CONTROL FOR DRUMS. SOIL SAMPLES WERE TAKEN FROM TWO OF THE SIX 55 GALLON DRUMS AND ONE MEASURED [REDACTED] AND THE OTHER MEASURED [REDACTED] OF [REDACTED] (THE LIMIT IS [REDACTED]) MIXED WITH THE CLAY. LICENSEE PLANS TO TRANSFER SOME OF THE SOIL FROM THESE TWO DRUMS TO THE OTHER DRUMS. [REDACTED]. NRC INSPECTION CONDUCTED. A RESPONSE TO THE VIOLATION BY THE LICENSEE.

UPDATE: UNANNOUNCED INSPECTION ON 03/04/94 TO REVIEW LICENSEE'S CORRECTIVE ACTIONS TAKEN IN RESPONSE TO PREVIOUSLY IDENTIFIED VIOLATIONS.

Event Date: 05/10/1993

Discovery Date: 05/10/1993

Report Date: 05/10/1993

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0124 Name: NUCLEAR FUEL SERVICES, INC.  
NRC Docket Number: 07000143 City: ERWIN  
NRC Program Code: 21210 State: TN Zip Code: 376509718  
Responsible NRC Region: 2

**Site of Event:**

Site Name ERWIN State: TN

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation:  
Atomic Energy Act Material: Y Record Complete:  
Consultant Hired: N Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: MANAGEMENT DEFICIENCY

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 NEW PROCEDURE WRITTEN

**Source of Radiation:**

FCP  
**Source Number:** 1  
Source/Material: UNSEALED SOURCE OTHER Radionuclide or Voltage (kVp/MeV): PU-OTH  
Device Name: CONTAINER, DRUM Activity: NR Ci NR GBq  
Manufacturer: NR  
Model Number: NR  
Serial Number: NR

**Device/Associated Equipment:**

FCP  
**Device Number:** 1  
Device Name: CONTAINER, DRUM Model Number: NR  
Manufacturer: NR Serial Number: NR

**Reporting Requirements:**

FCP  
Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported:

**References:**

Reference Number: Entry Date: Retraction Date: Coder Initials: Reference Type:

9307120073	03/31/1994	NB	INSPECTION REPORT
[REDACTED]	- Unmarked Legacy Reference		
9309230161	03/31/1994	NB	OTHER
[REDACTED]	- Unmarked Legacy Reference		
EN25503	03/31/1994	NB	EVENT NOTIFICATION
[REDACTED]	- Unmarked Legacy Reference		
MR2030053	03/31/1994	NB	MORNING REPORT
[REDACTED]	- Unmarked Legacy Reference		
9404120176	04/29/1994	NB	NRC LETTER
[REDACTED]	- Unmarked Legacy Reference		
9404120179	04/29/1994	NB	INSPECTION REPORT
[REDACTED]	- Unmarked Legacy Reference		

Item Number: FC940843

Last Updated: 03/31/1994

**Narrative:**

A SLURRY TANK IN THE [REDACTED] BUILDING WAS INADVERTENTLY FILLED WITH [REDACTED]. LICENSEE LIMIT IS [REDACTED] OF [REDACTED]. THIS MASS IS APPROXIMATELY 45% OF ONE CRITICAL MASS AND IS CONTAINED IN AN UNFAVORABLE GEOMETRY. WASTE RECOVERY PROCESS WAS SHUTDOWN AND THE SLURRY TANK WAS ISOLATED. LICENSEE BELIEVES THAT A TRANSCRIPTION ERROR MAY BE THE CAUSE. U-235 SLURRY WILL BE REMOVED IN [REDACTED] PORTIONS UNTIL INVENTORY DECREASES BELOW THE LICENSEE LIMIT.

Event Date: 04/07/1993

Discovery Date: 04/07/1993

Report Date: 04/07/1993

**Licensee/Reporting Party Information:**

Agreement State Regulated:	NO	Reciprocity:	NONE
License Number:	SNM-0124	Name:	NUCLEAR FUEL SERVICES, INC.
NRC Docket Number:	07000143	City:	ERWIN
NRC Program Code:	21210	State:	TN      Zip Code: 376509718
Responsible NRC Region:	2		

**Site of Event:**

Site Name	ERWIN	State:	TN
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**Additional Involved Party:**

License Number:	NA	Name:	NA
		City:	NA
		State:	NA      Zip Code: NA

**Other Information:**

NRC Reportable Event:	Y	Abnormal Occurrence:	N
Agreement State Reportable Event:	N	Investigation:	
Atomic Energy Act Material:	Y	Record Complete:	
Consultant Hired:	N	Event Closed:	Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: INATTENTION TO DETAIL

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1      NOT REPORTED

**Reporting Requirements:**

FCP  
Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported:

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN25371	03/31/1994		NB	EVENT NOTIFICATION

[REDACTED] - Unmarked Legacy Reference

Item Number: FC940844

Last Updated: 03/31/1994

**Narrative:**

FAILURE OF AN IN-LINE URANIUM MONITOR TO OPERATE FOR APPROXIMATELY 9 HOURS. APPROXIMATELY [REDACTED] OF HIGHLY ENRICHED U-235 IN THE FORM OF URANYL NITRATE LIQUID WAS DISCHARGED THROUGH THE LINE WITHOUT BEING MONITORED. NO PERSONNEL EXPOSURES OR RELEASES TO THE ENVIRONMENT.

Event Date: 02/04/1993

Discovery Date: 02/04/1993

Report Date: 02/04/1993

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0124	Name: NUCLEAR FUEL SERVICES, INC.
NRC Docket Number: 07000143	City: ERWIN
NRC Program Code: 21210	State: TN      Zip Code: 376509718
Responsible NRC Region: 2	

**Site of Event:**

Site Name      ERWIN      State:      TN

**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA      Zip Code: NA

**Other Information:**

NRC Reportable Event: Y	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation:
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS

Cause: OTHER

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1      NOT REPORTED

**Reporting Requirements:**

FCP  
Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported:

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN25020	03/31/1994		NB	EVENT NOTIFICATION

[REDACTED] - Unmarked Legacy Reference

Item Number: FC940845

Last Updated: 09/15/1997

**Narrative:**

DURING A QUARTERLY TEST OF THE EVACUATION ALARM SYSTEM, THE HOWLER (ANNUNCIATOR) AT THE [REDACTED] FACILITY FAILED TO SOUND. AN INVESTIGATION REVEALED A SHORT CIRCUIT IN THE FEEDER CIRCUIT TO WASTE TREATMENT. THE [REDACTED] FACILITY WAS EVACUATED PER PROCEDURE. THE WIRE WAS REPLACED AND THE SYSTEM TESTED SATISFACTORILY.

UPDATE: THERE WAS A ROUTINE INSPECTION. NO VIOLATIONS OR DEVIATIONS WERE IDENTIFIED.

Event Date: 10/21/1993

Discovery Date: 10/21/1993

Report Date: 10/22/1993

**Licensee/Reporting Party Information:**

Agreement State Regulated:	NO	Reciprocity:	NONE
License Number:	SNM-0042	Name:	BABCOCK & WILCOX CO.
NRC Docket Number:	07000027	City:	LYNCHBURG
NRC Program Code:	21210	State:	VA Zip Code: 24505-0785
Responsible NRC Region:	2		

**Site of Event:**

Site Name	LYNCHBURG	State:	VA
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**Additional Involved Party:**

License Number:	NA	Name:	NA
		City:	NA
		State:	NA Zip Code: NA

**Other Information:**

NRC Reportable Event:	Y	Abnormal Occurrence:	N
Agreement State Reportable Event:	N	Investigation:	
Atomic Energy Act Material:	Y	Record Complete:	
Consultant Hired:	N	Event Closed:	Y

**Event Cause:**

EQP - EQUIPMENT  
Cause: HUMAN ERROR  
FCP - FUEL CYCLE PROBLEMS  
Cause: HUMAN ERROR

**Corrective Actions Information:**

Action Number: Corrective Action:  
EQP  
1 REPAIRS MADE WITHOUT ENGINEERING CHANGE TO SYSTEM  
FCP  
1 REPAIRS MADE WITHOUT ENGINEERING CHANGE TO SYSTEM

**Device/Associated Equipment:**

EQP  
**Device Number: 1**  
Device Name: ALARM, OTHER Model Number: NR  
Manufacturer: NR Serial Number: NR  
Problem with Equipment:

FCP  
**Device Number: 1**  
Device Name: ALARM, OTHER Model Number: NR  
Manufacturer: NR Serial Number: NR

**Reporting Requirements:**

EQP  
Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.  
Mode Reported:



FCP

Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported: Written

**References:**

<b>Reference Number:</b>	<b>Entry Date:</b>	<b>Retraction Date:</b>	<b>Coder Initials:</b>	<b>Reference Type:</b>
EN26253	03/31/1994		NB	EVENT NOTIFICATION
	- Unmarked Legacy Reference			
9401240127	05/03/1994		NB	NRC LETTER
	- Unmarked Legacy Reference			
9401240148	05/03/1994		NB	INSPECTION REPORT
	- Unmarked Legacy Reference			



Item Number: FC940846

Last Updated: 03/31/1994

**Narrative:**

A VIOLATION OF AN ADMINISTRATIVE CRITICALITY CONTROL OCCURRED IN THE [REDACTED]. A MAXIMUM MASS LIMIT OF [REDACTED] IS PERMITTED IN THE ROOM FOR PROCESS WORK AT ANY GIVEN TIME. VIOLATION INVOLVED A TOTAL OF [REDACTED] U-235 BEING PRESENT IN THE ROOM.

Event Date: 09/16/1993

Discovery Date: 09/16/1993

Report Date: 09/21/1993

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BABCOCK & WILCOX CO.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name LYNCHBURG	State: VA
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**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation:
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: MANAGEMENT DEFICIENCY

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 NOT REPORTED

**Reporting Requirements:**

FCP  
Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported:

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
9311300009	03/31/1994		NB	OTHER
[REDACTED]				- Unmarked Legacy Reference
9311300012	03/31/1994		NB	NOTICE OF VIOLATION
[REDACTED]				- Unmarked Legacy Reference
9311300014	03/31/1994		NB	INSPECTION REPORT
[REDACTED]				- Unmarked Legacy Reference
EN26099	03/31/1994		NB	EVENT NOTIFICATION
[REDACTED]				- Unmarked Legacy Reference

Item Number: FC940850

Last Updated: 03/21/1995

**Narrative:**

A BACKHOE INADVERTENTLY CUT A CABLE IN THE CRITICALITY MONITORING SYSTEM, RENDERING IT INOPERABLE. LOSS OF CRITICALITY MONITORING WITH THE AMOUNT OF URANIUM PRESENTLY CONTAINED IN THE PROCESS EQUIPMENT IS AN UNUSUAL EVENT UNDER THE LICENSEE'S EMERGENCY PLAN. UNUSUAL EVENT TERMINATED AT 1142 EDT WHEN ALTERNATIVE CRITICALITY MONITORS WERE FOUND TO COVER THE AREA.

Event Date: 07/17/1993

Discovery Date: 07/17/1993

Report Date: 07/17/1993

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BABCOCK & WILCOX CO.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name LYNCHBURG State: VA

**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation:
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed: Y

**Event Cause:**

EQP - EQUIPMENT  
Cause: HUMAN ERROR  
FCP - FUEL CYCLE PROBLEMS  
Cause: HUMAN ERROR

**Corrective Actions Information:**

Action Number: Corrective Action:  
EQP  
1 REPAIRS MADE WITHOUT ENGINEERING CHANGE TO SYSTEM  
FCP  
1 REPAIRS MADE WITHOUT ENGINEERING CHANGE TO SYSTEM

**Device/Associated Equipment:**

EQP

<b>Device Number: 1</b>			
Device Name: DETECTOR, CRITICALITY	Model Number: NR		
Manufacturer: NR	Serial Number: NR		
	Problem with Equipment:		

<b>Device Number: 2</b>			
Device Name: CABLE, OTHER	Model Number: NR		
Manufacturer: NR	Serial Number: NA		
	Problem with Equipment:		

FCP

<b>Device Number: 1</b>			
Device Name: DETECTOR, CRITICALITY	Model Number: NR		
Manufacturer: NR	Serial Number: NR		

<b>Device Number: 2</b>			
Device Name: CABLE, OTHER	Model Number: NR		
Manufacturer: NR	Serial Number: NA		



**Reporting Requirements:**

EQP

Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.

Mode Reported: Telephone

FCP

Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.

Mode Reported: Telephone

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN25797	03/31/1994		NB	EVENT NOTIFICATION

 - Unmarked Legacy Reference



Item Number: FC940851

Last Updated: 07/14/1994

**Narrative:**

THE LICENSEE LOST [REDACTED] CAUSING THE LOSS OF THE CRITICALITY MONITORING SYSTEM. THIS WAS DUE TO HIGH AMBIENT TEMPERATURE IN THE ROOM WHERE THE [REDACTED] IS LOCATED. DURING THE SHIFT TO A NORMAL [REDACTED], A BREAKER MALFUNCTIONED CAUSING SEVERAL [REDACTED] FUSES TO BLOW FOR UNKNOWN REASONS. CORRECTIVE ACTIONS WERE TAKEN. UPDATE: DURING AN NRC INSPECTION, A VIOLATION OF NRC REQUIREMENTS WAS IDENTIFIED AS FOLLOWS: STATE AND LOCAL AUTHORITIES WERE NOT NOTIFIED FOLLOWING A NOTIFICATION OF UNUSUAL EVENT (NOUE) EMERGENCY DECLARATION.

Event Date: 07/04/1993

Discovery Date: 07/04/1993

Report Date: 07/04/1993

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0042 Name: BABCOCK & WILCOX CO.  
NRC Docket Number: 07000027 City: LYNCHBURG  
NRC Program Code: 21210 State: VA Zip Code: 24505-0785  
Responsible NRC Region: 2

**Site of Event:**

Site Name LYNCHBURG State: VA

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation:  
Atomic Energy Act Material: Y Record Complete:  
Consultant Hired: N Event Closed: Y

**Event Cause:**

EQP - EQUIPMENT  
Cause: EQUIPMENT FAILURE  
FCP - FUEL CYCLE PROBLEMS  
Cause: EQUIPMENT FAILURE

**Corrective Actions Information:**

Action Number: Corrective Action:  
EQP  
1 PERSONNEL RECEIVED ADDITIONAL TRAINING  
FCP  
1 REPAIRS MADE WITHOUT ENGINEERING CHANGE TO SYSTEM

**Reporting Requirements:**

EQP  
Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.  
Mode Reported: Telephone  
FCP  
Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported: Telephone

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN25739	03/31/1994		NB	EVENT NOTIFICATION
[REDACTED]				- Unmarked Legacy Reference
EN25741	03/31/1994		NB	EVENT NOTIFICATION
[REDACTED]				- Unmarked Legacy Reference
9405180220	07/14/1994		NB	NRC LETTER
[REDACTED]				- Unmarked Legacy Reference

9405180224	07/14/1994	[REDACTED]	NB	NOTICE OF VIOLATION
[REDACTED]	- Unmarked Legacy Reference			
9405180227	07/14/1994	[REDACTED]	NB	INSPECTION REPORT
[REDACTED]	- Unmarked Legacy Reference			



Item Number: FC940892

Last Updated: 07/27/1994

**Narrative:**

THE LICENSEE REPORTED THAT [REDACTED] OF EQUIPMENT IN THE [REDACTED] FACILITY WERE NOT POSTED WITH NUCLEAR CRITICALITY SAFETY REQUIREMENTS. OPERATIONS USING THIS EQUIPMENT WERE TERMINATED. APPROPRIATE POSTINGS ARE NOW BEING PREPARED AND OPERATIONS SHOULD RESUME THE WEEK OF 1/25/93. FAILURE TO POST EQUIPMENT HAS NOT RESULTED IN THE RELEASE OF RADIOACTIVE MATERIAL OR IN EXPOSURE OF ANY INDIVIDUAL.

Event Date: 01/21/1993

Discovery Date: 01/21/1993

Report Date: 01/22/1993

**Licensee/Reporting Party Information:**

Agreement State Regulated:	NO	Reciprocity:	NONE
License Number:	SNM-0042	Name:	BABCOCK & WILCOX CO.
NRC Docket Number:	07000027	City:	LYNCHBURG
NRC Program Code:	21210	State:	VA Zip Code: 24505-0785
Responsible NRC Region:	2		

**Site of Event:**

Site Name LYNCHBURG State: VA

**Additional Involved Party:**

License Number:	NA	Name:	NA
		City:	NA
		State:	NA Zip Code: NA

**Other Information:**

NRC Reportable Event:	Y	Abnormal Occurrence:	N
Agreement State Reportable Event:	N	Investigation:	
Atomic Energy Act Material:	Y	Record Complete:	
Consultant Hired:	N	Event Closed:	Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: FAILURE TO FOLLOW PROCEDURE OR WRONG PROCEDURE USED

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 NOT REPORTED

**Reporting Requirements:**

FCP  
Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported:

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN24929	04/07/1994		NB	EVENT NOTIFICATION
[REDACTED]				- Unmarked Legacy Reference
MR2930008	07/27/1994		NB	MORNING REPORT
[REDACTED]				- Unmarked Legacy Reference

Item Number: FC940893

Last Updated: 09/21/1994

**Narrative:**

It was discovered by a nuclear criticality safety engineer during his review of an operating procedure that [REDACTED] facility was manufacturing assemblies of [REDACTED] that had not been previously evaluated for criticality safety. The [REDACTED] is operated by [REDACTED]. All operations involving the [REDACTED] assemblies have been stopped until criticality safety evaluation is completed. This was a fairly minor unsafe condition, and there was no imminent danger of a critical incident. No release of radioactive material, and no exposures.

Update: Licensee replies to Notice of Violation and employees will be retrained on procedures.

Event Date: 03/11/1993

Discovery Date: 03/11/1993

Report Date: 03/12/1993

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0042 Name: BABCOCK & WILCOX CO.  
NRC Docket Number: 07000027 City: LYNCHBURG  
NRC Program Code: 21210 State: VA Zip Code: 24505-0785  
Responsible NRC Region: 2

**Site of Event:**

Site Name [REDACTED] State: ID

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation:  
Atomic Energy Act Material: Y Record Complete:  
Consultant Hired: N Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: MANAGEMENT DEFICIENCY

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 PERSONNEL RECEIVED ADDITIONAL TRAINING

**Reporting Requirements:**

FCP  
Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported:

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN25236	04/07/1994		NB	EVENT NOTIFICATION
[REDACTED]				- Unmarked Legacy Reference
9307130262	09/21/1994		NB	LICENSEE REPORT
[REDACTED]				- Unmarked Legacy Reference

Item Number: FC940895

Last Updated: 04/07/1994

**Narrative:**

LICENSEE DISCOVERED THE INLINE RADIATION MONITOR IN THE PIPE BETWEEN THE COLUMN AND THE TANK WAS INOPERABLE. LICENSEE REPAIRED RAD MONITOR. NO PERSONNEL WERE EXPOSED TO RADIATION. LICENSEE WAS MAKING A TRANSFER OF [REDACTED] OF LIQUID URANYL NITRATE FROM A SAFE GEOMETRY COLUMN TO AN UNFAVORABLE GEOMETRY TANK FOR MIXING PRIOR TO DISCHARGE TO THEIR WASTE TREATMENT FACILITY.

Event Date: 01/28/1993

Discovery Date: 01/28/1993

Report Date: 01/28/1993

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0124	Name: NUCLEAR FUEL SERVICES, INC.
NRC Docket Number: 07000143	City: ERWIN
NRC Program Code: 21210	State: TN      Zip Code: 376509718
Responsible NRC Region: 2	

**Site of Event:**

Site Name      ERWIN      State:      TN

**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA      Zip Code: NA

**Other Information:**

NRC Reportable Event: Y	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation:
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: DEFECTIVE OR FAILED PART

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP

1	REPAIRS MADE WITHOUT ENGINEERING CHANGE TO SYSTEM
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**Reporting Requirements:**

FCP  
Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported:

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN24965	04/07/1994		NB	EVENT NOTIFICATION

[REDACTED] - Unmarked Legacy Reference

Item Number: FC940914

Last Updated: 04/24/1995

**Narrative:**

THE LICENSEE IDENTIFIED A CRACK ON ONE OF THE FOUR HINGES ON THE DOOR TO THE SUPER TIGER SHIPPING CASK. WHEN DOOR WAS OPENED BEYOND 90 DEGREES THE HINGE WAS OVERSTRESSED LEADING TO ITS FAILURE. THE CASK WAS UNLOADED AND WILL NOT BE USED FOR SHIPMENT. UPDATE: AN INSPECTION WAS PERFORMED ON 03/04/94 TO REVIEW CORRECTIVE ACTIONS TAKEN BY LICENSEE FOR VIOLATIONS.

Event Date: 11/16/1993

Discovery Date: 11/16/1993

Report Date: 11/18/1993

**Licensee/Reporting Party Information:**

Agreement State Regulated:	NO	Reciprocity:	NONE
License Number:	SNM-0124	Name:	NUCLEAR FUEL SERVICES, INC.
NRC Docket Number:	07000143	City:	ERWIN
NRC Program Code:	21210	State:	TN      Zip Code: 376509718
Responsible NRC Region:	2		

**Site of Event:**

Site Name      ERWIN      State:      TN

**Additional Involved Party:**

License Number:	NA	Name:	NA
		City:	NA
		State:	NA      Zip Code: NA

**Other Information:**

NRC Reportable Event:	Y	Abnormal Occurrence:	N
Agreement State Reportable Event:	N	Investigation:	
Atomic Energy Act Material:	Y	Record Complete:	
Consultant Hired:	N	Event Closed:	Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: DEFECTIVE OR FAILED PART

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1      NEW EQUIPMENT OBTAINED

**Reporting Requirements:**

FCP  
Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported:      Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
MR2930131	04/12/1994		NB	MORNING REPORT
[REDACTED]				- Unmarked Legacy Reference
9404120176	04/29/1994		NB	NRC LETTER
[REDACTED]				- Unmarked Legacy Reference
9404120179	04/29/1994		NB	INSPECTION REPORT
[REDACTED]				- Unmarked Legacy Reference

Item Number: FC940923

Last Updated: 04/13/1994

**Narrative:**

DURING AN EVALUATION, IT WAS FOUND THAT URANIUM WAS BEING INTRODUCED INTO A COMPONENT OF THE SYSTEM FOR WHICH NO SAFETY ANALYSIS EXISTS. THE MAXIMUM CONCENTRATION OF URANIUM WHICH COULD BE PLACED IN THE ADD COLUMN IS [REDACTED]. THE ADD COLUMN HAS BEEN ISOLATED AND EMPTIED.

Event Date: 02/02/1994

Discovery Date: 02/02/1994

Report Date: 02/02/1994

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BABCOCK & WILCOX CO.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name LYNCHBURG State: VA

**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation:
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: LACK OF PROCEDURE

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 ENGINEERING CHANGE TO SYSTEM

**Source of Radiation:**

FCP

<b>Source Number:</b> 1			
Source/Material: FUEL FABRICATION MATERIAL	Radionuclide or Voltage (kVp/MeV): U-LE		
Device Name: NA	Activity: NR Ci	NR	GBq
Manufacturer: NR			
Model Number: NR			
Serial Number: NR			

**Reporting Requirements:**

FCP  
Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported: Telephone

**References:**

<b>Reference Number:</b> EN26729	<b>Entry Date:</b> 04/13/1994	<b>Retraction Date:</b>	<b>Coder Initials:</b> MEH	<b>Reference Type:</b> EVENT NOTIFICATION
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[REDACTED] - Unmarked Legacy Reference

Item Number: FC940924

Last Updated: 01/12/1996

**Narrative:**

THE LICENSEE NOTIFIED REGION II THAT AN OPERATOR FAILED TO FOLLOW THE POSTED LIMITS FOR THE LOW LEVEL DISSOLVER OPERATION. THE OPERATOR PLACED [REDACTED] OF MATERIAL IN THE [REDACTED]. THE OPERATION WAS STOPPED AND THE MATERIAL WAS SAMPLED AND MEASURED AND FOUND TO CONTAIN APPROXIMATELY [REDACTED] OF U-235. CORRECTIVE ACTIONS HAVE BEEN COMPLETED AND THE OPERATION HAS BEEN RESTARTED.

Event Date: 02/02/1994

Discovery Date: 02/02/1994

Report Date: 02/02/1994

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0042 Name: BABCOCK & WILCOX CO.  
NRC Docket Number: 07000027 City: LYNCHBURG  
NRC Program Code: 21210 State: VA Zip Code: 24505-0785  
Responsible NRC Region: 2

**Site of Event:**

Site Name LYNCHBURG State: VA

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation:  
Atomic Energy Act Material: Y Record Complete:  
Consultant Hired: N Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS

Cause: FAILURE TO FOLLOW PROCEDURE OR WRONG PROCEDURE USED

**Corrective Actions Information:**

Action Number: Corrective Action:

FCP

1 PERSONNEL RECEIVED ADDITIONAL TRAINING

**Source of Radiation:**

FCP

Source Number: 1  
Source/Material: UNSEALED SOURCE OTHER Radionuclide or Voltage (kVp/MeV): U-235  
Device Name: DISSOLVER, LOW-LEVEL Activity: NR Ci NR GBq  
Manufacturer: NR  
Model Number: NR  
Serial Number: NR

**Device/Associated Equipment:**

FCP

Device Number: 1  
Device Name: DISSOLVER, LOW-LEVEL Model Number: NR  
Manufacturer: NR Serial Number: NR

**Reporting Requirements:**

FCP

Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported: Written

**References:**

Reference Number: Entry Date: Retraction Date: Coder Initials: Reference Type:  
EN26726 04/13/1994 MEH EVENT NOTIFICATION

[REDACTED] - Unmarked Legacy Reference

[REDACTED]

[REDACTED]

Item Number: FC940925

Last Updated: 05/09/1995

**Narrative:**

THE LICENSEE REPORTED TO REGION II THAT AN ABOVE GROUND, OUTSIDE WASTE LINE BETWEEN THE [REDACTED] FACILITY AND THE [REDACTED] FACILITY FROZE AT THE JOINTS. THIS RESULTED IN LEAKAGE FOR THE LINE. ACCESS TO THE AREA WAS RESTRICTED FOR MORE THAN 24 HOURS.

Event Date: 01/20/1994

Discovery Date: 01/20/1994

Report Date: 01/21/1994

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BABCOCK & WILCOX CO.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name LYNCHBURG	State: VA
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**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation:
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed:

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: DEFECTIVE OR FAILED PART  
RLM - RADIOACTIVE MATERIAL REL.  
Cause: DEFECTIVE OR FAILED PART

**Corrective Actions Information:**

Action Number:	Corrective Action:
FCP	
1	NOT REPORTED
RLM	
1	NOT REPORTED

**Release of Material or Contamination Information:**

Type or Release or Contamination:	Activity:	Radionuclide:	Effect of Release or Contamination:
	Ci GBq		
SURFACE	NR NR	U-235	

**Source of Radiation:**

FCP			
<b>Source Number:</b>	1		
Source/Material:	UNSEALED SOURCE OTHER	Radionuclide or Voltage (kVp/MeV):	NR
Device Name:	LINE, WASTE DRAIN	Activity:	NR Ci NR GBq
Manufacturer:	NR		
Model Number:	NA		
Serial Number:	NA		
RLM			
<b>Source Number:</b>	1		
Source/Material:	UNSEALED SOURCE OTHER	Radionuclide or Voltage (kVp/MeV):	NR
Device Name:	LINE, WASTE DRAIN	Activity:	NR Ci NR GBq
Manufacturer:	NR		
Model Number:	NA		
Serial Number:	NA		



**Device/Associated Equipment:**

FCP

**Device Number: 1**

Device Name: LINE, WASTE DRAIN

Model Number: NR

Manufacturer: NR

Serial Number: NR

RLM

**Device Number: 1**

Device Name: LINE, WASTE DRAIN

Model Number: NR

Manufacturer: NR

Serial Number: NR

**Reporting Requirements:**

FCP

Reporting Requirement: 70.50(b)(1) - Unplanned contamination event.

Mode Reported: Written

RLM

Reporting Requirement: 70.50(b)(1) - Unplanned contamination event.

Mode Reported: Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN26655	04/13/1994		MEH	EVENT NOTIFICATION

 - Unmarked Legacy Reference



Item Number: FC940926

Last Updated: 04/13/1994

**Narrative:**

THE LICENSEE NOTIFIED REGION II THAT DURING THE CLEANING OF VENTILATION DUCT WORK, [REDACTED] WAS FOUND. THE MATERIAL WAS REMOVED AND STORED IN GEOMETRICALLY SAFE CONTAINERS. A REEVALUATION OF CURRENT PROCEDURES FOR MAINTENANCE IS UNDER WAY.

Event Date: 01/03/1994

Discovery Date: 01/03/1994

Report Date: 01/04/1994

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO

Reciprocity: NONE

License Number: SNM-0042

Name: BABCOCK & WILCOX CO.

NRC Docket Number: 07000027

City: LYNCHBURG

NRC Program Code: 21210

State: VA Zip Code: 24505-0785

Responsible NRC Region: 2

**Site of Event:**

Site Name LYNCHBURG

State: VA

**Additional Involved Party:**

License Number: NA

Name: NA

City: NA

State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: N

Investigation:

Atomic Energy Act Material: Y

Record Complete:

Consultant Hired: N

Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS

Cause: NOT REPORTED

**Corrective Actions Information:**

Action Number: Corrective Action:

FCP

1 REPAIRS MADE WITHOUT ENGINEERING CHANGE TO SYSTEM

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN26562	04/13/1994		MEH	EVENT NOTIFICATION

[REDACTED] - Unmarked Legacy Reference

Item Number: FC940950

Last Updated: 04/28/1995

**Narrative:**

Licensee had a previously assayed U-235 content of [REDACTED]. After the first state of the recovery dissolution process the content of the liquid and solid U-235 effluents from the process were assayed at [REDACTED]. This represents a loss of criticality control in that the total mass of U-235 in the dissolver was well above the limit of [REDACTED]. There was also a loss of mass control due to inaccurate assay of the input material into the process.

Update: The NRC conducted a routine inspection and weaknesses in facility operations activities reviewed, resulted in two examples of an apparent violation of license requirements for failure to conduct operations in accordance with posted nuclear criticality safety limits.

Update: An Augmented Inspection Team (AIT) was tasked to determine the cause and circumstances associated with this event. The AIT concluded that errors made, in 1990, determining the U-235 content of scrap (dissolved on 06/28/94), caused the event. The AIT further concluded that the root cause of the event was less-than-adequate evaluation of the [REDACTED], called a drum counter, as a method of measuring U-235 for certain configurations and types of scrap at the site.

Update: The NRC conducted an inspection and it was found that the 55 gallon drum containing the six bottles involved in this event, in addition to seven others, contained approximately [REDACTED] U-235 which exceeded the [REDACTED] limit. This is an apparent violation of License Condition S-1 requirements.

Update: The NRC conducted an Enforcement Conference to discuss violations and corrective actions.

Update: The NRC forwards Notice of Violation and proposed imposition of Civil Penalty in the amount of \$37,500.00 for violations. Also, the NRC notified the Licensee of a significant meeting to discuss the results of the Licensee's investigation of the root causes.

Event Date: 06/28/1994

Discovery Date: 06/28/1994

Report Date: 06/29/1994

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BABCOCK & WILCOX CO.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name LYNCHBURG State: VA

**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: Y
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: DEFECTIVE OR INADEQUATE PROCEDURE

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 NOT REPORTED

**Source of Radiation:**

FCP

<b>Source Number:</b> 1		
Source/Material: UNSEALED SOURCE SNM	Radionuclide or Voltage (kVp/MeV): U-235	
Device Name: DISSOLVER, LOW-LEVEL	Activity: NR Ci NR GBq	
Manufacturer: BABCOCK & WILCOX		
Model Number: NR		
Serial Number: NR		

**Device/Associated Equipment:**

FCP



**Device Number: 1**

Device Name: DISSOLVER, LOW-LEVEL  
Manufacturer: NR

Model Number: NR  
Serial Number: NR

**Reporting Requirements:**

FCP

Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported: Telephone

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN27465	07/06/1994		NB	EVENT NOTIFICATION
	- Unmarked Legacy Reference			
PN294031	07/06/1994		NB	PRELIMINARY NOTIFICATION
	- Unmarked Legacy Reference			
9408090039	08/30/1994		NB	NRC LETTER
	- Unmarked Legacy Reference			
9408090043	08/30/1994		NB	INSPECTION REPORT
	- Unmarked Legacy Reference			
9408190012	09/20/1994		NB	NRC LETTER
	- Unmarked Legacy Reference			
9408190027	09/20/1994		NB	INSPECTION REPORT
	- Unmarked Legacy Reference			
9409070054	09/26/1994		NB	NRC LETTER
	- Unmarked Legacy Reference			
9409070063	09/26/1994		NB	INSPECTION REPORT
	- Unmarked Legacy Reference			
9410120028	10/31/1994		NB	NRC LETTER
	- Unmarked Legacy Reference			
9410120052	10/31/1994		NB	ENFORCEMENT CONFERENCE
	- Unmarked Legacy Reference			
9410120167	10/31/1994		NB	OTHER
	- Unmarked Legacy Reference			
9411010205	12/12/1994		NB	NRC LETTER
	- Unmarked Legacy Reference			
9411010212	12/12/1994		NB	NOTICE OF VIOLATION
	- Unmarked Legacy Reference			
9411040085	12/12/1994		NB	NOTIFICATION OF SIGNIFICANT ENFORCEMENT ACTION
	- Unmarked Legacy Reference			
9411210014	12/12/1994		NB	NRC LETTER
	- Unmarked Legacy Reference			



Item Number: FC941284

Last Updated: 07/27/1994

**Narrative:**

LICENSEE DISCOVERED PIN HOLE LEAKS IN A WELD BETWEEN THE STEAM SIDE AND THE PRODUCT SIDE OF AN EVAPORATOR IN THE [REDACTED] FACILITY. THE STEAM CONDENSATE CONDUCTIVITY ALARM ACTIVATED WHICH IS DESIGNED TO DETECT POTENTIAL LEAKAGE OF THE HIGHLY CONCENTRATED URANIUM SOLUTION FROM THE PRODUCT SIDE TO THE STEAM SIDE OF THE EVAPORATOR PRIOR TO DISCHARGE OF STEAM CONDENSATE INTO AN UNFAVORABLE GEOMETRY CONTAINER. LICENSEE HAS REPLACED THE FAULTY EVAPORATOR AND REROUTED THE STEAM CONDENSATE DISCHARGE INTO THE CONTAMINATED AQUEOUS WASTE SYSTEM.

UPDATE: DURING AN NRC INSPECTION, LICENSEE WAS CITED FOR VIOLATION AND GIVEN A CIVIL PENALTY IN THE AMOUNT OF \$37,500.00.

Event Date: 10/22/1992

Discovery Date: 10/22/1992

Report Date: 10/22/1992

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0042 Name: BABCOCK & WILCOX CO.  
NRC Docket Number: 07000027 City: LYNCHBURG  
NRC Program Code: 21210 State: VA Zip Code: 24505-0785  
Responsible NRC Region: 2

**Site of Event:**

Site Name LYNCHBURG State: VA

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation:  
Atomic Energy Act Material: Y Record Complete:  
Consultant Hired: N Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: DEFECTIVE OR FAILED PART

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 NEW EQUIPMENT OBTAINED

**Reporting Requirements:**

FCP  
Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported: Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
9303020044	05/19/1994		NB	NRC LETTER
[REDACTED]				- Unmarked Legacy Reference
9303020051	05/19/1994		NB	INSPECTION REPORT
[REDACTED]				- Unmarked Legacy Reference
9304210112	07/27/1994		NB	NRC LETTER
[REDACTED]				- Unmarked Legacy Reference
9304210141	07/27/1994		NB	ENFORCEMENT ACTION
[REDACTED]				- Unmarked Legacy Reference

Item Number: FC941285

Last Updated: 05/19/1994

**Narrative:**

THE LICENSEE REPORTED THAT A SODIUM-IODIDE DETECTOR, WHICH RESTS INSIDE A SLEEVE PROTRUDING INTO THE WASTE STREAM, WAS FOUND TO BE POSITIONED INCORRECTLY. THIS RESULTED IN THE SYSTEM BEING UNABLE TO RESPOND TO THE LICENSE REQUIRED SET POINT OF [REDACTED].

Event Date: 12/16/1992

Discovery Date: 12/23/1992

Report Date: 12/23/1992

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BABCOCK & WILCOX CO.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name LYNCHBURG	State: VA
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**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation:
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: DEFECTIVE OR FAILED PART

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 NEW EQUIPMENT OBTAINED

**Reporting Requirements:**

FCP  
Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported: Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
9303020044	05/19/1994		NB	NRC LETTER
[REDACTED]				- Unmarked Legacy Reference
9303020051	05/19/1994		NB	INSPECTION REPORT
[REDACTED]				- Unmarked Legacy Reference

Item Number: FC941445

Last Updated: 05/26/1994

**Narrative:**

THE LICENSEE RECEIVED A VIOLATION FOR USING DOT 6M PACKAGES TO SHIP FISSILE MATERIAL HAVING HYDROGENOUS TO FISSILE MATERIAL RATIOS WHICH EXCEEDED THREE BUT WHICH WERE LABELED IMPROPERLY AS FISSILE CLASS I.

Event Date: 06/04/1993

Discovery Date: 06/04/1993

Report Date: 06/04/1993

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BABCOCK & WILCOX CO.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name LYNCHBURG	State: VA
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**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: N	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation:
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed:

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: MANAGEMENT DEFICIENCY  
TRS - TRANSPORTATION  
Cause: MANAGEMENT DEFICIENCY

**Corrective Actions Information:**

Action Number: Corrective Action:

FCP

1	PERSONNEL RECEIVED ADDITIONAL TRAINING
2	PROCEDURE MODIFIED

TRS

1	PERSONNEL RECEIVED ADDITIONAL TRAINING
2	PROCEDURE MODIFIED

**Source of Radiation:**

FCP

**Source Number: 1**

Source/Material: UNSEALED SOURCE OTHER	Radionuclide or Voltage (kVp/MeV): NR
Device Name: CONTAINER, SHIPPING	Activity: NR Ci NR GBq
Manufacturer: NR	
Model Number: NR	
Serial Number: NR	

TRS

**Source Number: 1**

Source/Material: UNSEALED SOURCE OTHER	Radionuclide or Voltage (kVp/MeV): NR
Device Name: CONTAINER, SHIPPING	Activity: NR Ci NR GBq
Manufacturer: NR	
Model Number: NR	
Serial Number: NR	

**Device/Associated Equipment:**

FCP



**Device Number:** 1

Device Name: CONTAINER, SHIPPING

Manufacturer: NR

Model Number: NR

Serial Number: NR

TRS

**Device Number:** 1

Device Name: CONTAINER, SHIPPING

Manufacturer: NR

Model Number: NR

Serial Number: NR

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
9307020110	05/26/1994		MEH	INSPECTION REPORT

 - Unmarked Legacy Reference



Item Number: FC941456

Last Updated: 08/23/1994

**Narrative:**

APPROXIMATELY [REDACTED] WAS FOUND IN THE DUCT WORK AT THE FACILITY. THE LICENSE LIMIT IS [REDACTED]. THE MATERIAL IS CURRENTLY BEING DISSOLVED FOR A MORE ACCURATE MEASUREMENT. THE REPORT WAS MADE DUE TO CONTROL OF THE MASS PARAMETER BEING LOST. THE MATERIAL HAS BEEN STORED IN FAVORABLE GEOMETRY CONTAINERS AND CONTROL HAS BEEN RESTORED.

UPDATE: THE NRC CONDUCTED A ROUTINE INSPECTION AND ONE NON-CITED VIOLATION WAS IDENTIFIED CONCERNING THE ACCUMULATION OF FISSILE MATERIAL IN VENTILATION DUCTS IN QUANTITIES GREATER THAN THE LICENSE LIMITS.

Event Date: 03/22/1994

Discovery Date: 03/22/1994

Report Date: 03/23/1994

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0042 Name: BABCOCK & WILCOX CO.  
NRC Docket Number: 07000027 City: LYNCHBURG  
NRC Program Code: 21210 State: VA Zip Code: 24505-0785  
Responsible NRC Region: 2

**Site of Event:**

Site Name LYNCHBURG State: VA

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation:  
Atomic Energy Act Material: Y Record Complete:  
Consultant Hired: N Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: NOT REPORTED

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 ENGINEERING CHANGE TO SYSTEM

**Source of Radiation:**

FCP  
**Source Number: 1**  
Source/Material: UNSEALED SOURCE SNM Radionuclide or Voltage (kVp/MeV): U-235  
Device Name: DUCTWORK Activity: NR Ci NR GBq  
Manufacturer: BABCOCK & WILCOX  
Model Number: NR  
Serial Number: NR

**Device/Associated Equipment:**

FCP  
**Device Number: 1**  
Device Name: DUCTWORK Model Number: NR  
Manufacturer: NR Serial Number: NR

**Reporting Requirements:**

FCP  
Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported: Written

**References:**

Reference Number: Entry Date: Retraction Date: Coder Initials: Reference Type:

EN26979	05/26/1994	[REDACTED]	MEH	EVENT NOTIFICATION
[REDACTED]	- Unmarked Legacy Reference			
9406060017	08/23/1994		NB	NRC LETTER
[REDACTED]	- Unmarked Legacy Reference			
9406060020	08/23/1994		NB	INSPECTION REPORT
[REDACTED]	- Unmarked Legacy Reference			

**Narrative:**

THE RESIDENT INSPECTORS AT CRYSTAL RIVER WERE INFORMED BY THE LICENSEE THAT THE SHIPMENT OF NEW FUEL HAD BEEN DELAYED BECAUSE CHEMICALLY CONTAMINATED FUEL PELLETS HAD BEEN DISCOVERED BY BABCOCK AND WILCOX (B&W), WHICH POTENTIALLY COULD AFFECT THE FUEL MANUFACTURED FOR CRYSTAL RIVER. FUEL FOR CRYSTAL RIVER IS PROVIDED BY B&W, USING PELLETS MANUFACTURED BY SIEMENS. A B&W TECHNICIAN NOTICED A DISCOLORATION IN AN EMPTY TRAY WHICH HAD BEEN USED FOR SHIPPING FUEL PELLETS. BASED ON SUBSEQUENT FOLLOW-UP BY B&W, IT WAS DETERMINED THAT THE CONTAMINATION OCCURRED AT SIEMENS WHEN THE HOODS COVERING EMPTY PELLET TRAYS WERE SPRAYED WITH DOW BATHROOM CLEANER AND THE CLEANER DRIPPED DOWN ONTO THE TRAYS. THE PELLETS WHICH WERE LATER LOADED INTO THE TRAYS BECAME CONTAMINATED THROUGH CONTACT WITH THE TRAYS. B&W PERFORMED A 100 PERCENT VISUAL INSPECTION OF ALL TRAYS AND PELLETS, AND IDENTIFIED AT LEAST TWO CONTAMINATED TRAYS AND APPROXIMATELY 50 CONTAMINATED PELLETS. SOME FUEL ASSEMBLIES ALREADY MANUFACTURED AT B&W FOR CRYSTAL RIVER MAY CONTAIN SIMILARLY CONTAMINATED PELLETS. SAMPLES OF CONTAMINATED PELLETS HAVE BEEN SENT TO AN ANALYTICAL LAB, AND EVALUATION IS STILL IN PROGRESS.

Event Date: 02/21/1994

Discovery Date: 02/21/1994

Report Date: 02/25/1994

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BABCOCK & WILCOX CO.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name LYNCHBURG	State: VA
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**Additional Involved Party:**

License Number: NON-LICENSEE	Name: CRYSTAL RIVER POWER PLANT
	City: CRYSTAL RIVER
	State: FL Zip Code: NR

**Other Information:**

NRC Reportable Event: Y	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: Y
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed:

**Event Cause:**

EQP - EQUIPMENT  
Cause: DEFECTIVE OR FAILED PART

FCP - FUEL CYCLE PROBLEMS  
Cause: DEFECTIVE OR FAILED PART

**Corrective Actions Information:**

Action Number:	Corrective Action:
EQP	
1	NOT REPORTED
FCP	
1	NOT REPORTED

**Source of Radiation:**

EQP

<b>Source Number:</b> 1			
Source/Material: FUEL PELLET	Radionuclide or Voltage (kVp/MeV): U-OXIDE		
Device Name: FUEL ASSEMBLY	Activity: NR Ci	NR GBq	
Manufacturer: NR	Problem with Source:		
Model Number: NR			
Serial Number: NR			

FCP



**Source Number:** 1

Source/Material:	FUEL PELLETT	Radionuclide or Voltage (kVp/MeV):	U-OXIDE
Device Name:	FUEL ASSEMBLY	Activity:	NR Ci NR GBq
Manufacturer:	NR		
Model Number:	NR		
Serial Number:	NR		

**Device/Associated Equipment:**

EQP

**Device Number:** 1

Device Name:	FUEL ASSEMBLY	Model Number:	NR
Manufacturer:	NR	Serial Number:	NR
		Problem with Equipment:	

FCP

**Device Number:** 1

Device Name:	FUEL ASSEMBLY	Model Number:	NR
Manufacturer:	NR	Serial Number:	NR

**Reporting Requirements:**

EQP

Reporting Requirement: 21.21(c)(1)(ii) - old - (SUPERSEDED) A FAILURE TO COMPLY OR A DEFECT AFFECTING A BASIC COMPONENT THAT IS SUPPLIED FOR A FACILITY OR AN ACTIVITY THAT IS SUBJECT TO LICENSING REQUIREMENTS.

Mode Reported: Telephone

FCP

Reporting Requirement: 21.21(c)(1)(ii) - old - (SUPERSEDED) A FAILURE TO COMPLY OR A DEFECT AFFECTING A BASIC COMPONENT THAT IS SUPPLIED FOR A FACILITY OR AN ACTIVITY THAT IS SUBJECT TO LICENSING REQUIREMENTS.

Mode Reported:

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
MR2940013	06/01/1994		NB	MORNING REPORT

 - Unmarked Legacy Reference



Item Number: FC941518

Last Updated: 01/15/1996

**Narrative:**

INSPECTION REPORT IDENTIFIES NON-CITED VIOLATIONS, CONCERNING THE FOLLOWING EVENT:

NO FURTHER SHIPMENTS OF CONTACT HANDLED-TRANSURANIC (CH-TRU), WASTE DRUMS WOULD BE RECEIVED BY [REDACTED] PENDING RESOLUTION OF PROBLEMS THAT HAD BEEN NOTED WITH SOME OF THE SHIPMENTS. THE PROBLEMS WERE IDENTIFIED BY [REDACTED] IN NON-CONFORMANCE REPORTS (NCRS). THE NCRS OUTLINED PROBLEMS WHICH INVOLVED: (1) A SOLID WASTE DRUM WHICH HAD BEEN RECEIVED WITHOUT AN INNER LINER LID, (2) A PREVIOUSLY REJECTED DRUM THAT WAS RETURNED TO [REDACTED] BUT STILL CONTAINED FREE LIQUID, (3) A 500 ML BOTTLE WAS NOTED TO BE LOCATED WITHIN A 2 LITTER BOTTLE INSIDE A WASTE DRUM AND THE 500 ML BOTTLE CONTAINED FREE LIQUID, AND (4) TWO 55 GALLON DRUMS WERE RECEIVED AT [REDACTED] AND UPON SURVEYING THE DRUMS WERE FOUND TO HAVE SURFACE CONTAMINATION IN EXCESS OF THE ACCEPTANCE CRITERIA.

Event Date: 01/20/1994

Discovery Date: 01/20/1994

Report Date: 01/20/1994

**Licensee/Reporting Party Information:**

Agreement State Regulated:	NO	Reciprocity:	NONE
License Number:	SNM-0124	Name:	NUCLEAR FUEL SERVICES, INC.
NRC Docket Number:	07000143	City:	ERWIN
NRC Program Code:	21210	State:	TN      Zip Code: 376509718
Responsible NRC Region:	2		

**Site of Event:**

Site Name	ERWIN	State:	TN
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**Additional Involved Party:**

License Number:	NA	Name:	NA
		City:	NA
		State:	NA      Zip Code: NA

**Other Information:**

NRC Reportable Event:	Y	Abnormal Occurrence:	N
Agreement State Reportable Event:	N	Investigation:	
Atomic Energy Act Material:	Y	Record Complete:	
Consultant Hired:	N	Event Closed:	Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: NOT REPORTED

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1      NOT REPORTED

**Reporting Requirements:**

FCP  
Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported: Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
9403280124	06/02/1994		NB	NRC LETTER
[REDACTED]				- Unmarked Legacy Reference
9403280136	06/02/1994		NB	INSPECTION REPORT
[REDACTED]				- Unmarked Legacy Reference
9404120176	06/02/1994		NB	NRC LETTER
[REDACTED]				- Unmarked Legacy Reference
9404120179	06/02/1994		NB	INSPECTION REPORT
[REDACTED]				- Unmarked Legacy Reference

Item Number: FC941601

Last Updated: 06/27/1994

**Narrative:**

LICENSEE REPLIES TO A NOTICE OF VIOLATION AND THE NRC ACKNOWLEDGES THE RESPONSE AND FOUND THAT IT MEETS THE REQUIREMENTS. THE VIOLATION WAS CITED BECAUSE [REDACTED] COMPONENTS WHICH WERE STORED IN THE VERTICAL STAND WERE NOT FREE DRAINING AND HAD SHIPPING FIXTURES INSTALLED RATHER THAN CONTROL RODS. IN THEIR REPLY, THE LICENSEE STATES REASONS FOR VIOLATION AND CORRECTIVE STEPS.

Event Date: 11/11/1993

Discovery Date: 11/11/1993

Report Date: 02/28/1994

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BABCOCK & WILCOX CO.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name LYNCHBURG State: VA

**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: Y
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: NOT REPORTED

**Corrective Actions Information:**

Action Number: Corrective Action:

FCP

1	PROCEDURE MODIFIED
2	REPAIRS MADE WITH ENGINEERING CHANGE TO SYSTEM

**Reporting Requirements:**

FCP  
Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported: Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
9404200081	06/27/1994		NB	NRC LETTER
[REDACTED]				- Unmarked Legacy Reference
LTR940329	06/27/1994		NB	LICENSEE REPORT
[REDACTED]				- Unmarked Legacy Reference

Item Number: FC941602

Last Updated: 06/27/1994

**Narrative:**

LICENSEE REPLIES TO A NOTICE OF VIOLATION WITH REASONS FOR THE VIOLATION AND CORRECTIVE STEPS THAT HAVE BEEN TAKEN AND THE RESULTS ACHIEVED. VIOLATION WAS ISSUED BECAUSE UNCOUNTED SOLID WASTE CONTAINING (WHICH HAD NOT BEEN MEASURED USING A NONDESTRUCTIVE ASSAY DEVICE) WAS AUTHORIZED AND ROUTINELY HANDLED IN A NON-FAVORABLE GEOMETRY, UNPOISONED CONTAINERS IN SIX AND FOUR LOCATIONS WITHIN THE FACILITIES RESPECTIVELY. MEASUREMENTS WERE PERFORMED ON A DAILY BASIS AFTER UNCOUNTED MATERIAL WAS ADDED TO THE NON-FAVORABLE GEOMETRY, UNPOISONED CONTAINERS.

Event Date: 04/09/1993

Discovery Date: 04/09/1993

Report Date: 09/01/1993

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BABCOCK & WILCOX CO.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA      Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name      LYNCHBURG      State:      VA

**Additional Involved Party:**

License Number: NA	Name:      NA
	City:      NA
	State:      NA      Zip Code: NA

**Other Information:**

NRC Reportable Event:	Y	Abnormal Occurrence:	N
Agreement State Reportable Event:	N	Investigation:	Y
Atomic Energy Act Material:	Y	Record Complete:	
Consultant Hired:	N	Event Closed:	Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause:      DEFECTIVE OR INADEQUATE PROCEDURE

**Corrective Actions Information:**

Action Number:      Corrective Action:  
FCP  
1      IMPROVE RADIOACTIVE MATERIAL LABELING AND HANDLING

**Reporting Requirements:**

FCP  
Reporting Requirement:      NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported:      Written

**References:**

<b>Reference Number:</b>	<b>Entry Date:</b>	<b>Retraction Date:</b>	<b>Coder Initials:</b>	<b>Reference Type:</b>
9307130262	06/27/1994		NB	LICENSEE REPORT

- Unmarked Legacy Reference

Item Number: FC941666

Last Updated: 01/12/1996

**Narrative:**

A fire occurred in the [redacted] at B&W's [redacted] Plant in Campbell County, Virginia. Two maintenance workers were repairing a saw in the laboratory when metal fines (chips) auto ignited. The material contained enriched Uranium and became airborne. Six people were exposed to the airborne material. Their exposures are not known at this time. Air sampling data has not been fully evaluated at this time. Five individuals were contaminated up to 1000 dpm. One individual received burns to his right arm, was treated at the scene, and returned to work. The laboratory is being decontaminated. Actions to be taken to prevent a recurrence of this type of event will be determine at the conclusion of the investigation.

Update: The NRC conducted an inspection, and it was determined that the cause of the fire was failure to thoroughly clean the saw before a disassembly and maintenance. The inspector notified the Licensee that failure to have adequate written and approved procedures for conducting activities involving licensed material was an additional example of an apparent violation of license conditions S-1 requirements.

Update: NRC forwards Notice of Violation and Proposed Imposition of Civil Penalty in the amount of \$37,500.00 for violations. The Licensee responds to Notice of violation. Corrective Actions: Procedure for evaluation and notification of potentially unsafe condition has been revised.

Event Date: 07/07/1994

Discovery Date: 07/07/1994

Report Date: 07/07/1994

**Licensee/Reporting Party Information:**

Agreement State Regulated:	NO	Reciprocity:	NONE
License Number:	SNM-0042	Name:	BABCOCK & WILCOX CO.
NRC Docket Number:	07000027	City:	LYNCHBURG
NRC Program Code:	21210	State:	VA Zip Code: 24505-0785
Responsible NRC Region:	2		

**Site of Event:**

Site Name LYNCHBURG State: VA

**Additional Involved Party:**

License Number:	NA	Name:	NA
		City:	NA
		State:	NA Zip Code: NA

**Other Information:**

NRC Reportable Event:	Y	Abnormal Occurrence:	N
Agreement State Reportable Event:	N	Investigation:	Y
Atomic Energy Act Material:	Y	Record Complete:	
Consultant Hired:	N	Event Closed:	Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: LACK OF PROCEDURE  
RLM - RADIOACTIVE MATERIAL REL.  
Cause: LACK OF PROCEDURE

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 PROCEDURE MODIFIED  
RLM  
1 PROCEDURE MODIFIED

**Release of Material or Contamination Information:**

Type or Release or Contamination:	Activity:	Radionuclide:	Effect of Release or Contamination:
AIR	Ci GBq NR NR	U-OTH	

**Source of Radiation:**

FCP



**Source Number: 1**

Source/Material: UNSEALED SOURCE OTHER Radionuclide or Voltage (kVp/MeV): U-OTH  
 Device Name: NA Activity: NR Ci NR GBq  
 Manufacturer: NR  
 Model Number: NA  
 Serial Number: NA

RLM

**Source Number: 1**

Source/Material: UNSEALED SOURCE OTHER Radionuclide or Voltage (kVp/MeV): U-OTH  
 Device Name: NA Activity: NR Ci NR GBq  
 Manufacturer: NR  
 Model Number: NA  
 Serial Number: NA

**Reporting Requirements:**

FCP

Reporting Requirement: 70.50(b)(1) - Unplanned contamination event.  
 Mode Reported: Written

RLM

Reporting Requirement: 70.50(b)(1) - Unplanned contamination event.  
 Mode Reported: Telephone

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN27498	07/14/1994		NB	EVENT NOTIFICATION
	- Unmarked Legacy Reference			
PN294036	07/14/1994		NB	PRELIMINARY NOTIFICATION
	- Unmarked Legacy Reference			
9409070054	09/26/1994		NB	NRC LETTER
	- Unmarked Legacy Reference			
9409070063	09/26/1994		NB	INSPECTION REPORT
	- Unmarked Legacy Reference			
9410180087	12/16/1994		NB	NRC LETTER
	- Unmarked Legacy Reference			
9410180093	12/16/1994		NB	NOTICE OF VIOLATION
	- Unmarked Legacy Reference			
9410180099	12/16/1994		NB	INSPECTION REPORT
	- Unmarked Legacy Reference			
9411010205	12/16/1994		NB	NRC LETTER
	- Unmarked Legacy Reference			
9411010212	12/16/1994		NB	ENFORCEMENT ACTION
	- Unmarked Legacy Reference			
9411040085	12/16/1994		NB	NOTIFICATION OF SIGNIFICANT ENFORCEMENT ACTION
	- Unmarked Legacy Reference			
9411150009	12/16/1994		NB	LICENSEE REPORT
	- Unmarked Legacy Reference			
9411210014	12/16/1994		NB	NRC LETTER
	- Unmarked Legacy Reference			



Item Number: FC941676

Last Updated: 07/18/1994

**Narrative:**

THE LICENSEE DISCOVERED THAT A RADIATION MONITOR SITUATED IN-LINE TO MEASURE URANIUM CONCENTRATIONS INS AQUEOUS WATER PRIOR TO ENTERING A 5000 GALLON UNFAVORABLE GEOMETRY RETENTION TANK WAS NOT OPERATING PROPERLY. A SODIUM IODIDE DETECTOR WHICH RESTS INSIDE A SLEEVE PROTRUDING INTO THE WASTE STREAM WAS FOUND TO BE POSITIONED INCORRECTLY. THIS RESULTED IN THE SYSTEM BEING UNABLE TO RESPOND TO THE LICENSE REQUIRED SET POINT OF [REDACTED].

Event Date: 12/23/1992

Discovery Date: 12/23/1992

Report Date: 12/23/1992

**Licensee/Reporting Party Information:**

Agreement State Regulated:	NO	Reciprocity:	NONE
License Number:	SNM-0042	Name:	BABCOCK & WILCOX CO.
NRC Docket Number:	07000027	City:	LYNCHBURG
NRC Program Code:	21210	State:	VA      Zip Code: 24505-0785
Responsible NRC Region:	2		

**Site of Event:**

Site Name	LYNCHBURG	State:	VA
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**Additional Involved Party:**

License Number:	NA	Name:	NA
		City:	NA
		State:	NA      Zip Code: NA

**Other Information:**

NRC Reportable Event:	Y	Abnormal Occurrence:	N
Agreement State Reportable Event:	N	Investigation:	
Atomic Energy Act Material:	Y	Record Complete:	
Consultant Hired:	N	Event Closed:	Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: DEFECTIVE OR FAILED PART

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1      NEW EQUIPMENT OBTAINED

**Source of Radiation:**

FCP

<b>Source Number:</b>	1		
Source/Material:	UNSEALED SOURCE SNM	Radionuclide or Voltage (kVp/MeV):	U-235
Device Name:	TANK, RETENTION	Activity:	NR Ci      NR GBq
Manufacturer:	NR		
Model Number:	NR		
Serial Number:	NR		

**Device/Associated Equipment:**

FCP

<b>Device Number:</b>	1		
Device Name:	TANK, RETENTION	Model Number:	NR
Manufacturer:	NR	Serial Number:	NR

**Reporting Requirements:**

FCP  
Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported: Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
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9303020044	07/18/1994	[REDACTED]	NB	NRC LETTER
[REDACTED]	- Unmarked Legacy Reference			
9303020051	07/18/1994	[REDACTED]	NB	INSPECTION REPORT
[REDACTED]	- Unmarked Legacy Reference			



Item Number: FC941677

Last Updated: 07/18/1994

**Narrative:**

THE LICENSEE REPORTED THAT THEY HAD DISCOVERED [REDACTED] FLUID PUMPS IN THE [REDACTED] SYSTEM WITH INSUFFICIENT DOCUMENTATION REGARDING THE CRITICALITY ANALYSIS FOR THESE PUMPS. BASED ON THE URANIUM CONCENTRATIONS IN THE FLUID, AND BASED ON THE CONFIGURATION OF THE PUMPS, THE LICENSEE HAS DETERMINED THAT NO NUCLEAR SAFETY PROBLEM EXISTS. THEY ARE IN THE PROCESS OF DOCUMENTING THESE CONCLUSIONS AND EXPECT TO FINISH WITHIN 24 HOURS. SINCE THE LICENSEE HAS DETERMINED THAT NO NUCLEAR SAFETY PROBLEM EXISTS, THE SYSTEM WAS NOT SHUT DOWN

Event Date: 02/16/1993

Discovery Date: 02/16/1993

Report Date: 02/16/1993

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BABCOCK & WILCOX CO.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name	LYNCHBURG	State:	VA
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**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event:	Y	Abnormal Occurrence:	N
Agreement State Reportable Event:	N	Investigation:	
Atomic Energy Act Material:	Y	Record Complete:	
Consultant Hired:	N	Event Closed:	Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: INATTENTION TO DETAIL

**Corrective Actions Information:**

Action Number:	Corrective Action:
FCP	
1	NOT REPORTED

**Reporting Requirements:**

FCP

Reporting Requirement:	NRCB 91-01 - Loss of criticality safety controls.
Mode Reported:	Telephone

**References:**

<b>Reference Number:</b>	<b>Entry Date:</b>	<b>Retraction Date:</b>	<b>Coder Initials:</b>	<b>Reference Type:</b>
EN25081	07/18/1994		NB	EVENT NOTIFICATION

[REDACTED] - Unmarked Legacy Reference

Item Number: FC941680

Last Updated: 07/18/1994

**Narrative:**

THE LICENSEE REPORTED THAT IT WAS DISCOVERED THAT A PREVIOUS NUCLEAR CRITICALITY SAFETY EVALUATION WAS DEFICIENT. THE CURRENT LIMITS FOR AN OPERATION WERE NOT ADEQUATELY SUPPORTED PER THE PREVIOUS EVALUATION, I.E. THE EXISTING EVALUATIONS ARE ABOUT 20 YEARS OLD. THE CURRENT [REDACTED] SPACING LIMIT UNDER BOTH NORMAL AND UPSET CONDITIONS, E.G. INTRODUCTION OF WATER AS A MODERATOR, DURING A VERTICAL DE-GREASING OPERATION USING [REDACTED] APPEARS TO BE INACCURATE. THE OPERATION LOCATED IN [REDACTED] WAS HALTED AT 1230 EST. A REEVALUATION IS BEING PERFORMED WITH THE EXPECTATION THAT THE OPERATION WILL BE RESUMED NEXT WEEK AFTER CORRECTIVE ACTIONS ARE DETERMINED. LICENSEE NOTIFIED THE NRC RESIDENT INSPECTOR AND DOES NOT PLAN A PRESS RELEASE. NO EXPOSURE TO PERSONNEL OR OFF SITE RELEASE OCCURRED AS A RESULT OF THIS INCIDENT.

Event Date: 02/19/1993

Discovery Date: 02/19/1993

Report Date: 02/19/1993

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0042 Name: BABCOCK & WILCOX CO.  
NRC Docket Number: 07000027 City: LYNCHBURG  
NRC Program Code: 21210 State: VA Zip Code: 24505-0785  
Responsible NRC Region: 2

**Site of Event:**

Site Name LYNCHBURG State: VA

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation:  
Atomic Energy Act Material: Y Record Complete:  
Consultant Hired: N Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: INATTENTION TO DETAIL

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 NOT REPORTED

**Reporting Requirements:**

FCP  
Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported: Telephone

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN25103	07/18/1994		NB	EVENT NOTIFICATION

[REDACTED] - Unmarked Legacy Reference

**Narrative:**

Enriched Uranium scrap was added to [redacted] section of Uranium recovery that exceeded the mass limit of [redacted]. The immediate corrective action was that the foreman was notified, the [redacted] were cleaned, and the material was re-measured. The re-measurement indicated that one [redacted] actually contained [redacted] U-235 and the other contained [redacted] U-235. This indicated the limits were not actually exceeded. The event is still under investigation.

Update: Administrative mass control for the [redacted] was lost. Operators will be re-instructed at the beginning of each shift on the NCS limits, use of computer system, and acknowledging alarms.

Update: Addendum to Confirmatory Action Letter; Processing will not be performed in the [redacted] until the following actions are completed:

- (1) Complete the investigation.
- (2) Identify root cause(s).
- (3) Propose and implement corrective actions.
- (4) Meet with NRC management to discuss these proposed corrective actions.

Update: The NRC conducted an inspection, and the Licensee was notified by the inspector that failure to have adequate approved written procedures for conducting activities involving licensed material was an apparent violation of License Condition S-1 requirements.

Update: The NRC informed the Commission that a Notice of Violation and Proposed Imposition of Civil Penalty in the amount of \$37,500.00 will be issued to the Licensee. The action is based on two violations involving:(1) Two examples of the failure to conduct activities involving licensed material in accordance with established Nuclear Criticality Safety Limits and Controls; and (2) Two examples of the failure to adequately consider pertinent process conditions and known modes of failure in establishing these safety limits.

Update: The Licensee denied both examples of its failure to adequately consider pertinent process conditions and known modes of failure and disagreed with the Proposed Civil Penalty. After careful consideration of the Licensee's response the NRC concluded: (1) The violations occurred as set forth in the NOV and Proposed Imposition of Civil Penalty, and (2) An adequate basis for mitigation of the Proposed Civil Penalty was not provided.

Event Date: 07/26/1994

Discovery Date: 07/26/1994

Report Date: 07/27/1994

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BABCOCK & WILCOX CO.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name LYNCHBURG State: VA

**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: Y
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: FAILURE TO FOLLOW PROCEDURE OR WRONG PROCEDURE USED

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 PERSONNEL RECEIVED ADDITIONAL TRAINING

**Reporting Requirements:**

FCP  
Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported: Telephone

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN27592	07/29/1994		NB	EVENT NOTIFICATION
[REDACTED]	- Unmarked Legacy Reference			
MR2940069	08/01/1994		NB	MORNING REPORT
[REDACTED]	- Unmarked Legacy Reference			
9408090001	08/30/1994		NB	NRC LETTER
[REDACTED]	- Unmarked Legacy Reference			
9409070054	09/26/1994		NB	NRC LETTER
[REDACTED]	- Unmarked Legacy Reference			
9409070063	09/26/1994		NB	INSPECTION REPORT
[REDACTED]	- Unmarked Legacy Reference			
9411010205	12/16/1994		NB	NRC LETTER
[REDACTED]	- Unmarked Legacy Reference			
9411010212	12/16/1994		NB	ENFORCEMENT ACTION
[REDACTED]	- Unmarked Legacy Reference			
9411040085	12/16/1994		NB	NOTIFICATION OF SIGNIFICANT ENFORCEMENT ACTION
[REDACTED]	- Unmarked Legacy Reference			
9411210014	12/16/1994		NB	NRC LETTER
[REDACTED]	- Unmarked Legacy Reference			
9503010060	03/16/1995		NB	NRC LETTER
[REDACTED]	- Unmarked Legacy Reference			
9503010063	03/16/1995		NB	ENFORCEMENT ACTION
[REDACTED]	- Unmarked Legacy Reference			
9503030253	03/16/1995		NB	NOTIFICATION OF SIGNIFICANT ENFORCEMENT ACTION
[REDACTED]	- Unmarked Legacy Reference			

Item Number: FC941682

Last Updated: 10/27/1997

**Narrative:**

A break occurred in a pvc recirculation line for one of the four aqueous waste (raffinate) column system in Uranium recovery. Some of the spill ran under a door to an asphalt area and into a storm drain line. Estimates were that 50 gallons total were spilled and that up to 5 gallons ran into the drain. The drain line discharges into a drainage ditch outside of the protected area, but within the Licensee's property. No offsite release, personnel contamination or injury occurred. Preliminary evaluation of the spill identified the failure occurred in the recirculation pipe wall where it was threaded to make a connection to a valve. Update: The NRC conducted an inspection and no violations or deviations were identified regarding this incident.

Event Date: 07/26/1994

Discovery Date: 07/26/1994

Report Date: 07/27/1994

**Licensee/Reporting Party Information:**

Agreement State Regulated:	NO	Reciprocity:	NONE
License Number:	SNM-0042	Name:	BABCOCK & WILCOX CO.
NRC Docket Number:	07000027	City:	LYNCHBURG
NRC Program Code:	21210	State:	VA
Responsible NRC Region:	2	Zip Code:	24505-0785

**Site of Event:**

Site Name	LYNCHBURG	State:	VA
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**Additional Involved Party:**

License Number:	NA	Name:	NA
		City:	NA
		State:	NA
		Zip Code:	NA

**Other Information:**

NRC Reportable Event:	Y	Abnormal Occurrence:	N
Agreement State Reportable Event:	N	Investigation:	Y
Atomic Energy Act Material:	Y	Record Complete:	
Consultant Hired:	N	Event Closed:	

**Event Cause:**

EQP - EQUIPMENT  
Cause: DEFECTIVE OR FAILED PART

FCP - FUEL CYCLE PROBLEMS  
Cause: DEFECTIVE OR FAILED PART

RLM - RADIOACTIVE MATERIAL REL.  
Cause: DEFECTIVE OR FAILED PART

**Corrective Actions Information:**

Action Number:	Corrective Action:
EQP	
1	NOT REPORTED
FCP	
1	NOT REPORTED
RLM	
1	NOT REPORTED

**Release of Material or Contamination Information:**

Type or Release or Contamination:	Activity:	Radionuclide:	Effect of Release or Contamination:
SURFACE	Ci GBq NR NR	U-AQ	

**Source of Radiation:**

EQP

<b>Source Number:</b>	1	<b>Radionuclide or Voltage (kVp/MeV):</b>	U-OTH
Source/Material:	FUEL FABRICATION MATERIAL	Activity:	NR Ci NR GBq
Device Name:	URANIUM WASH PROCESS	Problem with Source:	
Manufacturer:	NR		
Model Number:	NR		
Serial Number:	NR		

FCP



**Source Number: 1**

Source/Material: FUEL FABRICATION MATERIAL Radionuclide or Voltage (kVp/MeV): U-OTH  
 Device Name: URANIUM WASH PROCESS Activity: NR Ci NR GBq  
 Manufacturer: NR  
 Model Number: NR  
 Serial Number: NR

RLM

**Source Number: 1**

Source/Material: FUEL FABRICATION MATERIAL Radionuclide or Voltage (kVp/MeV): U-OTH  
 Device Name: URANIUM WASH PROCESS Activity: NR Ci NR GBq  
 Manufacturer: NR  
 Model Number: NR  
 Serial Number: NR

**Device/Associated Equipment:**

RLM

**Device Number: 1**

Device Name: URANIUM WASH PROCESS Model Number: NA  
 Manufacturer: NA Serial Number: NA

**Reporting Requirements:**

EQP

Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.  
 Mode Reported: Written

FCP

Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.  
 Mode Reported: Written

RLM

Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.  
 Mode Reported: Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
MR2940067	07/29/1994		NB	MORNING REPORT
	- Unmarked Legacy Reference			
9409070054	09/26/1994		NB	NRC LETTER
	- Unmarked Legacy Reference			
9409070063	09/26/1994		NB	INSPECTION REPORT
	- Unmarked Legacy Reference			



Item Number: FC941686

Last Updated: 07/18/1994

**Narrative:**

AFTER RECEIPT OF ALL DATA FOR WASTE TREATMENT THE U-235 DYNAMIC INVENTORY INDICATED -377.87 GRAMS FOR THE INVENTORY PERIOD 11/14/92 THROUGH 07/17/93. THIS INDICATES THAT MORE MATERIAL WAS REMOVED FROM THE SYSTEM THAN ENTERED IT. IT BRINGS INTO QUESTION THE ACCURACY OF THOSE MEASURING SYSTEMS WHICH PRODUCE DATA USED TO ASSURE NUCLEAR CRITICALITY SAFETY. A COMPLETE CLEAN OUT OF THE SYSTEM VESSELS IN JULY, 1993 ELIMINATED ANY SAFETY CONCERNS FOR MATERIAL IN WASTE TREATMENT AT THAT TIME.

Event Date: 07/17/1993

Discovery Date: 07/17/1993

Report Date: 10/05/1993

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BABCOCK & WILCOX CO.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name LYNCHBURG State: VA

**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation:
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: OTHER

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 NOT REPORTED

**Source of Radiation:**

FCP

Source Number: 1

Source/Material: UNSEALED SOURCE OTHER	Radionuclide or Voltage (kVp/MeV): U-235
Device Name: NA	Activity: NR Ci NR GBq
Manufacturer: NA	
Model Number: NA	
Serial Number: NA	

**Reporting Requirements:**

FCP

Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported: Telephone

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN26168	07/18/1994		NB	EVENT NOTIFICATION

[Redacted] - Unmarked Legacy Reference



**Item Number: FC941881**

**Last Updated: 09/29/1994**

**Narrative:**

The audible alarm for the criticality monitoring system was found to be turned off (disabled). This situation was discovered while responding to a security request to investigate an illuminated trouble light. Immediate investigation by safety personnel found that the audible alarm had, most likely, not been reactivated following a drill held at 1600 hours on 09/26/94. No incident occurred during the period when the audible alarm was turned off.

**Event Date:** 09/27/1994

**Discovery Date:** 09/27/1994

**Report Date:** 09/27/1994

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0124	Name: NUCLEAR FUEL SERVICES, INC.
NRC Docket Number: 07000143	City: ERWIN
NRC Program Code: 21210	State: TN      Zip Code: 376509718
Responsible NRC Region: 2	

**Site of Event:**

Site Name      ERWIN      State:      TN

**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA      Zip Code: NA

**Other Information:**

NRC Reportable Event: Y	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: N
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS

Cause: NOT REPORTED

**Corrective Actions Information:**

Action Number: Corrective Action:

FCP

1      NOT REPORTED

**Reporting Requirements:**

FCP

Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.

Mode Reported: Telephone

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN27828	09/29/1994		NB	EVENT NOTIFICATION

 - Unmarked Legacy Reference

**Narrative:**

The Licensee was testing the stack exhaust fan alarm (flow alarm) in the LTC area of the facility, and the evacuation alarm sounded. All personnel at the LTC evacuated. The alarm panel indicated normal conditions for criticality, fire and stack fan flow. At approximately 1315 hours, tests were again being conducted of the stack exhaust fan flow alarm when the evacuation alarm sounded and personnel evacuated again. The alarm panel showed normal conditions. After disabling the alarm horns, electronics personnel performed the fan alarm test again and the alarm sounded indicating there were circuit problems in the panel. During this test, the evacuation alarms sounded in other buildings on the LTC site. All movement of [REDACTED] was suspended in [REDACTED] personnel were posted at the alarm console to monitor and respond to any criticality or fire alarm signal. The Licensee identified the cause as the energizing relays for the two alarms were interacting - when the fan alarm relay activated, it activated the criticality relay. The repairs were completed overnight and all alarms were returned to service on 11/18/94.

Event Date: 11/17/1994

Discovery Date: 11/17/1994

Report Date: 11/18/1994

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0042 Name: BABCOCK & WILCOX CO.  
NRC Docket Number: 07000027 City: LYNCHBURG  
NRC Program Code: 21210 State: VA Zip Code: 24505-0785  
Responsible NRC Region: 2

**Site of Event:**

Site Name LYNCHBURG State: VA

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: N  
Atomic Energy Act Material: Y Record Complete:  
Consultant Hired: N Event Closed: Y

**Event Cause:**

EQP - EQUIPMENT  
Cause: DEFECTIVE OR FAILED PART  
FCP - FUEL CYCLE PROBLEMS  
Cause: DEFECTIVE OR FAILED PART

**Corrective Actions Information:**

Action Number: Corrective Action:  
EQP  
1 REPAIRS MADE WITH ENGINEERING CHANGE TO SYSTEM  
FCP  
1 REPAIRS MADE WITH ENGINEERING CHANGE TO SYSTEM

**Device/Associated Equipment:**

EQP  
**Device Number: 1**  
Device Name: PROTECTIVE SYSTEMS Model Number: NR  
Manufacturer: NR Serial Number: NR  
Problem with Equipment:  
**Device Number: 2**  
Device Name: ALARM, OTHER Model Number: NR  
Manufacturer: NR Serial Number: NR  
Problem with Equipment:  
FCP  
**Device Number: 1**  
Device Name: PROTECTIVE SYSTEMS Model Number: NR  
Manufacturer: NR Serial Number: NR



**Device Number:** 2

Device Name: ALARM, OTHER

Manufacturer: NR

Model Number: NR

Serial Number: NR

**Reporting Requirements:**

EQP

Reporting Requirement: 70.50(b)(1) - Unplanned contamination event.

Mode Reported: Telephone

FCP

Reporting Requirement: 70.50(b)(1) - Unplanned contamination event.

Mode Reported:

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
MR2940099	11/22/1994		NB	MORNING REPORT

 - Unmarked Legacy Reference



Item Number: FC950333

Last Updated: 01/12/1996

**Narrative:**

During a routine ventilation duct work clean out in the Uranium Recovery Facility, the Licensee discovered material containing more U-235 than normally found during routine clean out. Based on the location of the material in the duct work, the Licensee concluded that the source was the [REDACTED] and believes that the cause was the clogging of the drain line from the duct used to drain any liquid that carried over into or condensed in the duct work. The Licensee has shutdown the [REDACTED] operations until causes have been determined and adequate corrective actions have been implemented. Preliminary non-destructive assay (NDA) results indicated approximately [REDACTED] U-235 were removed from the ducting. The NRC limit for the duct work is [REDACTED] U-235. The Licensee plans to process the clean out material through the [REDACTED] to accurately determine the amount of U-235. Update: The Licensee forwarded their final investigation report. The Licensee identified the root causes of the event to be an inadequate understanding of the various process parameters leading to accumulation of U-235 in the ventilation duct work and failure to establish controls adequate to mitigate such accumulations. The Licensee re-started the [REDACTED] operations on 04/02/95. The senior resident inspector observed the re-start. The Licensee is proceeding slowly to ensure proper actions.

Event Date: 03/19/1995

Discovery Date: 03/20/1995

Report Date: 03/21/1995

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO  
License Number: SNM-0042  
NRC Docket Number: 07000027  
NRC Program Code: 21210  
Responsible NRC Region: 2  
Reciprocity: NONE  
Name: BABCOCK & WILCOX CO.  
City: LYNCHBURG  
State: VA Zip Code: 24505-0785

**Site of Event:**

Site Name LYNCHBURG State: VA

**Additional Involved Party:**

License Number: NA  
Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: N  
Atomic Energy Act Material: Y Record Complete:  
Consultant Hired: N Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: INADEQUATE TRAINING

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 NOT REPORTED

**Source of Radiation:**

FCP  
Source Number: 1  
Source/Material: FUEL FABRICATION MATERIAL Radionuclide or Voltage (kVp/MeV): U-OXIDE  
Device Name: [REDACTED] Activity: NR Ci NR GBq  
Manufacturer: BABCOCK & WILCOX  
Model Number: NR  
Serial Number: NR

**Device/Associated Equipment:**

FCP  
Device Number: 1  
Device Name: VENTILATION SYSTEM Model Number: NR  
Manufacturer: NR Serial Number: NR



**Device Number: 2**

Device Name: [Redacted]  
Manufacturer: NR

Model Number: NR  
Serial Number: NR

**Device Number: 3**

Device Name: DUCTWORK  
Manufacturer: NR

Model Number: NR  
Serial Number: NR

**Reporting Requirements:**

FCP

Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.

Mode Reported: Telephone

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN28569	03/23/1995		NB	EVENT NOTIFICATION
[Redacted]				- Unmarked Legacy Reference
MR2950033	03/23/1995		NB	MORNING REPORT
[Redacted]				- Unmarked Legacy Reference
9504140082	05/01/1995		NB	LICENSEE REPORT
[Redacted]				- Unmarked Legacy Reference
MR2950039	05/01/1995		NB	MORNING REPORT
[Redacted]				- Unmarked Legacy Reference



Item Number: FC950973

Last Updated: 07/20/1995

**Narrative:**

The Licensee discovered that a change from [REDACTED] was made in the spacing requirements between a [REDACTED] located in the [REDACTED] hood in uranium recovery. The deficiency is that the original review of this change was not documented.

Event Date: 05/11/1995

Discovery Date: 05/11/1995

Report Date: 05/11/1995

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0042 Name: BABCOCK & WILCOX CO.  
NRC Docket Number: 07000027 City: LYNCHBURG  
NRC Program Code: 21210 State: VA Zip Code: 24505-0785  
Responsible NRC Region: 2

**Site of Event:**

Site Name LYNCHBURG State: VA

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: N  
Atomic Energy Act Material: Y Record Complete:  
Consultant Hired: N Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: MANAGEMENT DEFICIENCY

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 NOT REPORTED

**Source of Radiation:**

FCP  
Source Number: 1  
Source/Material: FUEL FABRICATION MATERIAL Radionuclide or Voltage (kVp/MeV): U-OTH  
Device Name: [REDACTED] Activity: NR Ci NR GBq  
Manufacturer: NR  
Model Number: NR  
Serial Number: NR

**Device/Associated Equipment:**

FCP  
Device Number: 1  
Device Name: [REDACTED] Model Number: NR  
Manufacturer: NR Serial Number: NR

**Reporting Requirements:**

FCP  
Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported: Telephone

**References:**

Reference Number: Entry Date: Retraction Date: Coder Initials: Reference Type:  
EN28789 07/20/1995 NB EVENT NOTIFICATION

[REDACTED] - Unmarked Legacy Reference

Item Number: FC950982

Last Updated: 10/11/1995

**Narrative:**

The Licensee reported that they had declared an alert due to an evacuation of plant personnel from the [REDACTED] due to a spill of hazardous material. The contents of a 30 gallon nitric acid storage tank leaked through a cracked valve in the tank discharge line to the [REDACTED] onto the [REDACTED] building floor and out of the building onto a clean, unrestricted, owner controlled area. The acid did not leak into the [REDACTED] and no nuclear criticality safety concerns exist in this event. At 0320, the Licensee terminated the alert after the liquid acid had been removed from the [REDACTED] building floor. A hazard no longer exists to personnel or the plant. There were no personnel injuries during this event.

Event Date: 07/20/1995

Discovery Date: 07/20/1995

Report Date: 07/20/1995

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BABCOCK & WILCOX CO.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name LYNCHBURG	State: VA
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**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: N
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: DEFECTIVE OR FAILED PART

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 NOT REPORTED

**Reporting Requirements:**

FCP  
Reporting Requirement: 70.50(a) - Event that prevents immediate protective actions necessary to avoid exposures to radiation or radioactive materials that could exceed regulatory limits or releases of licensed material that could exceed regulatory limits.  
Mode Reported: Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN29087	07/21/1995		NB	EVENT NOTIFICATION
[REDACTED]				- Unmarked Legacy Reference
PN295044	07/24/1995		NRB	PRELIMINARY NOTIFICATION
[REDACTED]				- Unmarked Legacy Reference

Narrative:

The amount of U-235 stored in a [redacted] a storage [redacted] associated with the scrap material recovery operation at [redacted] Facility in Lynchburg, VA, exceeded the administrative limit of [redacted] as stipulated in NRC Bulletin 91-01. At about 10:00 p.m. on Tuesday, August 29, 1995, an operator discovered a potentially unsafe condition in that a storage unit with a posted limit of [redacted] U-235 had an actual amount of [redacted] of U-235. The operator immediately notified the foreman over the area. Immediate corrective action taken to assure that the unit's mass limit was being met. All storage units and locations in the area have been checked to ensure that there are no other units in violation of their posted limit. A set of conservative physics calculations have been made and Q.A. reviewed. The [redacted] was dry, [redacted]. The calculations demonstrate that if all [redacted] units [redacted], instead of just one, had been overloaded [redacted] of this type of material, The K-eff would still have been less than the License Limit for normal operations, 0.85. The actual existing condition, therefore, did not exceed any [redacted] license limit. A preliminary investigation has been made. It is believed that the unit was in a state of overload for about 8 to 11 hours before being discovered. At this time, there are no explanations of why the [redacted] posted limits were violated. An investigation team is being formed to conduct a detailed review of the incident to determine root cause and recommend corrective actions to prevent recurrence. Given that spacing, reflector, and moderation controls remained intact, it is possible that double contingency was not lost. Calculations are being performed to confirm this. However, they will not be complete within 24 hours of the occurrence; therefore, this report is being submitted. If it can be confirmed that double contingency was not lost, this report will be withdrawn. In the scrap material recovery portion of the facility, a storage [redacted] contains [redacted] storage units. Each location can hold [redacted] bottles of scrap U-235. The administrative limit on U-235 for each storage unit is [redacted]. Each bottle is marked with the amount of U-235 it contains prior to storage by an operator. An operator incorrectly stored five bottles ranging in amounts from 90g of U-235 to 250g of U-235 in a particular storage unit. This exceeded its [redacted] U-235 limit. Subsequently, another operator discovered this condition and immediately re-configured the bottles to reduce the U-235 inventory in the storage unit below the [redacted] limit. An investigation is ongoing to determine the cause of this condition. Update: three more instances of too much material in too small a space were found. (1) Drum Count Area - An accountability cart consisting of several storage units each limited to [redacted] U-235 with no moderation (H/X) restriction or [redacted] U-235 with a H/X of < [redacted] was found with [redacted] unit containing a [redacted] container of [redacted] U-235 of dry UO2 with a H/X of [redacted]. The container was immediately removed to an area that is limited to 3.1kg U-235 and 1,850g of moderator material. (2) Central Vault - A storage unit limited to [redacted] U-235 with no H/X restriction or [redacted] U-235 with H/X of [redacted] was found with [redacted] containers in one unit totaling [redacted] with H/X of [redacted]. One of the containers was immediately moved to another storage area. (3) [redacted] - [redacted] storage units, each limited to [redacted] U-235 with no H/X restriction or [redacted] U-235 with H/X of [redacted] where one was found to contain 474g U-235 with H/X of 138, another contained [redacted] U-235 with H/X of [redacted], and the third contained [redacted] U-235 with H/X of [redacted]. The corrective action consisted of immediately removing the containers from the [redacted] to a storage location that could hold these quantities. Upon discovery of item 2, above, [redacted] Management suspended all transfers to or from mass/moderator limited areas pending completion of inspections of the entire plant. This inspection has been completed with no additional examples of exceeded mass limits being identified. Transfers have been allowed to resume with the implementation of a two-man rule, whereby, one individual will actually make the transfer, and the other will verify the correctness of the transfer. A root cause investigation is in progress to review these events and any prior similar events. One similar event (which was not reportable under 91-01) occurred on August 8, 1995, and is being included in the investigation. The two-man rule will remain in effect until the investigation is complete and appropriate measures taken. The NRC resident inspector will be informed prior to discontinuing the two-man rule.

Event Date: 08/29/1995

Discovery Date: 08/29/1995

Report Date: 09/01/1995

Licensee/Reporting Party Information:

Agreement State Regulated: NO Reciprocity: NONE
License Number: SNM-0042 Name: BABCOCK & WILCOX CO.
NRC Docket Number: 07000027 City: LYNCHBURG
NRC Program Code: 21210 State: VA Zip Code: 24505-0785
Responsible NRC Region: 2

Site of Event:

Site Name LYNCHBURG State: VA

Additional Involved Party:

License Number: NA Name: NA
City: NA
State: NA Zip Code: NA

Other Information:

NRC Reportable Event: Y Abnormal Occurrence: N
Agreement State Reportable Event: N Investigation: N
Atomic Energy Act Material: Y Record Complete:
Consultant Hired: N Event Closed: Y

Event Cause:

FCP - FUEL CYCLE PROBLEMS
Cause: DEFECTIVE OR INADEQUATE PROCEDURE

Corrective Actions Information:

Action Number: Corrective Action:
FCP



**Source of Radiation:**

FCP

**Source Number:** 1

Source/Material:	FUEL FABRICATION MATERIAL	Radionuclide or Voltage (kVp/MeV):	U-235
Device Name:	████████ STORAGE	Activity:	NR Ci NR GBq
Manufacturer:	NR		
Model Number:	NR		
Serial Number:	NR		

**Device/Associated Equipment:**

FCP

**Device Number:** 1

Device Name:	████████ STORAGE	Model Number:	NR
Manufacturer:	NR	Serial Number:	NR

**Reporting Requirements:**

FCP

Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported: Telephone

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN29275	09/07/1995		DRL	EVENT NOTIFICATION
████████	- Unmarked Legacy Reference			
MR2950077	09/12/1995		DRL	MORNING REPORT
████████	- Unmarked Legacy Reference			



Item Number: FC960082

Last Updated: 02/21/1996

**Narrative:**

The Licensee reported that an amount of water leaked into an area containing moderation controlled storage units.

Event Date: 07/19/1995

Discovery Date: 07/19/1995

Report Date: 07/19/1995

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BABCOCK & WILCOX CO.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name LYNCHBURG	State: VA
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**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: N
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: NOT REPORTED

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 NOT REPORTED

**Source of Radiation:**

FCP

<b>Source Number:</b> 1			
Source/Material: UNSEALED SOURCE SNM	Radionuclide or Voltage (kVp/MeV): NR		
Device Name: NA	Activity: NR Ci	NR GBq	
Manufacturer: NR			
Model Number: NR			
Serial Number: NR			

**Reporting Requirements:**

FCP

Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported: Written

**References:**

<b>Reference Number:</b> 9512110313	<b>Entry Date:</b> 02/20/1996	<b>Retraction Date:</b>	<b>Coder Initials:</b> DRL	<b>Reference Type:</b> NRC LETTER
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[Redacted] - Unmarked Legacy Reference

**Narrative:**

While troubleshooting a trouble light on their criticality alarm system, an alarm condition locked in but the alarm did not sound through the plant speakers.

A system trouble light occurred in the criticality alarm panel room. While investigating the trouble light, an electronics technician attempted to reset the trouble light by powering the system down and then back up again. When the system powered up, it locked into an alarm condition but the alarm did not sound through the plant speakers. The technician pulled the fuses on the alarm system to ensure that the alarm to evacuate the plant did not sound. The technician removed a circuit board from the remote station [REDACTED]. When he inserted a replacement circuit board, the alarm reset for approximately one hour and then the system locked back into an alarm condition at approximately 2230 EST. The licensee is troubleshooting the problem. No special nuclear material has been moved since day shift on 03/22/96.

Event Date: 03/22/1996

Discovery Date: 03/22/1996

Report Date: 03/25/1996

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0124	Name: NUCLEAR FUEL SERVICES, INC.
NRC Docket Number: 07000143	City: ERWIN
NRC Program Code: 21210	State: TN Zip Code: 376509718
Responsible NRC Region: 2	

**Site of Event:**

Site Name ERWIN	State: TN
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**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: N
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed:

**Event Cause:**

EQP - EQUIPMENT  
Cause: DEFECTIVE OR FAILED PART

FCP - FUEL CYCLE PROBLEMS  
Cause: DEFECTIVE OR FAILED PART

**Corrective Actions Information:**

Action Number:	Corrective Action:
EQP	
1	REPAIRS MADE WITHOUT ENGINEERING CHANGE TO SYSTEM
FCP	
1	REPAIRS MADE WITHOUT ENGINEERING CHANGE TO SYSTEM

**Device/Associated Equipment:**

EQP

<b>Device Number:</b> 1			
Device Name: ALARM, CRITICALITY	Model Number: NR		
Manufacturer: NR	Serial Number: NR		
	Problem with Equipment:		

FCP

<b>Device Number:</b> 1			
Device Name: ALARM, CRITICALITY	Model Number: NR		
Manufacturer: NR	Serial Number: NR		

**Reporting Requirements:**



EQP

Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.  
Mode Reported: Telephone

FCP

Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.  
Mode Reported: Telephone

**References:**

<b>Reference Number:</b>	<b>Entry Date:</b>	<b>Retraction Date:</b>	<b>Coder Initials:</b>	<b>Reference Type:</b>
EN30165	03/28/1996		DRL	EVENT NOTIFICATION

 - Unmarked Legacy Reference



**Narrative:**

The licensee reported the declaration of a site area emergency due to a fire exceeding 15 minutes, a breach of containment, and the potential for a radioactive release at 1226. The fire was detected in the [redacted] room. It spread to the duct work on the roof and breached the duct work. At the time of this notification, the fire was under control, and it was extinguished by 1255 (during this notification). The incinerator was burning radioactive material at the time so the potential existed for a radiological release. The licensee determined that there was a maximum of [redacted] of high enriched uranium available for release and is currently performing evaluations to determine a more accurate quantity. (It was later determined that there was approximately [redacted] enriched uranium available for possible release.) At the time of this notification, the wind was blowing out of the south (away from the local population center) at a speed of three to five miles per hour. Offsite evacuation was not recommended. The local fire department and local law enforcement representative responded to the site to assist onsite emergency response personnel. The fire in the [redacted] building was detected at 1158. The licensee declared the site area emergency at 1226, and the fire was extinguished at approximately 1230. The fire damage to the roof ventilation duct work was in an area approximately 40 feet long. The licensee notified the State of Tennessee, and the State's independent air sampling system was activated at approximately 1340. The state also dispatched four representatives to perform release assessments. The NRC dispatched a regional manager, two regional radiation specialists, and a headquarters project manager to the site. The NRC also entered the monitoring phase of normal operations at 1345. The licensee has estimated that the worst case potential release could have been up to 200 grams of uranium-235, and the licensee's analytical calculations show that there could be up to a 3 millirem exposure at a distance of 1 mile down wind. The licensee has locked down its facility and has performed nasal swipes for the responders to the fire. The results are currently pending. The licensee downgraded its emergency classification to unusual event at 1450 because the fire was extinguished and under control and because the situation does not appear to be as severe. The licensee downgraded its emergency classification to unusual event at 1450. The licensee also notified FEMA, ANI, and the State of Tennessee of this change in classification. The NRC operations center notified the R2DO (Uryc), NMSS EO (Cool), FEMA (Earl), DOE (Moore and Schmit), EPA (Checkan), HHS (Raab), USDA (Cooper), and ARAC. The NRC terminated the monitoring phase of normal operations at 1700 on April 2, 1996. A Regional Manager, two Regional Radiation Specialist, and a Headquarters Project Manager are currently onsite; and they expect to be joined by a fire protection specialist from headquarters later today. The team was also given an augmented inspection team charter today. In addition, the NRC issued a Confirmatory Action Letter this afternoon to require the Licensee to maintain the system down until the licensee finishes its investigation and meets with the NRC to discuss the results and corrective actions. The NRC plans to hold a press conference when the Augmented Inspection Team has completed its investigation. There has been media interest in this event. The cause of the fire is still under investigation. apparently, the licensee had just shut the incineration system down when the fire was identified. The fire damaged approximately 150 feet of the ventilation ducting on the roof, and the damage appeared to be mostly down stream of a blower system that is on the roof with the portion closest to the fan having the most damage. There did not appear to be any damage to the portion of the system that goes from the incinerator through a scrubber which is located inside the building, out a ventilation duct, up through the roof, and over to the blower. The latest measurements indicate that the amount of material involved was approximately 8 grams in the ventilation system and approximately 45 grams in the actual burn. The results from air samples taken during and shortly after the event and surveys for contamination onsite indicated nothing unusual, and there did not appear to be any spread of contamination from the ducting system. In addition, the results of the nasal smears, urine samples, and lung counts on the fire response personnel thus far have been negative. The direct radiation surveys on the individuals who fought the fire also showed no contamination of the individuals. The licensee currently plans to continue performing lung counts until everyone that was involved is counted. The Tennessee Radiological Health Department representative performed surveys and took samples of soil and vegetation down wind of the fire. The licensee split samples with the state so that both can run samples for comparison. The licensee has also taken samples of soil and vegetation in the areas where samples are normally taken to see if there is any indication of impact in those areas. In addition, the licensee's environmental manager has put together an augmented sampling plan which will be taking additional soil and vegetation samples and will perhaps perform some surveys in down stream locations.

**Event Date:** 04/02/1996

**Discovery Date:** 04/02/1996

**Report Date:** 04/02/1996

**Licensee/Reporting Party Information:**

Agreement State Regulated:	NO	Reciprocity:	NONE
License Number:	SNM-0124	Name:	NUCLEAR FUEL SERVICES, INC.
NRC Docket Number:	07000143	City:	ERWIN
NRC Program Code:	21210	State:	TN      Zip Code: 376509718
Responsible NRC Region:	2		

**Site of Event:**

Site Name	ERWIN	State:	TN
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**Additional Involved Party:**

License Number:	NA	Name:	NA
		City:	NA
		State:	NA      Zip Code: NA

**Other Information:**

NRC Reportable Event:	Y	Abnormal Occurrence:	N
Agreement State Reportable Event:	N	Investigation:	Y
Atomic Energy Act Material:	Y	Record Complete:	
Consultant Hired:	N	Event Closed:	

**Event Cause:**

EQP - EQUIPMENT

Cause: OTHER

FCP - FUEL CYCLE PROBLEMS

Cause: OTHER

RLM - RADIOACTIVE MATERIAL REL.

Cause: OTHER

**Corrective Actions Information:**

Action Number: Corrective Action:

EQP

1 NOT REPORTED

FCP

1 NOT REPORTED

RLM

1 NOT REPORTED

**Release of Material or Contamination Information:**

Type or Release or Contamination:	Activity: Ci GBq	Radionuclide:	Effect of Release or Contamination:
SURFACE	NR NR	U-235	

**Source of Radiation:**

EQP

**Source Number: 1**

Source/Material: FUEL FABRICATION MATERIAL Radionuclide or Voltage (kVp/MeV): U-235  
 Device Name: INCINERATOR Activity: U-235 Ci GBq  
 Manufacturer: NR Problem with Source:  
 Model Number: NR  
 Serial Number: NR

FCP

**Source Number: 1**

Source/Material: FUEL FABRICATION MATERIAL Radionuclide or Voltage (kVp/MeV): U-235  
 Device Name: INCINERATOR Activity: U-235 Ci GBq  
 Manufacturer: NR  
 Model Number: NR  
 Serial Number: NR

RLM

**Source Number: 1**

Source/Material: FUEL FABRICATION MATERIAL Radionuclide or Voltage (kVp/MeV): U-235  
 Device Name: INCINERATOR Activity: U-235 Ci GBq  
 Manufacturer: NR  
 Model Number: NR  
 Serial Number: NR

**Device/Associated Equipment:**

EQP

**Device Number: 1**

Device Name: INCINERATOR Model Number: NR  
 Manufacturer: NR Serial Number: NR  
 Problem with Equipment:

**Device Number: 2**

Device Name: DUCTWORK Model Number: NR  
 Manufacturer: NR Serial Number: NR  
 Problem with Equipment:

FCP

**Device Number: 1**

Device Name: INCINERATOR Model Number: NR  
 Manufacturer: NR Serial Number: NR



**Device Number: 2**

Device Name: DUCTWORK  
Manufacturer: NR

Model Number: NR  
Serial Number: NR

RLM

**Device Number: 1**

Device Name: INCINERATOR  
Manufacturer: NR

Model Number: NR  
Serial Number: NR

**Device Number: 2**

Device Name: DUCTWORK  
Manufacturer: NR

Model Number: NR  
Serial Number: NR

**Reporting Requirements:**

EQP

Reporting Requirement: 70.50(a) - Event that prevents immediate protective actions necessary to avoid exposures to radiation or radioactive materials that could exceed regulatory limits or releases of licensed material that could exceed regulatory limits.

Mode Reported: Telephone

FCP

Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.

Mode Reported: Telephone

RLM

Reporting Requirement: 70.50(b)(4) - Unplanned fire or explosion damaging any licensed material or any device, container, or equipment containing licensed material.

Mode Reported: Telephone

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
9604030120	04/09/1996		DRL	PRELIMINARY NOTIFICATION
				- Unmarked Legacy Reference
9604030124	04/09/1996		DRL	PRELIMINARY NOTIFICATION
				- Unmarked Legacy Reference
EN30220	04/09/1996		DRL	EVENT NOTIFICATION
				- Unmarked Legacy Reference
PN296024A	04/09/1996		DRL	PRELIMINARY NOTIFICATION
				- Unmarked Legacy Reference
PN296024B	04/09/1996		DRL	PRELIMINARY NOTIFICATION
				- Unmarked Legacy Reference
9605280066	10/03/1996		DCH	INSPECTION REPORT
				- Unmarked Legacy Reference
PN296026	10/03/1996		DCH	PRELIMINARY NOTIFICATION
				- Unmarked Legacy Reference
9606070178	03/14/1997		DCH	LICENSEE REPORT
				- Unmarked Legacy Reference
TN96020	03/14/1997		DCH	AGREEMENT STATE LETTER
				- Unmarked Legacy Reference
9712040076	03/11/1998		DCH	LICENSEE REPORT
				- Unmarked Legacy Reference
PN296024	03/11/1998		DRL	PRELIMINARY NOTIFICATION
				- Unmarked Legacy Reference



**Narrative:**

A fuel cycle licensee reported an equipment problem involving their criticality alarm system. The licensee reported that a lightning strike at their facility caused a momentary power spike that activated the criticality alarm howlers. The howler system was reset soon after being activated. Two criticality detectors that could not be reset were immediately repaired and back in service within three hours. When the alarms sounded, the workers at the facility were evacuated to the cafeteria facility which had been surveyed and determined to be radiologically clean.

Event Date: 06/19/1996

Discovery Date: 06/19/1996

Report Date: 06/19/1996

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BABCOCK & WILCOX CO.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name LYNCHBURG	State: VA
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**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: N
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed: Y

**Event Cause:**

EQP - EQUIPMENT  
Cause: WEATHER OR AMBIENT CONDITION  
FCP - FUEL CYCLE PROBLEMS  
Cause: WEATHER OR AMBIENT CONDITION

**Corrective Actions Information:**

Action Number: Corrective Action:  
EQP  
1 REPAIRS MADE WITH ENGINEERING CHANGE TO SYSTEM  
FCP  
1 REPAIRS MADE WITH ENGINEERING CHANGE TO SYSTEM

**Device/Associated Equipment:**

EQP  
**Device Number: 1**  
Device Name: ALARM, CRITICALITY Model Number: NR  
Manufacturer: NR Serial Number: NR  
Problem with Equipment:

FCP  
**Device Number: 1**  
Device Name: ALARM, CRITICALITY Model Number: NR  
Manufacturer: NR Serial Number: NR

**Reporting Requirements:**

EQP  
Reporting Requirement: 70.50(a) - Event that prevents immediate protective actions necessary to avoid exposures to radiation or radioactive materials that could exceed regulatory limits or releases of licensed material that could exceed regulatory limits.  
Mode Reported: Telephone



FCP

Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported: Telephone

**References:**

<b>Reference Number:</b>	<b>Entry Date:</b>	<b>Retraction Date:</b>	<b>Coder Initials:</b>	<b>Reference Type:</b>
MR2960057	07/12/1996		DRL	MORNING REPORT

 - Unmarked Legacy Reference



Item Number: FC960306

Last Updated: 07/16/1996

**Narrative:**

A fuel cycle facility licensee was cited for leaving fuel unattended in an area not approved for storage of fuel. An NRC inspector observed an unattended one [redacted] container with [redacted] of U-235 on a [redacted] outside a [redacted]. Two employees had transported the container to the [redacted] for storage but had difficulties opening the door. The employees placed the container on top of the [redacted] outside the [redacted] and left the area for 45 minutes until [redacted] could be opened. The storage of the fuel on the storage cabinet violated a Criticality Safety Procedure. Corrective actions included the proper completion of the storage of the fuel, removing the cabinet from the area near the [redacted], documenting the event, disciplinary action, and briefing other personnel on the event.

Event Date: 03/14/1996

Discovery Date: 03/14/1996

Report Date: 03/14/1996

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0042 Name: BABCOCK & WILCOX CO.  
NRC Docket Number: 07000027 City: LYNCHBURG  
NRC Program Code: 21210 State: VA Zip Code: 24505-0785  
Responsible NRC Region: 2

**Site of Event:**

Site Name LYNCHBURG State: VA

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: N  
Atomic Energy Act Material: Y Record Complete:  
Consultant Hired: N Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: FAILURE TO FOLLOW PROCEDURE OR WRONG PROCEDURE USED

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 ENGINEERING CHANGE TO SYSTEM  
2 PERSONNEL REPRIMANDED  
3 PERSONNEL RECEIVED ADDITIONAL TRAINING

**Source of Radiation:**

FCP  
Source Number: 1  
Source/Material: UNSEALED SOURCE SNM Radionuclide or Voltage (kVp/MeV): U-235  
Device Name: CONTAINER, OTHER Activity: NR Ci NR GBq  
Manufacturer: BABCOCK & WILCOX  
Model Number: NR  
Serial Number: NR

**Device/Associated Equipment:**

FCP  
Device Number: 1  
Device Name: CONTAINER, OTHER Model Number: NR  
Manufacturer: NR Serial Number: NR

**Reporting Requirements:**

FCP  
Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported: Written

**References:**

<b>Reference Number:</b>	<b>Entry Date:</b>	<b>Retraction Date:</b>	<b>Coder Initials:</b>	<b>Reference Type:</b>
9605100125	07/16/1996		DRL	NRC LETTER
[REDACTED]	- Unmarked Legacy Reference			
9605100130	07/16/1996		DRL	NOTICE OF VIOLATION
[REDACTED]	- Unmarked Legacy Reference			



Item Number: FC960307

Last Updated: 07/16/1996

**Narrative:**

A fuel cycle facility licensee reported that process monitoring alarm indicating a material balance discrepancy. The alarm indicated that the amount of uranium removed was less than the amount of uranium added. To account for the material, the licensee reviewed and verified accounting records and remeasured materials, including inprocess holdup. The licensee determined that the discrepancy resulted from measurement system inaccuracies. The uranium recovery process was shut down by the licensee pending resolution of the discrepancy.

Event Date: 04/29/1996

Discovery Date: 04/29/1996

Report Date: 04/30/1996

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BABCOCK & WILCOX CO.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name LYNCHBURG State: VA

**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: U	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: N
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed:

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: DESIGN, MANUFACTURING, OR INSTALLATION ERROR  
LAS - LOST/ABANDONED/STOLEN  
Cause: DESIGN, MANUFACTURING, OR INSTALLATION ERROR

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 NOT REPORTED  
LAS  
1 NOT REPORTED

**Source of Radiation:**

FCP

<b>Source Number:</b> 1		
Source/Material: FUEL FABRICATION MATERIAL	Radionuclide or Voltage (kVp/MeV): U-235	
Device Name: NA	Activity: NR Ci	NR GBq
Manufacturer: BABCOCK & WILCOX		
Model Number: NR		
Serial Number: NR		

LAS

<b>Source Number:</b> 1		
Source/Material: FUEL FABRICATION MATERIAL	Radionuclide or Voltage (kVp/MeV): U-235	
Device Name: NA	Activity: NR Ci	NR GBq
Manufacturer: BABCOCK & WILCOX		
Model Number: NR		
Serial Number: NR		

**Keywords:**

LAS  
MATERIAL LOST AND NOT FOUND



**References:**

<b>Reference Number:</b>	<b>Entry Date:</b>	<b>Retraction Date:</b>	<b>Coder Initials:</b>	<b>Reference Type:</b>
MR2960039	07/16/1996		DRL	MORNING REPORT

 - Unmarked Legacy Reference



**Narrative:**

The licensee reported the failure of their criticality/fire alarm system. A Radiation Technician Supervisor noted that a trouble light was illuminated at the remote panel. A second remote panel with the same indicating system also had a trouble light illuminated. An Electronic Technician found that the problem had initially developed when the alarm system central control unit could not communicate with either the input detector modules or with the output alarm modules. The licensee believes that the system is currently operational. The licensee believes that a thunderstorm and the lightning associated with it may have contributed to the alarm system problem.

Event Date: 08/07/1996

Discovery Date: 08/07/1996

Report Date: 08/08/1996

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0124	Name: NUCLEAR FUEL SERVICES, INC.
NRC Docket Number: 07000143	City: ERWIN
NRC Program Code: 21210	State: TN      Zip Code: 376509718
Responsible NRC Region: 2	

**Site of Event:**

Site Name      ERWIN      State:      TN

**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA      Zip Code: NA

**Other Information:**

NRC Reportable Event: Y	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: Y
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed: Y

**Event Cause:**

EQP - EQUIPMENT  
Cause: WEATHER OR AMBIENT CONDITION

FCP - FUEL CYCLE PROBLEMS  
Cause: WEATHER OR AMBIENT CONDITION

**Corrective Actions Information:**

Action Number:	Corrective Action:
EQP	
1	NOT REPORTED
FCP	
1	NOT REPORTED

**Device/Associated Equipment:**

EQP

<b>Device Number: 1</b>	
Device Name: ALARM, CRITICALITY	Model Number: NR
Manufacturer: NR	Serial Number: NR
	Problem with Equipment:

FCP

<b>Device Number: 1</b>	
Device Name: ALARM, CRITICALITY	Model Number: NR
Manufacturer: NR	Serial Number: NR

**Reporting Requirements:**

EQP

Reporting Requirement: 70.50(a) - Event that prevents immediate protective actions necessary to avoid exposures to radiation or radioactive materials that could exceed regulatory limits or releases of licensed material that could exceed regulatory limits.

Mode Reported: Telephone



FCP

Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported: Telephone

**References:**

<b>Reference Number:</b>	<b>Entry Date:</b>	<b>Retraction Date:</b>	<b>Coder Initials:</b>	<b>Reference Type:</b>
MR2960065	09/04/1996		DCH	MORNING REPORT
	- Unmarked Legacy Reference			
9608280017	10/28/1996		DCH	CONFIRMATORY ACTION LETTER
	- Unmarked Legacy Reference			
9609130178	10/30/1996		DCH	LICENSEE REPORT
	- Unmarked Legacy Reference			
9610220099	12/12/1996		DCH	INSPECTION REPORT
	- Unmarked Legacy Reference			
EN30852	01/02/1997		DCH	EVENT NOTIFICATION
	- Unmarked Legacy Reference			



Item Number: FC960494

Last Updated: 11/19/1998

**Narrative:**

The licensee reported the occurrence of a self-extinguishing fire during scrap dissolution. A small self-extinguishing fire was observed by an operator [REDACTED] in Uranium Recovery. The fire occurred during the dissolution of scrap [REDACTED] oxide material. The material was being added to [REDACTED] that contained water and trace amounts of acids (nitric and hydrofluoric) used in the dissolution process. The flame appeared over a 10 second period and subsided. The operator observed that the flame never exceeded about four inches in height and self extinguished. Gas evolution continued and tapered off after about 45 minutes. No damage to equipment or product occurred, and there were no radiological consequences.

Event Date: 08/25/1996

Discovery Date: 08/25/1996

Report Date: 08/30/1996

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0042 Name: BABCOCK & WILCOX CO.  
NRC Docket Number: 07000027 City: LYNCHBURG  
NRC Program Code: 21210 State: VA Zip Code: 24505-0785  
Responsible NRC Region: 2

**Site of Event:**

Site Name LYNCHBURG State: VA

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: N  
Atomic Energy Act Material: Y Record Complete:  
Consultant Hired: N Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: OTHER

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 NOT REPORTED

**Source of Radiation:**

FCP  
**Source Number: 1**  
Source/Material: UNSEALED SOURCE OTHER Radionuclide or Voltage (kVp/MeV): U-DEP  
Device Name: [REDACTED] Activity: NR Ci NR GBq  
Manufacturer: NR  
Model Number: NA  
Serial Number: NA

**Device/Associated Equipment:**

FCP  
**Device Number: 1**  
Device Name: [REDACTED] Model Number: NR  
Manufacturer: NR Serial Number: NR  
**Device Number: 2**  
Device Name: [REDACTED] Model Number: NR  
Manufacturer: NR Serial Number: NR

**Reporting Requirements:**



FCP

Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported: Telephone

**References:**

<b>Reference Number:</b>	<b>Entry Date:</b>	<b>Retraction Date:</b>	<b>Coder Initials:</b>	<b>Reference Type:</b>
MR2960073	09/04/1996		DCH	MORNING REPORT

 - Unmarked Legacy Reference



Item Number: FC960579

Last Updated: 11/02/1998

**Narrative:**

The licensee reported a fire within their facility. A vacuum cleaner used for cleaning up metal shavings caught fire. The vacuum cleaner was located in an area where components are machined. The fire was quickly extinguished by workers in the immediate area with a class D dry chemical powder. One worker was slightly injured with first-degree burns to the face. No equipment damage, other than the vacuum cleaner, occurred. No licensed material was involved in the fire.

Event Date: 09/19/1996

Discovery Date: 09/19/1996

Report Date: 09/24/1996

**Licensee/Reporting Party Information:**

Agreement State Regulated:	NO	Reciprocity:	NONE
License Number:	SNM-0042	Name:	BABCOCK & WILCOX CO.
NRC Docket Number:	07000027	City:	LYNCHBURG
NRC Program Code:	21210	State:	VA Zip Code: 24505-0785
Responsible NRC Region:	2		

**Site of Event:**

Site Name	LYNCHBURG	State:	VA
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**Additional Involved Party:**

License Number:	NA	Name:	NA
		City:	NA
		State:	NA Zip Code: NA

**Other Information:**

NRC Reportable Event:	Y	Abnormal Occurrence:	N
Agreement State Reportable Event:	N	Investigation:	N
Atomic Energy Act Material:	Y	Record Complete:	
Consultant Hired:	N	Event Closed:	Y

**Event Cause:**

EQP - EQUIPMENT

Cause: DEFECTIVE OR FAILED PART

FCP - FUEL CYCLE PROBLEMS

Cause: DEFECTIVE OR FAILED PART

**Corrective Actions Information:**

Action Number:	Corrective Action:
EQP	
1	NOT REPORTED
FCP	
1	NOT REPORTED

**Source of Radiation:**

EQP

<b>Source Number:</b>	1		
Source/Material:	FUEL FABRICATION MATERIAL	Radionuclide or Voltage (kVp/MeV):	U-OXIDE
Device Name:	VACUUM CLEANER	Activity:	NR Ci NR GBq
Manufacturer:	NA	Problem with Source:	
Model Number:	NA		
Serial Number:	NA		

FCP

<b>Source Number:</b>	1		
Source/Material:	FUEL FABRICATION MATERIAL	Radionuclide or Voltage (kVp/MeV):	U-OXIDE
Device Name:	VACUUM CLEANER	Activity:	NR Ci NR GBq
Manufacturer:	NA		
Model Number:	NA		
Serial Number:	NA		

**Device/Associated Equipment:**

EQP



**Device Number: 1**

Device Name: VACUUM CLEANER  
Manufacturer: NR

Model Number: NA  
Serial Number: NA  
Problem with Equipment:

FCP

**Device Number: 1**

Device Name: VACUUM CLEANER  
Manufacturer: NR

Model Number: NA  
Serial Number: NA

**Reporting Requirements:**

EQP

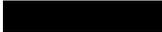
Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.  
Mode Reported: Written

FCP

Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported: Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
MR2960087	09/27/1996		DCH	MORNING REPORT

 - Unmarked Legacy Reference



Item Number: FC960582

Last Updated: 11/02/1998

**Narrative:**

The licensee reported a fire in their ventilation system. A fire occurred in an area where [redacted] components were being machined. The fire occurred in a local ventilation system in the same immediate area as a fire that occurred on 09/19/96. This local ventilation system was used to remove vapors and [redacted] fines generated during machining operations. This local ventilation system was not connected to any other plant HVAC systems. No damage occurred to the [redacted] component that was being machined at the time of the fire. There was no release of licensed material to the environment as a result of the fire.

Event Date: 09/24/1996

Discovery Date: 09/24/1996

Report Date: 09/25/1996

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BABCOCK & WILCOX CO.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name LYNCHBURG State: VA

**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: Y
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: OTHER

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 NOT REPORTED

**Source of Radiation:**

FCP

Source Number: 1

Source/Material: FUEL FABRICATION MATERIAL	Radionuclide or Voltage (kVp/MeV): SNM
Device Name: VENTILATION SYSTEM	Activity: NR Ci NR GBq
Manufacturer: NR	
Model Number: NA	
Serial Number: NA	

**Device/Associated Equipment:**

FCP

Device Number: 1

Device Name: VENTILATION SYSTEM	Model Number: NR
Manufacturer: NR	Serial Number: NR

**Reporting Requirements:**

FCP

Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported: Written

**References:**

Reference Number: Entry Date: Retraction Date: Coder Initials: Reference Type:

MR2960088

09/27/1996

[REDACTED]

DCH

MORNING REPORT

[REDACTED] - Unmarked Legacy Reference

9612230405

05/14/1997

DCH

INSPECTION REPORT

[REDACTED] - Unmarked Legacy Reference

[REDACTED]

Item Number: FC960623

Last Updated: 11/16/1998

**Narrative:**

The licensee reported a solution spill of approximately 80 liters of four percent enriched uranyl nitrate. The spill occurred in the [redacted] Area from [redacted] downblending equipment. None of the workers in the area were contaminated as a result of the spill. The concentration of the solution was [redacted] of uranium per liter of solution. The spill occurred when a sampling connection broke off as plastic tubing was being attached to the end of the sampling tap. The spilled solution was contained in a [redacted] favorable geometry slab area under the equipment until the solution was returned [redacted]. Clean up was completed with residual contamination levels of less than 500 dpm/100 square centimeters.

Event Date: 10/15/1996

Discovery Date: 10/15/1996

Report Date: 10/15/1996

**Licensee/Reporting Party Information:**

Agreement State Regulated:	NO	Reciprocity:	NONE
License Number:	SNM-0042	Name:	BABCOCK & WILCOX CO.
NRC Docket Number:	07000027	City:	LYNCHBURG
NRC Program Code:	21210	State:	VA
Responsible NRC Region:	2	Zip Code:	24505-0785

**Site of Event:**

Site Name	LYNCHBURG	State:	VA
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**Additional Involved Party:**

License Number:	NA	Name:	NA
		City:	NA
		State:	NA
		Zip Code:	NA

**Other Information:**

NRC Reportable Event:	Y	Abnormal Occurrence:	N
Agreement State Reportable Event:	N	Investigation:	N
Atomic Energy Act Material:	Y	Record Complete:	
Consultant Hired:	N	Event Closed:	Y

**Event Cause:**

EQP - EQUIPMENT  
Cause: DEFECTIVE OR FAILED PART

FCP - FUEL CYCLE PROBLEMS  
Cause: DEFECTIVE OR FAILED PART

**Corrective Actions Information:**

Action Number:	Corrective Action:
EQP	
1	NOT REPORTED
FCP	
1	NOT REPORTED

**Source of Radiation:**

EQP

<b>Source Number:</b>	1		
Source/Material:	FUEL FABRICATION MATERIAL	Radionuclide or Voltage (kVp/MeV):	U-LE
Device Name:	LINE, SAMPLING	Activity:	NR Ci NR GBq
Manufacturer:	NA	Problem with Source:	
Model Number:	NA		
Serial Number:	NA		

FCP

<b>Source Number:</b>	1		
Source/Material:	FUEL FABRICATION MATERIAL	Radionuclide or Voltage (kVp/MeV):	U-LE
Device Name:	LINE, SAMPLING	Activity:	NR Ci NR GBq
Manufacturer:	NA		
Model Number:	NA		
Serial Number:	NA		

**Device/Associated Equipment:**

EQP



**Device Number: 1**

Device Name: LINE, SAMPLING  
Manufacturer: NA

Model Number: NA  
Serial Number: NA  
Problem with Equipment:

FCP

**Device Number: 1**

Device Name: LINE, SAMPLING  
Manufacturer: NA

Model Number: NA  
Serial Number: NA

**Reporting Requirements:**

EQP

Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.  
Mode Reported: Telephone

FCP

Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported: Telephone

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
MR2960095	10/17/1996		DCH	MORNING REPORT

 - Unmarked Legacy Reference



Item Number: FC960673

Last Updated: 11/17/1998

**Narrative:**

The licensee reported that a spill of about 40 liters of waste solution, [REDACTED] occurred in the [REDACTED] Facility. The solution contained approximately 0.02 grams per liter U-235 and was being transferred from the Recovery Facility to a Waste Treatment Facility. The spill occurred when PVC piping separated at a glued connection. No personnel contaminations occurred and no solution was released to the environment. The solution was recovered and decontamination activities are in progress.

Event Date: 10/30/1996

Discovery Date: 10/30/1996

Report Date: 10/30/1996

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BABCOCK & WILCOX CO.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name LYNCHBURG State: VA

**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: N
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed: Y

**Event Cause:**

EQP - EQUIPMENT  
Cause: DEFECTIVE OR FAILED PART

FCP - FUEL CYCLE PROBLEMS  
Cause: DEFECTIVE OR FAILED PART

RLM - RADIOACTIVE MATERIAL REL.  
Cause: DEFECTIVE OR FAILED PART

**Corrective Actions Information:**

Action Number:	Corrective Action:
EQP	
1	NOT REPORTED
FCP	
1	NOT REPORTED
RLM	
1	NOT REPORTED

**Release of Material or Contamination Information:**

Type or Release or Contamination:	Activity:	Radionuclide:	Effect of Release or Contamination:
SURFACE	Ci GBq NR NR	U-235	

**Source of Radiation:**

EQP

Source Number: 1	
Source/Material: UNSEALED SOURCE SNM	Radionuclide or Voltage (kVp/MeV): U-235
Device Name: PIPE, OTHER	Activity: NR Ci NR GBq
Manufacturer: NR	Problem with Source:
Model Number: NR	
Serial Number: NR	

FCP



**Source Number: 1**

Source/Material:	UNSEALED SOURCE SNM	Radionuclide or Voltage (kVp/MeV):	U-235
Device Name:	PIPE, OTHER	Activity:	NR Ci NR GBq
Manufacturer:	NR		
Model Number:	NR		
Serial Number:	NR		

RLM

**Source Number: 1**

Source/Material:	UNSEALED SOURCE SNM	Radionuclide or Voltage (kVp/MeV):	U-235
Device Name:	PIPE, OTHER	Activity:	NR Ci NR GBq
Manufacturer:	NR		
Model Number:	NR		
Serial Number:	NR		

**Device/Associated Equipment:**

EQP

**Device Number: 1**

Device Name:	PIPE, OTHER	Model Number:	NA
Manufacturer:	NA	Serial Number:	NA
		Problem with Equipment:	

FCP

**Device Number: 1**

Device Name:	PIPE, OTHER	Model Number:	NA
Manufacturer:	NA	Serial Number:	NA

RLM

**Device Number: 1**

Device Name:	PIPE, OTHER	Model Number:	NA
Manufacturer:	NA	Serial Number:	NA

**Reporting Requirements:**

EQP

Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.  
 Mode Reported: Telephone

FCP

Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
 Mode Reported: Telephone

RLM

Reporting Requirement: 70.50(b)(1) - Unplanned contamination event.  
 Mode Reported: Telephone

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
MR2960106	12/05/1996		DCH	MORNING REPORT

- Unmarked Legacy Reference



Item Number: FC960796

Last Updated: 12/04/1996

**Narrative:**

During an NRC inspection it was noted that simulated [redacted] components were not readily distinguishable from [redacted]. The [redacted] components were not properly marked as "dummies," and were stored in an area with no criticality safety postings.

Event Date: 05/24/1996

Discovery Date: 05/24/1996

Report Date: 05/24/1996

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BABCOCK & WILCOX CO.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name LYNCHBURG	State: VA
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**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: N	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: N
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: INATTENTION TO DETAIL

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 NOT REPORTED

**Device/Associated Equipment:**

FCP

<b>Device Number: 1</b>			
Device Name: FUEL ASSEMBLY	Model Number: NR		
Manufacturer: NR	Serial Number: NR		

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
9608090127	12/04/1996		DCH	NOTICE OF VIOLATION
[redacted]				- Unmarked Legacy Reference
9608230024	12/04/1996		DCH	LICENSEE REPORT
[redacted]				- Unmarked Legacy Reference

Item Number: FC960838

Last Updated: 01/07/1997

**Narrative:**

The licensee reported that a nuclear criticality safety mass limit in the [REDACTED] had been violated. The licensee discovered two [REDACTED] bottles in a unit in the [REDACTED] with a combined mass of enriched U-235 exceeding the allowed mass. Corrective actions were taken. The [REDACTED] consists of [REDACTED]. The remaining [REDACTED] units were within allowed limits. Criticality margins were not threatened.

Event Date: 12/19/1996

Discovery Date: 12/19/1996

Report Date: 12/19/1996

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0042 Name: BABCOCK & WILCOX CO.  
NRC Docket Number: 07000027 City: LYNCHBURG  
NRC Program Code: 21210 State: VA Zip Code: 24505-0785  
Responsible NRC Region: 2

**Site of Event:**

Site Name LYNCHBURG State: VA

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: N  
Atomic Energy Act Material: Y Record Complete:  
Consultant Hired: N Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: NOT REPORTED

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 NOT REPORTED

**Source of Radiation:**

FCP

Source Number: 1

Source/Material: FUEL FABRICATION MATERIAL Radionuclide or Voltage (kVp/MeV): U-235  
Device Name: CONTAINER, BOTTLE Activity: NR Ci NR GBq  
Manufacturer: NR  
Model Number: NR  
Serial Number: NR

**Device/Associated Equipment:**

FCP

Device Number: 1

Device Name: CONTAINER, BOTTLE Model Number: NA  
Manufacturer: NA Serial Number: NA

**Reporting Requirements:**

FCP

Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported: Telephone

**References:**

Reference Number: Entry Date: Retraction Date: Coder Initials: Reference Type:  
EN31483 01/07/1997 DCH EVENT NOTIFICATION

[REDACTED] - Unmarked Legacy Reference

MR2960124

01/07/1997

[REDACTED]

DCH

MORNING REPORT

[REDACTED]

- Unmarked Legacy Reference

[REDACTED]

Item Number: FC970194

Last Updated: 07/02/1997

**Narrative:**

The licensee reported a spill of approximately 100 liters of uranyl nitrate. All but 1-2 liters of the material containing 1% enriched uranium was contained in a catch tray. Based upon a release of nitrous oxide into the building, all affected rooms were evacuated. There was no release to the environment outside the facility and no personnel injuries.

Event Date: 03/04/1997

Discovery Date: 03/04/1997

Report Date: 03/04/1997

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BABCOCK & WILCOX CO.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name LYNCHBURG	State: VA
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**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: U	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: N
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS

Cause: NOT REPORTED

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 NOT REPORTED

**Source of Radiation:**

FCP

<b>Source Number:</b> 1			
Source/Material: UNSEALED SOURCE SNM	Radionuclide or Voltage (kVp/MeV): SNM		
Device Name: NA	Activity: NR Ci		NR GBq
Manufacturer: NA			
Model Number: NR			
Serial Number: NR			

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN31883	03/14/1997		DCH	EVENT NOTIFICATION
[REDACTED]				- Unmarked Legacy Reference
MR2970013	03/14/1997		DCH	MORNING REPORT
[REDACTED]				- Unmarked Legacy Reference
MR2970014	03/14/1997		DCH	MORNING REPORT
[REDACTED]				- Unmarked Legacy Reference
PN297012	03/14/1997		DCH	PRELIMINARY NOTIFICATION
[REDACTED]				- Unmarked Legacy Reference
9705050228	07/02/1997		DCH	PRELIMINARY NOTIFICATION
[REDACTED]				- Unmarked Legacy Reference

Item Number: FC970615

Last Updated: 07/14/1997

**Narrative:**

During an NRC inspection it was noted that the licensee had two [redacted] bottles containing a total [redacted] of U-235 placed in a [redacted] which violated the posted mass limit and type of authorized container.

Event Date: 11/21/1996

Discovery Date: 12/08/1996

Report Date: 12/08/1996

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BABCOCK & WILCOX CO.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name LYNCHBURG State: VA

**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: N
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: NOT REPORTED

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 NOT REPORTED

**Source of Radiation:**

FCP

<b>Source Number:</b> 1			
Source/Material: FUEL FABRICATION MATERIAL	Radionuclide or Voltage (kVp/MeV): U-235		
Device Name: NA	Activity: NR Ci	NR	GBq
Manufacturer: NR			
Model Number: NR			
Serial Number: NR			

**Reporting Requirements:**

FCP  
Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported: Written

**References:**

<b>Reference Number:</b> 9702250001	<b>Entry Date:</b> 06/26/1997	<b>Retraction Date:</b>	<b>Coder Initials:</b> DCH	<b>Reference Type:</b> NOTICE OF VIOLATION
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[redacted] - Unmarked Legacy Reference

Item Number: FC970719

Last Updated: 11/10/1997

**Narrative:**

The licensee reported receiving an exclusive use radioactive materials shipment from Niagara Mohawk's Nine Mile Point Unit 1 Station that exceeded the radiation level limits. Receipt surveys showed 12 mSv/hour (1200 mrem/hour) at the surface of the package and 30 uSv/hour (3 mrem/hour) in the sleeper portion of the truck cab. The package was 35 gallon shielded drum that contained boat samples from the core shroud. The package was unloaded, secured, labeled, and posted. The licensee notified the shipper, the carrier and NRC. The shipper plans to dispatch a representative to perform confirmatory surveys and to observe the opening of the package.

Event Date: 07/25/1997

Discovery Date: 07/25/1997

Report Date: 07/25/1997

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BABCOCK & WILCOX CO.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name LYNCHBURG	State: VA
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**Additional Involved Party:**

License Number: NR	Name: NIAGARA MOHAWK'S NINE MILE
	City: NR
	State: NR Zip Code: NR

**Other Information:**

NRC Reportable Event: Y	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: N
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed:

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: NOT REPORTED

TRS - TRANSPORTATION  
Cause: NOT REPORTED

**Corrective Actions Information:**

Action Number:	Corrective Action:
FCP	
1	NOT REPORTED
TRS	
1	NOT REPORTED

**Source of Radiation:**

FCP

<b>Source Number:</b> 1			
Source/Material:	UNSEALED SOURCE OTHER	Radionuclide or Voltage (kVp/MeV):	NR
Device Name:	CONTAINER, DRUM	Activity:	NR Ci NR GBq
Manufacturer:	NR		
Model Number:	NR		
Serial Number:	NR		

TRS

<b>Source Number:</b> 1			
Source/Material:	UNSEALED SOURCE OTHER	Radionuclide or Voltage (kVp/MeV):	NR
Device Name:	CONTAINER, DRUM	Activity:	NR Ci NR GBq
Manufacturer:	NR		
Model Number:	NR		
Serial Number:	NR		

**Device/Associated Equipment:**

FCP



**Device Number: 1**

Device Name: CONTAINER, DRUM  
Manufacturer: NR

Model Number: NA  
Serial Number: NA

TRS

**Device Number: 1**

Device Name: CONTAINER, DRUM  
Manufacturer: NR

Model Number: NA  
Serial Number: NA

**Reporting Requirements:**

FCP

Reporting Requirement: 20.1906(d)(2) - Transported package exceeds external radiation limits.  
Mode Reported:

TRS

Reporting Requirement: 20.1906(d)(2) - Transported package exceeds external radiation limits.  
Mode Reported: Telephone

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
PN297041	07/28/1997		DCH	PRELIMINARY NOTIFICATION
				- Unmarked Legacy Reference
9707280280	11/10/1997		DCH	PRELIMINARY NOTIFICATION
				- Unmarked Legacy Reference



Item Number: FC970729

Last Updated: 10/27/1997

**Narrative:**

The licensee reported the loss of nuclear criticality safety mass and moderation control barriers. discovered a transport cart in the Uranium Recovery Area of the with storage units in violation of the nuclear criticality safety postings on the cart. The posting limits each storage unit to a maximum of of U-235 with greater than . One storage unit had a mass of of U-235, the second unit had a mass of , and the third unit had a mass of . All three of these units had a documented H/X ratio of greater than . Plant Operations personnel isolated the transport cart, removed the from the cart, transferred material into other containers each with less than of U-235, and placed the on other carts to reestablish the nuclear criticality safety barriers to bring the situation into compliance without modifying any controls.

Event Date: 07/28/1997

Discovery Date: 07/28/1997

Report Date: 07/28/1997

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0042 Name: BABCOCK & WILCOX CO.  
NRC Docket Number: 07000027 City: LYNCHBURG  
NRC Program Code: 21210 State: VA Zip Code: 24505-0785  
Responsible NRC Region: 2

**Site of Event:**

Site Name LYNCHBURG State: VA

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: N  
Atomic Energy Act Material: Y Record Complete:  
Consultant Hired: N Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS

Cause: FAILURE TO FOLLOW PROCEDURE OR WRONG PROCEDURE USED

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 NOT REPORTED

**Source of Radiation:**

FCP

Source Number: 1  
Source/Material: FUEL FABRICATION MATERIAL Radionuclide or Voltage (kVp/MeV): U-OXIDE  
Device Name: CONTAINER, STORAGE Activity: NR Ci NR GBq  
Manufacturer: NR  
Model Number: NA  
Serial Number: NA

**Device/Associated Equipment:**

FCP

Device Number: 1  
Device Name: CONTAINER, STORAGE Model Number: NA  
Manufacturer: NR Serial Number: NA

**Reporting Requirements:**

FCP

Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported: Telephone

**References:**

Reference Number: Entry Date: Retraction Date: Coder Initials: Reference Type:

[REDACTED]

EN32690	07/29/1997	DCH	EVENT NOTIFICATION
[REDACTED]	- Unmarked Legacy Reference		
MR2970058	07/30/1997	DCH	MORNING REPORT
[REDACTED]	- Unmarked Legacy Reference		

[REDACTED]

Item Number: FC980288

Last Updated: 06/10/1998

**Narrative:**

The licensee reported that plant personnel discovered that portions of the diked area around two waste water storage tanks in [REDACTED] was between [REDACTED] deep. This condition exceeds the Criticality Control Parameter (geometry) of [REDACTED] maximum dike depth and a level floor within the diked area specified in Plant Criticality Safety Analysis #54T-97-014. Plant personnel plan to fill in the portions of the dike that are greater than [REDACTED] and then resurface the dike area.

Event Date: 02/25/1998

Discovery Date: 02/25/1998

Report Date: 02/26/1998

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0124	Name: NUCLEAR FUEL SERVICES, INC.
NRC Docket Number: 07000143	City: ERWIN
NRC Program Code: 21210	State: TN      Zip Code: 376509718
Responsible NRC Region: 2	

**Site of Event:**

Site Name      ERWIN      State:      TN

**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA      Zip Code: NA

**Other Information:**

NRC Reportable Event:	Y	Abnormal Occurrence:	N
Agreement State Reportable Event:	N	Investigation:	N
Atomic Energy Act Material:	Y	Record Complete:	
Consultant Hired:	N	Event Closed:	Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS

Cause:      DESIGN, MANUFACTURING, OR INSTALLATION ERROR

**Corrective Actions Information:**

Action Number:      Corrective Action:

FCP

1      REPAIRS MADE WITHOUT ENGINEERING CHANGE TO SYSTEM

**Reporting Requirements:**

FCP

Reporting Requirement:      NRCB 91-01 - Loss of criticality safety controls.

Mode Reported:      Telephone

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
9804230270	05/21/1998		DCH	LICENSEE REPORT
[REDACTED]				- Unmarked Legacy Reference
EN33797	05/21/1998		DCH	EVENT NOTIFICATION
[REDACTED]				- Unmarked Legacy Reference

Item Number: FC980598

Last Updated: 06/10/1998

**Narrative:**

The licensee reported that during several brief periods from 1000 until 2000 on 5/14/98, the lid of a liquid waste tank was left unsecured while unattended. Due to a misinterpretation of the term "immediate tank area," two operators left the lid to the waste discharge unsecured while they used a nearby telephone to verify information prior to discharging waste. The tank contained less than [redacted] of uranium, enriched to 33% by weight U-235, in the chemical form of dilute uranyl nitrate solution. The licensee has reinstructed operators to lock the tank lids at all times when they are not present in the tank area.

Event Date: 05/19/1998

Discovery Date: 05/19/1998

Report Date: 05/19/1998

**Licensee/Reporting Party Information:**

Agreement State Regulated:	NO	Reciprocity:	NONE
License Number:	SNM-0124	Name:	NUCLEAR FUEL SERVICES, INC.
NRC Docket Number:	07000143	City:	ERWIN
NRC Program Code:	21210	State:	TN      Zip Code: 376509718
Responsible NRC Region:	2		

**Site of Event:**

Site Name	ERWIN	State:	TN
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**Additional Involved Party:**

License Number:	NA	Name:	NA
		City:	NA
		State:	NA      Zip Code: NA

**Other Information:**

NRC Reportable Event:	Y	Abnormal Occurrence:	N
Agreement State Reportable Event:	N	Investigation:	N
Atomic Energy Act Material:	Y	Record Complete:	
Consultant Hired:	N	Event Closed:	Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: INADEQUATE TRAINING

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1      NOT REPORTED

**Reporting Requirements:**

FCP  
Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported: Telephone

**References:**

<b>Reference Number:</b>	<b>Entry Date:</b>	<b>Retraction Date:</b>	<b>Coder Initials:</b>	<b>Reference Type:</b>
EN34261	05/20/1998		DCH	EVENT NOTIFICATION

[redacted] - Unmarked Legacy Reference

Item Number: FC980741

Last Updated: 07/02/1998

**Narrative:**

The licensee reported that during the course of upgrading the Nuclear Criticality Safety Analysis for the [REDACTED] Nitrous Oxide (NOx) Scrubber, it was discovered that the allowable concentration limit [REDACTED] U-235/liter) was acceptable for the scrubber tank, but unacceptable for the larger [REDACTED] downstream blowdown tank. This tank could have allowed an accumulation of greater than [REDACTED] of U-235 into the blowdown tank. The licensee changed the concentration limit from [REDACTED]. The NOx scrubber has operated throughout 1998 with measured U-235 concentration limits ranging between [REDACTED] U-235/liter.

Event Date: 06/29/1998

Discovery Date: 06/29/1998

Report Date: 07/01/1998

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0124	Name: NUCLEAR FUEL SERVICES, INC.
NRC Docket Number: 07000143	City: ERWIN
NRC Program Code: 21210	State: TN      Zip Code: 376509718
Responsible NRC Region: 2	

**Site of Event:**

Site Name      ERWIN      State:      TN

**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA      Zip Code: NA

**Other Information:**

NRC Reportable Event: Y	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: N
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: NOT REPORTED

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1      PROCEDURE MODIFIED

**Reporting Requirements:**

FCP  
Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported: Telephone

**References:**

<b>Reference Number:</b>	<b>Entry Date:</b>	<b>Retraction Date:</b>	<b>Coder Initials:</b>	<b>Reference Type:</b>
EN34464	07/02/1998		DCH	EVENT NOTIFICATION

[REDACTED] - Unmarked Legacy Reference

Item Number: FC980827

Last Updated: 07/24/1998

**Narrative:**

The licensee reported that a contaminated injured man was transported offsite for medical treatment. A contract employee sustained fractures to an arm and leg when he was injured while repairing a forklift. The individual's pants and boots had up to 1,200 dpm/100 cm2 alpha contamination, but the individual had no detectable contamination on his body. The individual was transported to the Johnson City Medical Center for treatment.

Event Date: 07/22/1998

Discovery Date: 07/22/1998

Report Date: 07/23/1998

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0124	Name: NUCLEAR FUEL SERVICES, INC.
NRC Docket Number: 07000143	City: ERWIN
NRC Program Code: 21210	State: TN      Zip Code: 376509718
Responsible NRC Region: 2	

**Site of Event:**

Site Name ERWIN      State: TN

**Additional Involved Party:**

License Number: NR	Name: JOHNSON CITY MEDICAL CENTER
	City: NR
	State: TN      Zip Code: NR

**Other Information:**

NRC Reportable Event: Y	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: N
Atomic Energy Act Material: Y	Record Complete:
Consultant Hired: N	Event Closed:

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS

Cause: CONTAMINATED OR POTENTIALLY CONTAMINATED WORKER TRANSPORTED TO AN OFFSITE MEDICAL FACILITY

RLM - RADIOACTIVE MATERIAL REL.

Cause: CONTAMINATED OR POTENTIALLY CONTAMINATED WORKER TRANSPORTED TO AN OFFSITE MEDICAL FACILITY

**Corrective Actions Information:**

Action Number:	Corrective Action:
FCP	
1	NOT REPORTED
RLM	
1	NOT REPORTED

**Release of Material or Contamination Information:**

Type or Release or Contamination:	Activity:	Radionuclide:	Effect of Release or Contamination:
	Ci      GBq		
PERSON	NR      NR	NR	

**Source of Radiation:**

FCP

<b>Source Number:</b> 1		
Source/Material: UNSEALED SOURCE OTHER	Radionuclide or Voltage (kVp/MeV): NR	
Device Name: NA	Activity: NR Ci	NR GBq
Manufacturer: NR		
Model Number: NA		
Serial Number: NA		

RLM



**Source Number:** 1

Source/Material:	UNSEALED SOURCE OTHER	Radionuclide or Voltage (kVp/MeV):	NR
Device Name:	NA	Activity:	NR Ci      NR GBq
Manufacturer:	NR		
Model Number:	NA		
Serial Number:	NA		

**Reporting Requirements:**

FCP

Reporting Requirement: 70.50(b)(3) - Event that requires unplanned medical treatment at a medical facility of an individual with spreadable radioactive contamination on the individual's clothing or body.

Mode Reported:

RLM

Reporting Requirement: 70.50(b)(3) - Event that requires unplanned medical treatment at a medical facility of an individual with spreadable radioactive contamination on the individual's clothing or body.

Mode Reported: Telephone

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN34568	07/24/1998		DCH	EVENT NOTIFICATION

 - Unmarked Legacy Reference



Item Number: FC981021

Last Updated: 11/24/1998

**Narrative:**

The licensee reported that the inverter component of the [REDACTED] had failed during a test causing [REDACTED] [REDACTED] criticality monitoring system failures. Immediate compensatory measures were taken upon discovery. The criticality monitoring instruments became inoperable for approximately four minutes during the event. Due to [REDACTED] concerns, no additional details are provided. Procedure error was viewed as the primary cause of this event as the Plant Superintendent did not issue or authorize a work request for repair of the [REDACTED] System. The inverter was repaired and the [REDACTED] system made operational on 9/29/98. The Security Director issued a re-instruction notice to the Plant Superintendent that it is their responsibility to initiate an route work requests for repairs to all systems affecting plant [REDACTED]

Event Date: 09/29/1998

Discovery Date: 09/29/1998

Report Date: 09/29/1998

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0124 Name: NUCLEAR FUEL SERVICES, INC.  
NRC Docket Number: 07000143 City: ERWIN  
NRC Program Code: 21210 State: TN Zip Code: 376509718  
Responsible NRC Region: 2

**Site of Event:**

Site Name ERWIN State: TN

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: Y  
Atomic Energy Act Material: Y Record Complete:  
Consultant Hired: N Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: FAILURE TO FOLLOW PROCEDURE OR WRONG PROCEDURE USED

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 PERSONNEL RECEIVED ADDITIONAL TRAINING

**Device/Associated Equipment:**

FCP  
Device Number: 1  
Device Name: DETECTOR, CRITICALITY Model Number: NR  
Manufacturer: NR Serial Number: NR

**Reporting Requirements:**

FCP  
Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.  
Mode Reported: Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN34848	09/30/1998		DCH	EVENT NOTIFICATION
[REDACTED]				- Unmarked Legacy Reference
9811030076	11/24/1998		DCH	LICENSEE REPORT
[REDACTED]				- Unmarked Legacy Reference

**Narrative:**

The licensee reported that a plastic bag containing uranyl nitrate contaminated items (i.e. plastic gloves, shoe covers, and cheese cloth) was found to be smoldering in the [REDACTED]. The bag contained greater than [REDACTED] of highly enriched uranium in solid form. The building shift supervisor extinguished the bag with approximately one-cup of water. A pre-cut hole was present in the plastic bag to prevent the accumulation of liquids. There were no apparent degraded criticality controls and no readily identifiable precursors to this event. The results from a high volume air sample collected in the vicinity of the smoldering bag indicated an airborne concentration of 17.4 nBq/ml (4.7E-13 uCi/ml), well below the applicable derived air concentration limit of 11.1 uBq/ml (3.0E-10 uCi/ml). The licensee noted significant charring of the bag contents. The investigation committee concluded that an exothermic chemical reaction occurred between an oxidizing material and an organic material contained in the plastic bag. There were no personnel contamination or injuries. Corrective actions include employee re-instruction regarding waste disposal and revision of applicable procedures. Toolbox training sessions were held with building personnel to review the event, with emphasis placed on chemical incompatibility and proper segregation and disposal of waste materials.

Event Date: 12/03/1998

Discovery Date: 12/03/1998

Report Date: 12/03/1998

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0124 Name: NUCLEAR FUEL SERVICES, INC.  
NRC Docket Number: 07000143 City: ERWIN  
NRC Program Code: 21210 State: TN Zip Code: 376509718  
Responsible NRC Region: 2

**Site of Event:**

Site Name ERWIN State: TN

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: Y  
Atomic Energy Act Material: Y Record Complete:  
Consultant Hired: N Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: OTHER

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 PERSONNEL RECEIVED ADDITIONAL TRAINING  
2 PROCEDURE MODIFIED

**Reporting Requirements:**

FCP  
Reporting Requirement: 70.50(b)(4) - Unplanned fire or explosion damaging any licensed material or any device, container, or equipment containing licensed material.  
Mode Reported: Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN35113	12/07/1998		DCH	EVENT NOTIFICATION
[REDACTED]				- Unmarked Legacy Reference
9901060301	02/23/1999		DCH	LICENSEE REPORT
[REDACTED]				- Unmarked Legacy Reference
IR990122	05/16/2001		RLS	INSPECTION REPORT
[REDACTED]				- Unmarked Legacy Reference

		[REDACTED]	
IR990401	05/16/2001	RLS	INSPECTION REPORT
[REDACTED]	- Unmarked Legacy Reference		
IR990610	05/16/2001	RLS	INSPECTION REPORT
[REDACTED]	- Unmarked Legacy Reference		
LTR990122	05/16/2001	RLS	NRC LETTER
[REDACTED]	- Unmarked Legacy Reference		
LTR990401	05/16/2001	RLS	NRC LETTER
[REDACTED]	- Unmarked Legacy Reference		
LTR990610	05/16/2001	RLS	NRC LETTER
[REDACTED]	- Unmarked Legacy Reference		

**Narrative:**

The licensee reported that one of the DuKane Corporation amplifiers (model [REDACTED]) powering the annunciation system for the criticality and fire alarms failed as the result of a failed capacitor. The nonfunctional amplifier was removed from service, and the affected circuit was temporarily rerouted to one of the functional amplifiers. The licensee determined that the temporary modification was unacceptable, and the licensee suspended operations involving [REDACTED] that require criticality alarm system coverage. At 1830 EST the amplifier and faulty circuit board were replaced with a substitute and the system was restored to its normal operating condition. After testing and verification of the system operability, [REDACTED] operations were resumed. On 2/28/99, the substitute amplifier was removed and replaced with a permanent system amplifier. At this time the faulty circuit board was also replaced. The system was tested and confirmed to be operational. Licensee corrective actions included the writing of two memorandums providing directions for preapproval of modifications to the criticality and fire alarm system. The directions in these two memorandums were incorporated in the appropriate procedures. Also, a spare amplifier was ordered to reduce down time of the system should one of the system amplifiers fail in the future.

Event Date: 02/26/1999

Discovery Date: 02/26/1999

Report Date: 02/26/1999

**Licensee/Reporting Party Information:**

Agreement State Regulated:	NO	Reciprocity:	NONE
License Number:	SNM-0124	Name:	NUCLEAR FUEL SERVICES, INC.
NRC Docket Number:	07000143	City:	ERWIN
NRC Program Code:	21210	State:	TN      Zip Code: 376509718
Responsible NRC Region:	2		

**Site of Event:**

Site Name	ERWIN	State:	TN
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**Additional Involved Party:**

License Number:	NA	Name:	NA
		City:	NA
		State:	NA      Zip Code: NA

**Other Information:**

NRC Reportable Event:	Y	Abnormal Occurrence:	N
Agreement State Reportable Event:	N	Investigation:	N
Atomic Energy Act Material:	Y	Record Complete:	Y
Consultant Hired:	N	Event Closed:	Y

**Event Cause:**

EQP - EQUIPMENT  
Cause: DEFECTIVE OR FAILED PART

FCP - FUEL CYCLE PROBLEMS  
Cause: DEFECTIVE OR FAILED PART

**Corrective Actions Information:**

Action Number: Corrective Action:

EQP

1	NEW EQUIPMENT OBTAINED
2	PROCEDURE MODIFIED

FCP

1	NEW EQUIPMENT OBTAINED
2	PROCEDURE MODIFIED

**Device/Associated Equipment:**

EQP

<b>Device Number:</b>	1		
Device Name:	ALARM, CRITICALITY	Model Number:	NR
Manufacturer:	NR	Serial Number:	NR
		Problem with Equipment:	

FCP

<b>Device Number:</b>	1		
Device Name:	ALARM, CRITICALITY	Model Number:	NR
Manufacturer:	NR	Serial Number:	NR

**Reporting Requirements:**



EQP

Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.  
Mode Reported: Telephone

FCP

Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.  
Mode Reported:

**References:**

<b>Reference Number:</b>	<b>Entry Date:</b>	<b>Retraction Date:</b>	<b>Coder Initials:</b>	<b>Reference Type:</b>
EN35414	03/01/1999		DCH	EVENT NOTIFICATION
	- Unmarked Legacy Reference			
EN35425	03/02/1999		DCH	EVENT NOTIFICATION
	- Unmarked Legacy Reference			
9904070225	07/09/1999		DCH	LICENSEE REPORT
	- Unmarked Legacy Reference			



**Narrative:**

The licensee reported a failed criticality alarm detector. The licensee uses Victoreen system components (model [redacted] for the [redacted] criticality monitors. The criticality alarm panel in [redacted] registered an alarm for detector [redacted] located in [redacted], and it could not be immediately reset from the panel. At approximately 1930 EDT, a Health Physicist entered the criticality alarm panel room in [redacted] and noted that the monitor for detector [redacted] was in failure mode and displayed error code E0007. According to the system user's manual, this error message indicates a "loop time out," where the ratemeter was unable to establish communication with the detector preamplifier within the prescribed time (10 seconds). Possible causes for this condition are: 1) bad seating of the serial communications board in the ratemeter, 2) bad connections in the preamplifier or ratemeter, 3) a bad rate mismatch between the serial board setting and the preamplifier, 4) an invalid address setting on the serial board, or 5) blown loop fuses. Because most of the listed probable causes would have been identified at initial system start-up, the ratemeter was visually checked for loose connections by an Electronics Technician. No loose connections were observed, and the rate meter was turned off and back on. This action allowed the meter to reset and, after allowing adequate time for the system to run through its self diagnostics, no error message was displayed. The instrument was source checked and determined to be operating effectively at approximately 2015 EDT. Since the detector failed in the alarm mode and coverage is provided by two detectors, the event had no effect on the criticality monitoring system's ability to detect a criticality or sound the evacuation alarm. Also, during this time period, there were no operations involving [redacted], which requires criticality detector coverage. No corrective actions were needed for this event.

Event Date: 05/06/1999

Discovery Date: 05/06/1999

Report Date: 05/07/1999

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO  
License Number: SNM-0124  
NRC Docket Number: 07000143  
NRC Program Code: 21210  
Responsible NRC Region: 2  
Reciprocity: NONE  
Name: NUCLEAR FUEL SERVICES, INC.  
City: ERWIN  
State: TN Zip Code: 376509718

**Site of Event:**

Site Name ERWIN State: TN

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: N  
Atomic Energy Act Material: Y Record Complete: Y  
Consultant Hired: N Event Closed: Y

**Event Cause:**

EQP - EQUIPMENT  
Cause: DEFECTIVE OR FAILED PART  
FCP - FUEL CYCLE PROBLEMS  
Cause: DEFECTIVE OR FAILED PART

**Corrective Actions Information:**

Action Number: Corrective Action:  
EQP  
1 NO CORRECTIVE ACTION TAKEN  
FCP  
1 NO CORRECTIVE ACTION TAKEN

**Device/Associated Equipment:**

EQP  
**Device Number: 1**  
Device Name: ALARM, CRITICALITY Model Number: NR  
Manufacturer: NR Serial Number: NR  
Problem with Equipment:  
**Device Number: 2**  
Device Name: DETECTOR, CRITICALITY Model Number: NR  
Manufacturer: VICTOREEN Serial Number: NR  
Problem with Equipment:



FCP

**Device Number: 1**

Device Name:	ALARM, CRITICALITY	Model Number:	NR
Manufacturer:	NR	Serial Number:	NR

**Device Number: 2**

Device Name:	DETECTOR, CRITICALITY	Model Number:	NR
Manufacturer:	VICTOREEN	Serial Number:	NR

**Reporting Requirements:**

EQP

Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.  
 Mode Reported: Written

FCP

Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.  
 Mode Reported: Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN35691	05/10/1999		DCH	EVENT NOTIFICATION
	- Unmarked Legacy Reference			
9906080234	08/19/1999		DCH	LICENSEE REPORT
	- Unmarked Legacy Reference			



**Narrative:**

The licensee reported that pieces of equipment containing SNM material were not stored in a configuration evaluated for Nuclear Criticality Safety (NCS). The [redacted] furnace in the [redacted] uses [redacted] for processing U3O8. Material is placed in [redacted] and loaded into the furnace for processing. The [redacted] taken out of service have historically been placed into plastic bags after removing any visible SNM per procedure and stored in the area as [redacted] (no NCS controls) for future use. Sixteen different [redacted] that had been used for contracts had been placed in individual plastic bags and stored in the [redacted] [redacted] were stacked in a two high single row. If a [redacted] U-235 [redacted] average is applied (based on previous preliminary Non-destructive Analysis for other [redacted] to the storage of the [redacted], a total SNM content of approximately [redacted] U-235 in dry U3O8 results. The storage of such a quantity of SNM in a close packed array [redacted] has not explicitly been evaluated for appropriate criticality safety controls consistent with the double contingency principle. The licensee's preliminary review indicates that over the past year of use, the porous nature of the [redacted] material absorbed SNM over time and many batches. This SNM accumulation would not have caused a problem in the furnace glove boxes. However, when the [redacted] were removed from the glove box for storage, the procedural check to assure of no visible accumulations [redacted] was not adequate to determine if SNM had been absorbed [redacted]. Consequently, [redacted] were not stored in a configuration evaluated for NCS. Under NCS guidance, [redacted] were placed in a safe and evaluated condition. Currently, there are no [redacted] being stored without appropriate NCS controls. Processing of additional [redacted] was suspended until an investigation and corrective action could be completed. The facts that [redacted] material would allow significant accumulation was not anticipated during the design, selection, and evaluation of the equipment. Also, the standard practice used for determining or establishing the level of contamination on equipment or materials that would allow for storage without NCS controls was inadequate to cover all situations. Corrective actions taken include development of specific guidance to ensure consideration is given to properties of process material and equipment for its ability to collect uranium. Also, the development of a generic guidance statement to be included in operating procedures to clarify the requirements for storage of contaminated equipment and revising plant wide and area specific waste handling procedures to include specific requirements to identify highly contaminated process equipment as recoverable scrap when it cannot be determined to be waste.

Event Date: 05/18/1999

Discovery Date: 05/18/1999

Report Date: 05/18/1999

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0042 Name: BWX TECHNOLOGIES, INC.  
NRC Docket Number: 07000027 City: LYNCHBURG  
NRC Program Code: 21210 State: VA Zip Code: 24505-0785  
Responsible NRC Region: 2

**Site of Event:**

Site Name LYNCHBURG State: VA

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: Y  
Atomic Energy Act Material: Y Record Complete: Y  
Consultant Hired: N Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: DEFECTIVE OR INADEQUATE PROCEDURE

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 PROCEDURE MODIFIED

**Reporting Requirements:**

FCP  
Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported: Telephone

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN35733	05/19/1999		DCH	EVENT NOTIFICATION

Official Use Only - Unmarked Legacy Reference

PN299019	05/24/1999	[REDACTED]	DCH	PRELIMINARY NOTIFICATION
[REDACTED]	- Unmarked Legacy Reference			
9906030222	11/19/1999		RLS	PRELIMINARY NOTIFICATION
[REDACTED]	- Unmarked Legacy Reference			
IR70-27/99-03	08/22/2001		DCH	INSPECTION REPORT
[REDACTED]	- Unmarked Legacy Reference			

Item Number: FC990383

Last Updated: 11/19/1999

**Narrative:**

The licensee reported an industrial accident that occurred at the [REDACTED] near [REDACTED] Virginia, resulting in the death of an electronics technician. The accident occurred after maintenance was performed near an operating hydraulic system. The technician was apparently trapped under the equipment and pinned between a hydraulic cylinder and the floor. The technician was not contaminated with radioactive material and was transported to a local hospital and pronounced dead shortly thereafter. There were no nuclear materials involved and no other employees were injured. Investigations into the cause of the accident are being conducted by facility management and government agencies.

Event Date: 06/15/1999

Discovery Date: 06/15/1999

Report Date: 06/16/1999

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BWX TECHNOLOGIES, INC.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name LYNCHBURG	State: VA
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**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: N	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: N
Atomic Energy Act Material: N	Record Complete: Y
Consultant Hired: N	Event Closed:

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: NOT REPORTED

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 NOT REPORTED

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
PN299024	06/28/1999		DCH	PRELIMINARY NOTIFICATION
[REDACTED]				- Unmarked Legacy Reference
9906160316	11/19/1999		RLS	PRELIMINARY NOTIFICATION
[REDACTED]				- Unmarked Legacy Reference

**Narrative:**

The licensee reported what was initially thought to be a loss of one leg of the double contingency criticality control system. An operator in Area [redacted] of building [redacted] moved an empty bottle (originally thought to be full, thus the initial report of a violation) from enclosure [redacted] the connected enclosure [redacted]. This caused the total number of bottles in the [redacted] enclosure to be [redacted], thus exceeding the criticality safety limit of [redacted] bottles for that enclosure. The operator then removed a full bottle from the [redacted] in enclosure [redacted], resulting in a second safety limit exceedance (having more than one bottle out of the [redacted]). The empty bottle and the full bottle were then placed in approved [redacted] positions, thus bringing the enclosures into compliance with the safety limits. This incident involved approximately [redacted] of uranium (enriched to 97% by weight in the isotope U-235). This incident was caused by less than adequate programs to ensure that the training and qualification of operators and supervisors are appropriate for the operations involved and the lack of operational limits that would further reduce the likelihood of a criticality safety limit violation. Corrective actions include modification of the Training and Qualification System, including recommended operational limits during on-the-job training, removal of excess SNM storage racks and position indicators that are not approved for use, and ensuring adequate coverage by supervisors and safety support personnel on all shifts.

Event Date: 08/25/1999

Discovery Date: 08/25/1999

Report Date: 08/25/1999

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0124 Name: NUCLEAR FUEL SERVICES, INC.  
NRC Docket Number: 07000143 City: ERWIN  
NRC Program Code: 21210 State: TN Zip Code: 376509718  
Responsible NRC Region: 2

**Site of Event:**

Site Name ERWIN State: TN

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: N Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: N  
Atomic Energy Act Material: Y Record Complete: Y  
Consultant Hired: N Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: FAILURE TO FOLLOW PROCEDURE OR WRONG PROCEDURE USED

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 PERSONNEL RECEIVED ADDITIONAL TRAINING  
2 PROCEDURE MODIFIED

**Source of Radiation:**

FCP  
**Source Number: 1**  
Source/Material: FUEL FABRICATION MATERIAL Radionuclide or Voltage (kVp/MeV): U-238  
Device Name: CONTAINER, BOTTLE Activity: 0.0000408 Ci 0.0015096 GBq  
Manufacturer: NR  
Model Number: NA  
Serial Number: NA  
**Source Number: 2**  
Source/Material: FUEL FABRICATION MATERIAL Radionuclide or Voltage (kVp/MeV): U-235  
Device Name: CONTAINER, BOTTLE Activity: 0.00848 Ci 0.31376 GBq  
Manufacturer: NR  
Model Number: NA  
Serial Number: NA

**Device/Associated Equipment:**

FCP



**Device Number:** 1

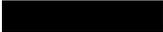
Device Name: CONTAINER, BOTTLE

Model Number: NA

Manufacturer: NR

Serial Number: NA

**References:**

<b>Reference Number:</b>	<b>Entry Date:</b>	<b>Retraction Date:</b>	<b>Coder Initials:</b>	<b>Reference Type:</b>
EN36071	08/26/1999		DCH	EVENT NOTIFICATION
				- Unmarked Legacy Reference
9909290083	11/09/1999		RLS	LICENSEE REPORT
				- Unmarked Legacy Reference



**Narrative:**

The licensee reported that while excavating between two buildings on the plant site, a criticality alarm cable was severed, which activated the criticality alarm system. In accordance with plant procedures, personnel evacuated to designated locations. The alarms were from areas where high enriched uranium is normally processed. The licensee performed radiation surveys around the building where the alarm had activated in accordance with existing procedures and obtained readings within the normal range. A search of the area for the cause of the alarm identified the severed cable. Additional radiation surveys inside the buildings confirmed that a criticality accident had not occurred. The licensee also verified that the environmental monitors around the site did not show any abnormal readings. The facility processes in the buildings were shutdown at the time of the alarm and no processing of radioactive materials will occur until the alarm system is restored. Evacuated staff returned to areas where criticality monitors were still operable. Only a portion of the criticality alarm system remained out of service and it was anticipated that it would be fully restored within five to six hours.

Event Date: 10/01/1999

Discovery Date: 10/01/1999

Report Date: 10/01/1999

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0042 Name: BWX TECHNOLOGIES, INC.  
NRC Docket Number: 07000027 City: LYNCHBURG  
NRC Program Code: 21210 State: VA Zip Code: 24505-0785  
Responsible NRC Region: 2

**Site of Event:**

Site Name LYNCHBURG State: VA

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: N  
Atomic Energy Act Material: Y Record Complete: Y  
Consultant Hired: N Event Closed: Y

**Event Cause:**

EQP - EQUIPMENT  
Cause: HUMAN ERROR  
FCP - FUEL CYCLE PROBLEMS  
Cause: HUMAN ERROR

**Corrective Actions Information:**

Action Number: Corrective Action:  
EQP  
1 NOT REPORTED  
FCP  
1 NOT REPORTED

**Device/Associated Equipment:**

EQP

**Device Number: 1**  
Device Name: ALARM, CRITICALITY Model Number: NR  
Manufacturer: NR Serial Number: NR  
Problem with Equipment:

**Device Number: 2**  
Device Name: CABLE, OTHER Model Number: NA  
Manufacturer: NR Serial Number: NA  
Problem with Equipment:

FCP

**Device Number: 1**  
Device Name: ALARM, CRITICALITY Model Number: NR  
Manufacturer: NR Serial Number: NR



**Device Number:** 2

Device Name: CABLE, OTHER

Model Number: NA

Manufacturer: NR

Serial Number: NA

**Reporting Requirements:**

EQP

Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.

Mode Reported: Telephone

FCP

Reporting Requirement: 70.50(a) - Event that prevents immediate protective actions necessary to avoid exposures to radiation or radioactive materials that could exceed regulatory limits or releases of licensed material that could exceed regulatory limits.

Mode Reported: Telephone

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
PN299040	10/05/1999		DCH	PRELIMINARY NOTIFICATION
	- Unmarked Legacy Reference			
9910060095	11/24/1999		RLS	PRELIMINARY NOTIFICATION
	- Unmarked Legacy Reference			



Item Number: FC990705

Last Updated: 05/08/2001

**Narrative:**

The licensee reported that an alert was declared due to entering a tornado watch. All plant productions were ceased. The tornado watch and alert were terminated at 2102 EDT on 6/3/98.

Event Date: 06/03/1998

Discovery Date: 06/03/1998

Report Date: 06/03/1998

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0124	Name: NUCLEAR FUEL SERVICES, INC.
NRC Docket Number: 07000143	City: ERWIN
NRC Program Code: 21210	State: TN Zip Code: 376509718
Responsible NRC Region: 2	

**Site of Event:**

Site Name ERWIN State: TN

**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: N	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: N
Atomic Energy Act Material: Y	Record Complete: Y
Consultant Hired: N	Event Closed:

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: WEATHER OR AMBIENT CONDITION

**Corrective Actions Information:**

Action Number:	Corrective Action:
FCP	
1	NOT REPORTED

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN34339	10/12/1999		DCH	EVENT NOTIFICATION
[REDACTED]				- Unmarked Legacy Reference
PN298029	05/08/2001		DCH	PRELIMINARY NOTIFICATION
[REDACTED]				- Unmarked Legacy Reference

**Narrative:**

The licensee reported that a short circuit in one of the circuits in the plant [REDACTED] caused a fuse to blow, which de-energized the circuit. This caused a loss of power to several of the [REDACTED]. Appropriate [REDACTED] compensatory measures were taken and repairs to the [REDACTED] completed by approximately 2015 EST on 2/12/2000. During the course of the investigation, it was discovered on 2/15/2000 that the criticality monitoring system and the evacuation howlers at [REDACTED] which is used to store uranium enriched to no greater than 5%, [REDACTED] circuit that was affected. When the [REDACTED] circuit was broken, the criticality monitoring system and the evacuation howlers for [REDACTED] were not functional. The two other criticality monitoring systems [REDACTED] remained functional since they are not on the affected [REDACTED] circuit. When [REDACTED] was lost, the [REDACTED] did not provide a warning that the criticality monitoring system had failed and appropriate compensatory actions were not implemented. Therefore, for approximately seven hours, [REDACTED] was without criticality monitoring. No SNM operations were being conducted during this seven hour period; however, the licensee still investigated if personnel could have been present in the building. The licensee determined that no personnel exposures to radiation or radioactive material resulted from the event. Causes of the event include: No formal checklist, procedure, or reference document existed describing actions to be taken when [REDACTED] fail to function; Management Systems - standards, policies, or administrative controls were not adequate; Human Engineering - complex system knowledge based decision was required but was not understood and; Equipment reliability LTA-equipment environment was not considered. Corrective actions taken by the licensee included: [REDACTED] developed a procedure and checklist for response to [REDACTED] failures; Radiation Protection developed a procedure to include compensatory actions when specific [REDACTED] have failed; Industrial Health and Safety developed a procedure to include compensatory actions when specific [REDACTED] have failed; Industrial Engineering revised the Safety Work Order procedure to include actions to be taken during significant repairs or modifications to the [REDACTED], or associated wiring; Safety and Licensing revised the Change Management Procedures to more clearly state that [REDACTED], and associated [REDACTED] interface changes require a Safety Evaluation Request and; The [REDACTED] panel was labeled to warn maintenance personnel that work with this equipment that changes may affect critical safety systems. All criticality monitoring and evacuation alarm systems have been operating normally since the incident and are presently fully functional.

Event Date: 02/12/2000

Discovery Date: 02/15/2000

Report Date: 02/15/2000

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0042 Name: BWX TECHNOLOGIES, INC.  
NRC Docket Number: 07000027 City: LYNCHBURG  
NRC Program Code: 21210 State: VA Zip Code: 24505-0785  
Responsible NRC Region: 2

**Site of Event:**

Site Name LYNCHBURG State: VA

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: Y  
Atomic Energy Act Material: Y Record Complete: Y  
Consultant Hired: N Event Closed: Y

**Event Cause:**

EQP - EQUIPMENT  
Cause: DEFECTIVE OR INADEQUATE PROCEDURE  
FCP - FUEL CYCLE PROBLEMS  
Cause: DEFECTIVE OR INADEQUATE PROCEDURE

**Corrective Actions Information:**

Action Number: Corrective Action:  
EQP  
1 NEW PROCEDURE WRITTEN  
2 PROCEDURE MODIFIED  
FCP  
1 PROCEDURE MODIFIED  
2 NEW PROCEDURE WRITTEN

**Device/Associated Equipment:**

EQP



**Device Number: 1**

Device Name: ALARM, CRITICALITY  
Manufacturer: NR

Model Number: NR  
Serial Number: NR  
Problem with Equipment:

**Device Number: 2**

Device Name: FUSE  
Manufacturer: NR

Model Number: NA  
Serial Number: NA  
Problem with Equipment:

FCP

**Device Number: 1**

Device Name: ALARM, CRITICALITY  
Manufacturer: NR

Model Number: NR  
Serial Number: NR

**Device Number: 2**

Device Name: FUSE  
Manufacturer: NR

Model Number: NA  
Serial Number: NA

**Reporting Requirements:**

EQP

Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.  
Mode Reported: Telephone

FCP

Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.  
Mode Reported: Telephone

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN36693	02/16/2000		DCH	EVENT NOTIFICATION
	- Unmarked Legacy Reference			
ML003693933	08/22/2001		DCH	LICENSEE REPORT
	- Unmarked Legacy Reference			
ML003695851	08/22/2001		DCH	INSPECTION REPORT
	- Unmarked Legacy Reference			



**Narrative:**

The licensee reported that two waste shipments [REDACTED] and [REDACTED] to Envirocare, Incorporated, contained concentrations of radioactive material above that authorized by the Envirocare license. The waste consisted of approximately 480 cubic feet of soil contaminated with plutonium and americium. The waste had been shipped as Class A waste, but was later determined to be Class C waste. Envirocare is currently licensed to accept Class A waste only. A total of 16 containers exceeded the limit by up to 37%. These waste shipments were buried by Envirocare prior to discovering this error. The licensee was notified by Envirocare on 5/10/2000 that an over-check sample taken on waste shipment [REDACTED] indicated Am-241 activity higher than the licensee's reported value. The licensee stopped shipments pending completion of their investigation into the discrepancy. The licensee's investigation determined that the calibration of the system they used to measure Am-241 in soil was inaccurate. This inaccuracy was a result of a failure to account for an increase in Am-241 over time as Pu-241 in the source decayed to Am-241. The licensee obtained new calibration standards, developed statistical control limits for the calibration system, and implemented a program to use an independent laboratory to verify the assay results of 10% of all waste batches.

Event Date: 03/16/2000

Discovery Date: 05/10/2000

Report Date: 07/07/2000

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0124 Name: NUCLEAR FUEL SERVICES, INC.  
NRC Docket Number: 07000143 City: ERWIN  
NRC Program Code: 21210 State: TN Zip Code: 376509718  
Responsible NRC Region: 2

**Site of Event:**

Site Name SALT LAKE CITY State: UT

**Additional Involved Party:**

License Number: SMC-1559 Name: ENVIROCARE OF UTAH, INC.  
City: CLIVE  
State: UT Zip Code: 84101

**Other Information:**

NRC Reportable Event: N Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: Y  
Atomic Energy Act Material: Y Record Complete: Y  
Consultant Hired: N Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: DEFECTIVE OR INADEQUATE PROCEDURE

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 PROCEDURE MODIFIED  
2 NEW EQUIPMENT OBTAINED

**Source of Radiation:**

FCP  
Source Number: 1  
Source/Material: UNSEALED SOURCE OTHER Radionuclide or Voltage (kVp/MeV): AM-241  
Device Name: SAND/DIRT/SOIL Activity: NR Ci NR GBq  
Manufacturer: NR  
Model Number: NA  
Serial Number: NA

**Device/Associated Equipment:**

FCP  
Device Number: 1  
Device Name: SAND/DIRT/SOIL Model Number: NA  
Manufacturer: NR Serial Number: NA



**Device Number:** 2

Device Name: CONTAINER, WASTE

Manufacturer: NR

Model Number: NR

Serial Number: NR

**References:**

<b>Reference Number:</b>	<b>Entry Date:</b>	<b>Retraction Date:</b>	<b>Coder Initials:</b>	<b>Reference Type:</b>
MR2000014	07/12/2000		DCH	MORNING REPORT
	- Unmarked Legacy Reference			
ML003770427	12/21/2000		RLS	LICENSEE REPORT
	- Unmarked Legacy Reference			
LTR030304	03/05/2003		DCH	NRC LETTER
	- Unmarked Legacy Reference			



**Narrative:**

The licensee reported stopping discharges from its Waste Water Treatment Facility (WWTF) due to a laboratory analysis showing elevated concentrations of uranium for the May 2000 monthly composite sample. A subsequent NRC investigation determined that no actual elevated liquid waste release occurred. The initial licensee results indicated that the concentration of liquid waste released to the Nolichucky River exceeded an action point in the license. Previous analyses of individual releases showed the concentrations to be below license limits. The licensee's initial dose analysis showed that if the sample analyses results were accurate, the releases would have resulted in less than 10 uSv (1 mrem) to a member of the public. An NRC Special Team Inspection determined that no release occurred and that the most likely cause for the elevated sample result was less than adequate chain of custody controls. This resulted in less than adequate sample control practices, as well as procedures and instructions that lacked sufficient details to ensure that a water batch discharge would be completely monitored and controlled.

Event Date: 08/03/2000

Discovery Date: 08/03/2000

Report Date: 08/04/2000

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0124 Name: NUCLEAR FUEL SERVICES, INC.  
NRC Docket Number: 07000143 City: ERWIN  
NRC Program Code: 21210 State: TN Zip Code: 376509718  
Responsible NRC Region: 2

**Site of Event:**

Site Name ERWIN State: TN

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: N Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: Y  
Atomic Energy Act Material: Y Record Complete: Y  
Consultant Hired: N Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: DEFECTIVE OR INADEQUATE PROCEDURE

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 NOT REPORTED

**Source of Radiation:**

FCP

Source Number: 1  
Source/Material: UNSEALED SOURCE GAS Radionuclide or Voltage (kVp/MeV): U-OTH  
Device Name: NA Activity: NR Ci NR GBq  
Manufacturer: NR  
Model Number: NA  
Serial Number: NA

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
PN200030	08/07/2000		DCH	PRELIMINARY NOTIFICATION
[REDACTED]				- Unmarked Legacy Reference
ML003748459	10/02/2000		RLS	INSPECTION REPORT
[REDACTED]				- Unmarked Legacy Reference
ML003748459	10/02/2000		RLS	NOTICE OF VIOLATION
[REDACTED]				- Unmarked Legacy Reference

ML003748459	10/02/2000	RLS	NRC LETTER
[REDACTED]	- Unmarked Legacy Reference		
LTR001020	10/23/2000	DCH	NRC LETTER
[REDACTED]	- Unmarked Legacy Reference		
TN00114	01/17/2001	DCH	AGREEMENT STATE EVENT REPORT
[REDACTED]	- Unmarked Legacy Reference		
LTR030304	03/05/2003	DCH	NRC LETTER
[REDACTED]	- Unmarked Legacy Reference		

Item Number: FC000684

Last Updated: 11/05/2001

**Narrative:**

The licensee reported that a tractor-trailer hauling low level radioactive waste caught on fire on I-24 West near Nashville, Tennessee. The trailer contained low level dry active wastes and was on its way to a disposal site in Utah. Only the tractor burned; the trailer containing the waste was not breached. There were no injuries and no other vehicles were involved. The trailer contained low level waste with a total of [redacted] of U-235. The Tennessee State Police, the Department of Transportation, and a local fire department responded to the scene and determined that the trailer was roadworthy. The trailer was opened and it was determined that no damage to the shipment had occurred. The trailer was temporarily moved to a secure hazardous materials storage area. On 9/11/2000, licensee representatives and the shipper secured a new tractor and trailer, repackaged the waste on the new trailer, and continued the shipment without incident. There was media interest at the scene by a local television news crew.

Event Date: 09/09/2000

Discovery Date: 09/09/2000

Report Date: 09/09/2000

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0042 Name: BWX TECHNOLOGIES, INC.  
NRC Docket Number: 07000027 City: LYNCHBURG  
NRC Program Code: 21210 State: VA Zip Code: 24505-0785  
Responsible NRC Region: 2

**Site of Event:**

Site Name NASHVILLE State: TN

**Additional Involved Party:**

License Number: NR Name: LANDSTAR RMCS, INC.  
City: JACKSONVILLE  
State: FL Zip Code: NR

**Other Information:**

NRC Reportable Event: Y Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: Y  
Atomic Energy Act Material: Y Record Complete: Y  
Consultant Hired: N Event Closed:

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: EXTERNAL FIRE OR EXPLOSION  
TRS - TRANSPORTATION  
Cause: EXTERNAL FIRE OR EXPLOSION

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 NO CORRECTIVE ACTION TAKEN  
TRS  
1 NO CORRECTIVE ACTION TAKEN

**Source of Radiation:**

FCP

Source Number: 1  
Source/Material: FUEL FABRICATION MATERIAL Radionuclide or Voltage (kVp/MeV): U-235  
Device Name: CONTAINER, WASTE Activity: NR Ci NR GBq  
Manufacturer: NR  
Model Number: NA  
Serial Number: NA

TRS

Source Number: 1  
Source/Material: FUEL FABRICATION MATERIAL Radionuclide or Voltage (kVp/MeV): U-235  
Device Name: CONTAINER, WASTE Activity: NR Ci NR GBq  
Manufacturer: NR  
Model Number: NA  
Serial Number: NA

**Device/Associated Equipment:**



FCP

**Device Number: 1**

Device Name: CONTAINER, WASTE

Manufacturer: NR

Model Number: NA

Serial Number: NA

TRS

**Device Number: 1**

Device Name: CONTAINER, WASTE

Manufacturer: NR

Model Number: NA

Serial Number: NA

**Reporting Requirements:**

FCP

Reporting Requirement: 71.5 - Transportation of licensed material

Mode Reported:

TRS

Reporting Requirement: 71.5 - Transportation of licensed material

Mode Reported: Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
PN200035	09/12/2000		DCH	PRELIMINARY NOTIFICATION
				- Unmarked Legacy Reference
ML003762259	11/17/2000		RLS	INSPECTION REPORT
				- Unmarked Legacy Reference
ML003762259	11/17/2000		RLS	NRC LETTER
				- Unmarked Legacy Reference
TN00138	11/05/2001		DCH	AGREEMENT STATE EVENT REPORT
				- Unmarked Legacy Reference



Narrative:

The licensee reported the occurrence of a leak from 1995 to the present of contaminated water from the [redacted] located in [redacted] of the Lynchburg Technology Center into the soil underneath the building. [redacted], located approximately 0.3 miles from the James River, contains approximately [redacted] gallons of water. The preliminary estimate of the leak rate was about 280 gallons per day. Although several radionuclides are found in the [redacted] water, the average concentrations of the key radionuclides are 3.33 kBq/liter (90 nCi/liter) for Cs-137 and 0.26 kBq/liter (7 nCi/liter) for Co-60. The activity of the primary radionuclides released over five years is estimated to be 6.9 GBq (186.5 mCi) of Cs-137, 0.54 GBq (14.5 mCi) of Co-60. The total activity of all radionuclides released over five years is estimated to be 18.78 GBq (507.5 mCi). The [redacted] is used to provide shielding for highly radioactive materials as they are moved in and out of an adjoining [redacted] used for research and development activities. [redacted] is also used to [redacted] [redacted] from previous research and development activities along with other contaminated items and equipment. The licensee determined that the most likely leak path was from the pool into an unused transfer cavity between the pool and a previously decommissioned test reactor and then into the soil beneath the building. Boroscopic examination of the inside of the transfer cavity showed significant water flow from cracks above the [redacted] door into the transfer cavity. Further boroscopic examination and dye testing revealed a crack above the [redacted] door at a concrete/metal interface. This leak was temporarily repaired by the application of an epoxy coating by contract divers. Five test wells were drilled around the facility to determine if radionuclides from [redacted] had migrated from underneath the building and spread into the groundwater. Analysis of water samples from these wells showed no radionuclides other than naturally occurring constituents. Based on the concentration of radioactive materials in [redacted], the suspected leak rate, and groundwater flows, the licensee and the NRC concluded that there was a low risk of contaminating areas outside of the licensee's facility and low risk of exposure to the public. The root causes of this event were determined to be: 1) design deficiencies in the original pool design did not prevent or detect leaks, 2) inadequate communications between various facility supervisors that resulted in several missed opportunities to identify the leak, and 3) failure to follow written instructions and a lack of adequate follow-up to obvious changes in [redacted] conditions. Numerous corrective actions were identified and include short term and permanent fixes to [redacted] to prevent further leakage, management oversight improvements, and identification of other systems and parameters important to safety.

Event Date: 09/19/2000

Discovery Date: 09/19/2000

Report Date: 09/26/2000

Licensee/Reporting Party Information:

Agreement State Regulated: NO Reciprocity: NONE
License Number: SNM-0042 Name: BWX TECHNOLOGIES, INC.
NRC Docket Number: 07000027 City: LYNCHBURG
NRC Program Code: 21210 State: VA Zip Code: 24505-0785
Responsible NRC Region: 2

Site of Event:

Site Name LYNCHBURG State: VA

Additional Involved Party:

License Number: NA Name: NA
City: NA
State: NA Zip Code: NA

Other Information:

NRC Reportable Event: N Abnormal Occurrence: N
Agreement State Reportable Event: N Investigation: Y
Atomic Energy Act Material: Y Record Complete: Y
Consultant Hired: Y Event Closed:

Event Cause:

FCP - FUEL CYCLE PROBLEMS
Cause: DESIGN, MANUFACTURING, OR INSTALLATION ERROR
RLM - RADIOACTIVE MATERIAL REL.
Cause: DESIGN, MANUFACTURING, OR INSTALLATION ERROR

Corrective Actions Information:

Action Number: Corrective Action:
FCP
1 PROCEDURE MODIFIED
2 REPAIRS MADE WITH ENGINEERING CHANGE TO SYSTEM
RLM
1 PROCEDURE MODIFIED
2 REPAIRS MADE WITH ENGINEERING CHANGE TO SYSTEM

Release of Material or Contamination Information:

Type or Release or Contamination: Activity: Ci GBq Radionuclide: Effect of Release or Contamination:

WATER	0.1865	6.9005	CS-137
WATER	0.0145	0.5365	CO-60

**Source of Radiation:**

FCP

**Source Number:** 1  
 Source/Material: UNSEALED SOURCE OTHER Radionuclide or Voltage (kVp/MeV): CS-137  
 Device Name: NA Activity: 0.1865 Ci 6.9005 GBq  
 Manufacturer: NR  
 Model Number: NA  
 Serial Number: AGGREGATE

**Source Number:** 2  
 Source/Material: UNSEALED SOURCE OTHER Radionuclide or Voltage (kVp/MeV): CO-60  
 Device Name: NA Activity: 0.0145 Ci 0.5365 GBq  
 Manufacturer: NR  
 Model Number: NA  
 Serial Number: AGGREGATE

RLM

**Source Number:** 1  
 Source/Material: UNSEALED SOURCE OTHER Radionuclide or Voltage (kVp/MeV): CS-137  
 Device Name: NA Activity: 0.1865 Ci 6.9005 GBq  
 Manufacturer: NR  
 Model Number: NA  
 Serial Number: AGGREGATE

**Source Number:** 2  
 Source/Material: UNSEALED SOURCE OTHER Radionuclide or Voltage (kVp/MeV): CO-60  
 Device Name: NA Activity: 0.0145 Ci 0.5365 GBq  
 Manufacturer: NR  
 Model Number: NA  
 Serial Number: AGGREGATE

**Consultant Information:**

Consultant's Name:	Consultant's Company:	Who Hired Consultant:	Speciality:
STORMBERG, GREG	INEEL	LICENSEE	OTHER

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
MR2000023	10/03/2000		DCH	MORNING REPORT
[REDACTED]				- Unmarked Legacy Reference
PN200044	10/09/2000		DCH	PRELIMINARY NOTIFICATION
[REDACTED]				- Unmarked Legacy Reference
ML003773206	01/04/2001		RLS	LICENSEE REPORT
[REDACTED]				- Unmarked Legacy Reference
ML003773206	01/04/2001		RLS	CONSULTANT REPORT
[REDACTED]				- Unmarked Legacy Reference
ML003774214	01/04/2001		RLS	INSPECTION REPORT
[REDACTED]				- Unmarked Legacy Reference
ML003774214	01/04/2001		RLS	NRC LETTER
[REDACTED]				- Unmarked Legacy Reference
ML012690014	10/11/2001		RLS	INSPECTION REPORT
[REDACTED]				- Unmarked Legacy Reference
ML012690014	10/11/2001		RLS	NRC LETTER
[REDACTED]				- Unmarked Legacy Reference

Item Number: FC010007

Last Updated: 10/08/2001

**Narrative:**

The licensee reported that a fire occurred in a [REDACTED] located in the [REDACTED] Facility. The [REDACTED] Facility was evacuated and emergency personnel responded to the scene. There were no injuries. The fire was confined to the [REDACTED] and was extinguished within two to three minutes by plant personnel using hand-held fire extinguishers. Licensee safety and operations personnel collected initial data and information and determined through radiological surveys and analyses of air samples that no radiological consequences had occurred outside the [REDACTED] as a result of the fire. The licensee's investigation team determined that the root cause of this event was the failure to keep enough solution in the [REDACTED]. Because of this failure, the solution level in the electrically heated [REDACTED] decreased as the acidic solution boiled off. When a portion of the [REDACTED] bottom boiled dry, residual [REDACTED] material in the bottom [REDACTED] ignited. Corrective actions included enhanced fire fighting capabilities, improvements in the [REDACTED] operating procedure, and posting operator aids to help prevent [REDACTED] from being allowed to boil dry. The Commonwealth of Virginia was informed of this event.

Event Date: 12/15/2000

Discovery Date: 12/15/2000

Report Date: 12/15/2000

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0042 Name: BWX TECHNOLOGIES, INC.  
NRC Docket Number: 07000027 City: LYNCHBURG  
NRC Program Code: 21210 State: VA Zip Code: 24505-0785  
Responsible NRC Region: 2

**Site of Event:**

Site Name LYNCHBURG State: VA

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: Y  
Atomic Energy Act Material: Y Record Complete: Y  
Consultant Hired: N Event Closed:

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: HUMAN ERROR

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 NOT REPORTED

**Source of Radiation:**

FCP

Source Number: 1

Source/Material: FUEL FABRICATION MATERIAL Radionuclide or Voltage (kVp/MeV): NR  
Device Name: NA Activity: NR Ci NR GBq  
Manufacturer: NR  
Model Number: NA  
Serial Number: NA

**Reporting Requirements:**

FCP

Reporting Requirement: 30.50(a) - Event that prevents immediate protective actions necessary to avoid exposures to radiation or radioactive materials that could exceed regulatory limits or releases of material that could exceed regulatory limits.  
Mode Reported: Written

**References:**

Reference Number: Entry Date: Retraction Date: Coder Initials: Reference Type:  
MR2000027 01/04/2001 DCH MORNING REPORT

[REDACTED] - Unmarked Legacy Reference

ML010120129	01/31/2001	[REDACTED]	DCH	INSPECTION REPORT
[REDACTED]	- Unmarked Legacy Reference			
ML010120129	01/31/2001	[REDACTED]	DCH	NRC INFORMATION NOTICE
[REDACTED]	- Unmarked Legacy Reference			
ML010510160	10/08/2001	[REDACTED]	RLS	INSPECTION REPORT
[REDACTED]	- Unmarked Legacy Reference			
ML010510160	10/08/2001	[REDACTED]	RLS	NRC LETTER
[REDACTED]	Official Use Only - Unmarked Legacy Reference			

**Narrative:**

The licensee reported a potential lack of coverage by the criticality accident alarm system (CAAS) for portions of a special nuclear material storage area [REDACTED]. 10 CFR 70.24 requires coverage by the criticality detector/alarm system for arrays containing more than [REDACTED] of U-235. The documentation for the area in question could not be located. The licensee started calculations to develop new documentation for the coverage area. Immediate actions were taken to stop all movements of [REDACTED] within the area of questionable coverage. On March 9, 2001, the licensee completed the installation of two additional detectors to provide adequate coverage for the area. The licensee also performed a plant-wide review of CAAS coverage and revised their CAAS documentation. The licensee retracted the event notification on 5/18/2001 after continued evaluation of the CAAS coverage area led to the conclusion that all portions of the storage area originally in question were in fact covered at all times by the CAAS. However, an NRC review of the licensee's analysis determined that the CAAS would not have detected and annunciated an accidental criticality.

Event Date: 03/05/2001

Discovery Date: 03/05/2001

Report Date: 03/06/2001

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0124 Name: NUCLEAR FUEL SERVICES, INC.  
NRC Docket Number: 07000143 City: ERWIN  
NRC Program Code: 21210 State: TN Zip Code: 376509718  
Responsible NRC Region: 2

**Site of Event:**

Site Name ERWIN State: TN

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: Y  
Atomic Energy Act Material: Y Record Complete: Y  
Consultant Hired: N Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS

Cause: HUMAN ERROR

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 NEW EQUIPMENT OBTAINED  
2 PROCEDURE MODIFIED

**Device/Associated Equipment:**

FCP

Device Number: 1

Device Name: ALARM, CRITICALITY Model Number: NR  
Manufacturer: NR Serial Number: NR

**Reporting Requirements:**

FCP

Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.

Mode Reported: Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN37811	03/07/2001		DCH	EVENT NOTIFICATION
[REDACTED]				- Unmarked Legacy Reference
ML011420095	06/12/2001		RLS	LICENSEE REPORT
[REDACTED]				- Unmarked Legacy Reference

ML011200580	09/17/2001	RLS	INSPECTION REPORT
[REDACTED]	- Unmarked Legacy Reference		
ML011200580	09/17/2001	RLS	NRC LETTER
[REDACTED]	- Unmarked Legacy Reference		
ML012690259	11/21/2001	RLS	NOTICE OF VIOLATION
[REDACTED]	- Unmarked Legacy Reference		
ML012690259	11/21/2001	RLS	NRC LETTER
[REDACTED]	- Unmarked Legacy Reference		

**Narrative:**

The licensee reported the loss of power to the Criticality Alarm System, rendering it non-functional for about 10 minutes. Processing and handling of special nuclear material was not occurring during the power outage. An improved preventative maintenance program, which complies with industry guidance, was developed. Also, upgrades and corrections of previously existing deficiencies with the site electrical systems were performed.

Event Date: 04/01/2001

Discovery Date: 04/01/2001

Report Date: 04/02/2001

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0124	Name: NUCLEAR FUEL SERVICES, INC.
NRC Docket Number: 07000143	City: ERWIN
NRC Program Code: 21210	State: TN      Zip Code: 376509718
Responsible NRC Region: 2	

**Site of Event:**

Site Name      ERWIN      State:      TN

**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA      Zip Code: NA

**Other Information:**

NRC Reportable Event:	Y	Abnormal Occurrence:	N
Agreement State Reportable Event:	N	Investigation:	N
Atomic Energy Act Material:	Y	Record Complete:	Y
Consultant Hired:	N	Event Closed:	Y

**Event Cause:**

EQP - EQUIPMENT

Cause: DEFECTIVE OR FAILED PART

FCP - FUEL CYCLE PROBLEMS

Cause: DEFECTIVE OR FAILED PART

**Corrective Actions Information:**

Action Number: Corrective Action:

EQP

- 1      NEW QUALITY MANAGEMENT PLAN
- 2      REPAIRS MADE WITH ENGINEERING CHANGE TO SYSTEM

FCP

- 1      NEW QUALITY MANAGEMENT PLAN
- 2      REPAIRS MADE WITH ENGINEERING CHANGE TO SYSTEM

**Device/Associated Equipment:**

EQP

<b>Device Number:</b> 1			
Device Name:	ALARM, CRITICALITY	Model Number:	NR
Manufacturer:	NR	Serial Number:	NR
		Problem with Equipment:	

FCP

<b>Device Number:</b> 1			
Device Name:	ALARM, CRITICALITY	Model Number:	NR
Manufacturer:	NR	Serial Number:	NR

**Reporting Requirements:**

EQP

Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.  
Mode Reported: Telephone



FCP

Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.  
Mode Reported: Telephone

**References:**

<b>Reference Number:</b>	<b>Entry Date:</b>	<b>Retraction Date:</b>	<b>Coder Initials:</b>	<b>Reference Type:</b>
EN37881	04/03/2001		DCH	EVENT NOTIFICATION
	- Unmarked Legacy Reference			
LTR030306	03/10/2003		DCH	NRC LETTER
	- Unmarked Legacy Reference			



Item Number: FC010479

Last Updated: 11/30/2001

**Narrative:**

The licensee reported a [REDACTED] system degradation related to detection/monitoring. This system degradation resulted in the loss of all [REDACTED] systems due to a total power outage. The power outage caused a criticality alarm, which necessitated an evacuation. An "All Clear To Return" occurred at 0908 EDT. The licensee stated that compensatory measures were in place during this event.

Event Date: 05/19/2001

Discovery Date: 05/19/2001

Report Date: 05/19/2001

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0124	Name: NUCLEAR FUEL SERVICES, INC.
NRC Docket Number: 07000143	City: ERWIN
NRC Program Code: 21210	State: TN Zip Code: 376509718
Responsible NRC Region: 2	

**Site of Event:**

Site Name ERWIN State: TN

**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: N	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: N
Atomic Energy Act Material: Y	Record Complete: N
Consultant Hired: N	Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS

Cause: NOT REPORTED

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 NOT REPORTED

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN38014	05/21/2001		DCH	EVENT NOTIFICATION

[REDACTED] - Unmarked Legacy Reference

**Narrative:**

The licensee reported that during diagnostic maintenance activities on [redacted] systems, a circuit breaker was automatically opened which temporarily de-energized the criticality accident alarm system (CAAS). The maintenance activity was being performed to diagnose system problems in order to prevent inadvertent [redacted] related system failures. During the event, NFS safety personnel were continuously monitoring the status of the CAAS and immediately alerted management of the failure, as did the maintenance personnel performing the diagnostic procedures, and all primary operations were ordered to stop movement of SNM. At 1545 EDT, power was restored and the CAAS was again functioning normally. The cause of the trip is under investigation.

Event Date: 05/31/2001

Discovery Date: 05/31/2001

Report Date: 06/01/2001

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0124	Name: NUCLEAR FUEL SERVICES, INC.
NRC Docket Number: 07000143	City: ERWIN
NRC Program Code: 21210	State: TN      Zip Code: 376509718
Responsible NRC Region: 2	

**Site of Event:**

Site Name      ERWIN	State:      TN
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**Additional Involved Party:**

License Number: NA	Name:      NA
	City:      NA
	State:      NA      Zip Code: NA

**Other Information:**

NRC Reportable Event:	Y	Abnormal Occurrence:	N
Agreement State Reportable Event:	N	Investigation:	Y
Atomic Energy Act Material:	Y	Record Complete:	N
Consultant Hired:	N	Event Closed:	Y

**Event Cause:**

EQP - EQUIPMENT  
Cause:      EQUIPMENT FAILURE

FCP - FUEL CYCLE PROBLEMS  
Cause:      EQUIPMENT FAILURE

**Corrective Actions Information:**

Action Number:	Corrective Action:
EQP	
1	NOT REPORTED
FCP	
1	NOT REPORTED

**Device/Associated Equipment:**

EQP

<b>Device Number:</b> 1			
Device Name:	ALARM, CRITICALITY	Model Number:	NR
Manufacturer:	NR	Serial Number:	NR
		Problem with Equipment:	

FCP

<b>Device Number:</b> 1			
Device Name:	ALARM, CRITICALITY	Model Number:	NR
Manufacturer:	NR	Serial Number:	NR

**Reporting Requirements:**

EQP

Reporting Requirement:	70.50(b)(2) - Equipment is disabled or fails to function as designed.
Mode Reported:	Telephone



FCP

Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.  
Mode Reported: Telephone

**References:**

<b>Reference Number:</b>	<b>Entry Date:</b>	<b>Retraction Date:</b>	<b>Coder Initials:</b>	<b>Reference Type:</b>
EN38044	06/05/2001		DCH	EVENT NOTIFICATION
	- Unmarked Legacy Reference			
ML012200504	08/27/2001		RLS	INSPECTION REPORT
	- Unmarked Legacy Reference			
ML012200504	08/27/2001		RLS	NRC LETTER
	- Unmarked Legacy Reference			



**Narrative:**

The licensee reported that a portable power supply generator (manufactured by Caterpillar, model XQ225) automatically shut down due to low oil pressure, temporarily de-powering the criticality accident alarm system (CAAS). The power generator was in use due to on-going testing activities related to prevention of inadvertent [redacted]-related system failures. The status of the generator's oil pressure was identified prior to the shutdown and plans to re-route power and repair the generator were actively underway when the shutdown occurred. All SNM operations had been notified prior to the shutdown of the potential need to stop movement of SNM, and movement was stopped immediately upon loss of power to the CAAS. The oil level in the generator was brought up to normal operating level. At 2340 EDT on 6/6/2001, power was restored and the CAAS was again functioning normally. The inspection checklist for the generator was revised to include the oil pressure and oil level. A method was established for adding oil to the generator while it is running.

Event Date: 06/05/2001

Discovery Date: 06/05/2001

Report Date: 06/06/2001

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0124 Name: NUCLEAR FUEL SERVICES, INC.  
NRC Docket Number: 07000143 City: ERWIN  
NRC Program Code: 21210 State: TN Zip Code: 376509718  
Responsible NRC Region: 2

**Site of Event:**

Site Name ERWIN State: TN

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: Y  
Atomic Energy Act Material: Y Record Complete: Y  
Consultant Hired: N Event Closed: Y

**Event Cause:**

EQP - EQUIPMENT

Cause: DEFECTIVE OR FAILED PART

FCP - FUEL CYCLE PROBLEMS

Cause: DEFECTIVE OR FAILED PART

**Corrective Actions Information:**

Action Number: Corrective Action:  
EQP  
1 PROCEDURE MODIFIED  
FCP  
1 PROCEDURE MODIFIED

**Device/Associated Equipment:**

EQP

**Device Number: 1**  
Device Name: ALARM, CRITICALITY Model Number: NR  
Manufacturer: NR Serial Number: NR  
Problem with Equipment:

**Device Number: 2**  
Device Name: GENERATOR, EMERGENCY ELECTRIC Model Number: NR  
Manufacturer: CATERPILLAR Serial Number: NR  
Problem with Equipment:

FCP

**Device Number: 1**  
Device Name: ALARM, CRITICALITY Model Number: NR  
Manufacturer: NR Serial Number: NR



**Device Number: 2**

Device Name: GENERATOR, EMERGENCY ELECTRIC  
Manufacturer: CATERPILLAR

Model Number: NR  
Serial Number: NR

**Reporting Requirements:**

EQP

Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.  
Mode Reported: Written

FCP

Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.  
Mode Reported: Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN38054	06/07/2001		DCH	EVENT NOTIFICATION
				- Unmarked Legacy Reference
ML011870177	08/02/2001		DCH	LICENSEE REPORT
				- Unmarked Legacy Reference
ML012200504	08/27/2001		RLS	INSPECTION REPORT
				- Unmarked Legacy Reference
ML012200504	08/27/2001		RLS	NRC LETTER
				Official Use Only - Unmarked Legacy Reference



**Narrative:**

The licensee reported that as a result of recent modifications associated with the discharge line to Waste Storage Tanks [REDACTED], a solution (containing 97% enriched U-235) discharged to the tanks was not effectively monitored. The modifications included relocating the in-line monitor, installing a drain line on the discharge line's "P-Trap," and installing a clear PVC pipe on the "P-Trap" in order to observe the line's contents. During discharges from [REDACTED], the discharge line "P-Trap" was not completely full of solution. The in-line monitor is most effective when the line is completely full of solution. The [REDACTED] pumps, operating in continuous mode, pumped air into the line such that the line was only partially filled with solution. Discharges were immediately suspended. The licensee sampled the 400 gallons discharged and estimated that the solution contained [REDACTED] U-235. Short term corrective actions included performing discharges with the pumps in manual mode while visually ensuring the line was full of solution. Final corrective actions included engineered changes to the flow of material from the pump to the waste tanks such that the pump was modified to pump the material into [REDACTED] are then double sampled for their uranium content and then pumped to the waste tanks through the in-line monitor with no air in the line.

Event Date: 07/23/2001

Discovery Date: 07/23/2001

Report Date: 07/24/2001

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0124 Name: NUCLEAR FUEL SERVICES, INC.  
NRC Docket Number: 07000143 City: ERWIN  
NRC Program Code: 21210 State: TN Zip Code: 376509718  
Responsible NRC Region: 2

**Site of Event:**

Site Name ERWIN State: TN

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: Y  
Atomic Energy Act Material: Y Record Complete: Y  
Consultant Hired: N Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: DESIGN, MANUFACTURING, OR INSTALLATION ERROR

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 PROCEDURE MODIFIED  
2 ENGINEERING CHANGE TO SYSTEM

**Reporting Requirements:**

FCP  
Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported: Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN38166	07/25/2001		DCH	EVENT NOTIFICATION
[REDACTED]				- Unmarked Legacy Reference
ML012410083	09/17/2001		RLS	LICENSEE REPORT
[REDACTED]				- Unmarked Legacy Reference
ML012740157	10/18/2001		RLS	INSPECTION REPORT
[REDACTED]				- Unmarked Legacy Reference
ML012740157	10/18/2001		RLS	NRC LETTER
[REDACTED]				- Unmarked Legacy Reference

Item Number: FC010854

Last Updated: 09/25/2001

**Narrative:**

The licensee reported [REDACTED] system degradation related to power supply functions. Immediate compensatory measures were taken upon discovery.

Event Date: 09/23/2001

Discovery Date: 09/23/2001

Report Date: 09/23/2001

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0124	Name: NUCLEAR FUEL SERVICES, INC.
NRC Docket Number: 07000143	City: ERWIN
NRC Program Code: 21210	State: TN      Zip Code: 376509718
Responsible NRC Region: 2	

**Site of Event:**

Site Name      ERWIN      State:      TN

**Additional Involved Party:**

License Number: NA	Name:      NA
	City:      NA
	State:      NA      Zip Code: NA

**Other Information:**

NRC Reportable Event:	N	Abnormal Occurrence:	N
Agreement State Reportable Event:	N	Investigation:	N
Atomic Energy Act Material:	Y	Record Complete:	N
Consultant Hired:	N	Event Closed:	Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause:      NOT REPORTED

**Corrective Actions Information:**

Action Number:	Corrective Action:
FCP	
1	NOT REPORTED

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN38306	09/25/2001		DCH	EVENT NOTIFICATION

[REDACTED] - Unmarked Legacy Reference

**Narrative:**

The licensee reported the possible overexposure of a fuel processing and recovery operator as indicated by elevated urinalysis sample results collected during the period September - October 2001. The licensee later determined that the erratic results of the elevated uranium concentration in the operator's bioassay samples did not support a significant uranium intake and that repeated sample contamination more likely occurred. The operator had experienced several significant contamination events during the period of elevated bioassay sample results. However, the ability to conclusively determine how multiple bioassay samples came to contain elevated uranium concentrations was lost due to the operator's failure to self-identify all contamination events, inadequacies in the conduct of personnel surveys, and weaknesses in the decontamination protocols and procedures. The operator was immediately restricted from activities involving further occupational exposure. Surveys of the employee's locker, car, and home did not reveal contamination in excess of release limits. Licensee corrective actions included retraining personnel on the reporting of contamination events, improving the tracking and evaluation of contamination events, and modifying decontamination procedures.

Event Date: 09/24/2001

Discovery Date: 10/05/2001

Report Date: 10/05/2001

**Licensee/Reporting Party Information:**

Agreement State Regulated:	NO	Reciprocity:	NONE
License Number:	SNM-0124	Name:	NUCLEAR FUEL SERVICES, INC.
NRC Docket Number:	07000143	City:	ERWIN
NRC Program Code:	21210	State:	TN      Zip Code: 376509718
Responsible NRC Region:	2		

**Site of Event:**

Site Name	ERWIN	State:	TN
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**Additional Involved Party:**

License Number:	NA	Name:	NA
		City:	NA
		State:	NA      Zip Code: NA

**Other Information:**

NRC Reportable Event:	N	Abnormal Occurrence:	N
Agreement State Reportable Event:	N	Investigation:	Y
Atomic Energy Act Material:	Y	Record Complete:	Y
Consultant Hired:	N	Event Closed:	

**Event Cause:**

EXP - OVEREXPOSURE  
Cause: DEFECTIVE OR INADEQUATE PROCEDURE  
FCP - FUEL CYCLE PROBLEMS  
Cause: DEFECTIVE OR INADEQUATE PROCEDURE

**Corrective Actions Information:**

Action Number: Corrective Action:  
EXP  
1 PERSONNEL RECEIVED ADDITIONAL TRAINING  
2 PROCEDURE MODIFIED  
FCP  
1 PERSONNEL RECEIVED ADDITIONAL TRAINING  
2 PROCEDURE MODIFIED

**Exposure Detail:**

Person Number:	Exposure Dose:	Type of Dose:	Effect of Exposure:
1	NR      Sv	INTERNAL (CEDE), OCCUPATIONAL	

**Demographics:**

Person ID No: Description:  
EXP  
1 MALE

**Source of Radiation:**

EXP



**Source Number: 1**

Source/Material: FUEL FABRICATION MATERIAL      Radionuclide or Voltage (kVp/MeV): U-OTH  
 Device Name: NA      Activity: NR Ci      NR GBq  
 Manufacturer: NR  
 Model Number: NA  
 Serial Number: NA

FCP

**Source Number: 1**

Source/Material: FUEL FABRICATION MATERIAL      Radionuclide or Voltage (kVp/MeV): U-OTH  
 Device Name: NA      Activity: NR Ci      NR GBq  
 Manufacturer: NR  
 Model Number: NA  
 Serial Number: NA

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN38354	10/10/2001		DCH	EVENT NOTIFICATION
	- Unmarked Legacy Reference			
PN201034	10/25/2001		DCH	PRELIMINARY NOTIFICATION
	- Unmarked Legacy Reference			
ML013100043	11/26/2001		RLS	LICENSEE REPORT
	- Unmarked Legacy Reference			
ML020390305	02/27/2002		RLS	INSPECTION REPORT
	- Unmarked Legacy Reference			
ML020390305	02/27/2002		RLS	NRC LETTER
	- Unmarked Legacy Reference			



**Narrative:**

The licensee reported the loss and recovery of two packages provided to Airborne Express for delivery. One package contained 40 MBq (1.1 mCi) of natural thorium (solid metal rod) and the other contained 3.4 MBq (91 uCi) of highly enriched U-235 (solid UO2). The package containing the natural thorium was licensed by the State of Tennessee (license #TN-S-86007) and the package containing the U-235 was licensed by the NRC (license #SNM-0124). The Airborne Express tracking system shows that the packages were picked up at the licensee's facility on 9/12/2001. Because all aircraft were grounded following the terrorist attacks on the World Trade Center on 9/11/2001, the packages were delivered by truck to the Airborne Express facility in Knoxville, Tennessee. The packages were loaded onto a contract trucking company's truck for transport to the Airborne Express facility in Wilmington, Ohio. The arrival of the packages at the Wilmington facility was not shown by the tracking system. The loading/receiving areas at the licensee's facility and the Airborne Express facilities in Knoxville and Wilmington were inspected twice, but the packages were not found. The material was subsequently found intact at the Wilmington Airborne Express facility on 11/30/2001. It was in an unmarked container in a corner of the facility. It was forwarded to the licensee's facility. The licensee notified the FBI that the material was found.

Event Date: 09/12/2001

Discovery Date: 09/20/2001

Report Date: 10/19/2001

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0124 Name: NUCLEAR FUEL SERVICES, INC.  
NRC Docket Number: 07000143 City: ERWIN  
NRC Program Code: 21210 State: TN Zip Code: 376509718  
Responsible NRC Region: 2

**Site of Event:**

Site Name KNOXVILLE State: TN

**Additional Involved Party:**

License Number: NON-LICENSEE Name: AIRBORNE EXPRESS  
City: KNOXVILLE  
State: TN Zip Code: NR

**Other Information:**

NRC Reportable Event: Y Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: N  
Atomic Energy Act Material: Y Record Complete: N  
Consultant Hired: N Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: HUMAN ERROR  
LAS - LOST/ABANDONED/STOLEN  
Cause: HUMAN ERROR

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 NOT REPORTED  
LAS  
1 NOT REPORTED

**Source of Radiation:**

FCP  
Source Number: 1  
Source/Material: FUEL FABRICATION MATERIAL Radionuclide or Voltage (kVp/MeV): U-OXIDE  
Device Name: CONTAINER, SHIPPING Activity: 0.000091 Ci 0.003367 GBq  
Manufacturer: NR  
Model Number: NR  
Serial Number: NR



**Source Number: 2**

Source/Material: UNSEALED SOURCE NORM Radionuclide or Voltage (kVp/MeV): TH-NAT  
 Device Name: CONTAINER, SHIPPING Activity: 0.0011 Ci 0.0407 GBq  
 Manufacturer: NR  
 Model Number: NA  
 Serial Number: NA

LAS

**Source Number: 1**

Source/Material: FUEL FABRICATION MATERIAL Radionuclide or Voltage (kVp/MeV): U-OXIDE  
 Device Name: CONTAINER, SHIPPING Activity: 0.000091 Ci 0.003367 GBq  
 Manufacturer: NR  
 Model Number: NR  
 Serial Number: NR

**Source Number: 2**

Source/Material: UNSEALED SOURCE NORM Radionuclide or Voltage (kVp/MeV): TH-NAT  
 Device Name: CONTAINER, SHIPPING Activity: 0.0011 Ci 0.0407 GBq  
 Manufacturer: NR  
 Model Number: NA  
 Serial Number: NA

**Device/Associated Equipment:**

FCP

**Device Number: 1**

Device Name: CONTAINER, SHIPPING Model Number: NR  
 Manufacturer: NR Serial Number: NR

LAS

**Device Number: 1**

Device Name: CONTAINER, SHIPPING Model Number: NR  
 Manufacturer: NR Serial Number: NR

**Reporting Requirements:**

FCP

Reporting Requirement: 20.2201(a)(1)(ii) - Lost, stolen, or missing licensed material in a quantity greater than 10 times the Appendix C quantities.  
 Mode Reported: Telephone

LAS

Reporting Requirement: 20.2201(a)(1)(ii) - Lost, stolen, or missing licensed material in a quantity greater than 10 times the Appendix C quantities.  
 Mode Reported: Telephone

**Keywords:**

LAS

MATERIAL LOST AND FOUND

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN38406	10/24/2001		DCH	EVENT NOTIFICATION
	- Unmarked Legacy Reference			
TN01199	01/14/2002		RLS	AGREEMENT STATE EVENT REPORT
	- Unmarked Legacy Reference			
LTR040623	06/23/2004		RLS	NRC LETTER
	- Unmarked Legacy Reference			



Item Number: FC010972

Last Updated: 10/29/2001

**Narrative:**

The licensee reported the partial loss of one control used for double contingency. It was later determined that double contingency was not lost. Low level waste solution from raffinate was re-circulated, sampled, and analyzed for uranium content [REDACTED]. Authorization was then given to discharge the solution to Waste [REDACTED]. During discharge to the waste tank, the in-line monitor was activated and the valves on the in-let line (to the waste tank) were closed. An attempt was made to sample the solution in the waste tank; however, due to the low volume of solution in the waste tank, it was not possible to re-circulate the solution and obtain a sample. A Non-Destructive Assay (NDA) of the tank was performed. The scan result indicated approximately [REDACTED] U-235 in the tank. The NDA specialist determined that the peak for the solution had drifted outside the region of interest for the system. The NDA specialist then adjusted the gain on the monitoring system's electronics. The licensee retracted this event on 10/28/2001. After further investigation it was discovered that there was no drift problem or equipment problem with the in-line monitor. Double contingency control was always maintained.

Event Date: 10/27/2001

Discovery Date: 10/27/2001

Report Date: 10/27/2001

**Licensee/Reporting Party Information:**

Agreement State Regulated:	NO	Reciprocity:	NONE
License Number:	SNM-0124	Name:	NUCLEAR FUEL SERVICES, INC.
NRC Docket Number:	07000143	City:	ERWIN
NRC Program Code:	21210	State:	TN      Zip Code: 376509718
Responsible NRC Region:	2		

**Site of Event:**

Site Name	ERWIN	State:	TN
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**Additional Involved Party:**

License Number:	NA	Name:	NA
		City:	NA
		State:	NA      Zip Code: NA

**Other Information:**

NRC Reportable Event:	N	Abnormal Occurrence:	N
Agreement State Reportable Event:	N	Investigation:	N
Atomic Energy Act Material:	Y	Record Complete:	Y
Consultant Hired:	N	Event Closed:	Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: NOT REPORTED

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1      NOT REPORTED

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN38434	10/29/2001	10/28/2001	DCH	EVENT NOTIFICATION

[REDACTED] - Unmarked Legacy Reference

**Narrative:**

The licensee reported transporting a radioactively contaminated individual to a hospital. An employee performing the routine task of cleaning out piping in the fuel process area was struck and injured on the left arm by a flange and/or packing material. The employee was unaware that the piping was pressurized when he released the clamp on the flange. The employee also received minor skin contamination when one of the unused gloves in the glove box in which he was working separated from the box, releasing airborne contamination to the work area. The contaminated employee was transported to the local hospital emergency room for treatment. Maximum skin contamination was less than 17,000 dpm/100 cm2. A radiation technician accompanied the injured employee to monitor contamination levels. After treatment, the employee returned to the plant and was decontaminated to less than 200 dpm/100 cm2. The licensee estimated the amount of radioactive material involved at 1.41 kBq (0.038 uCi) of highly enriched uranium (predominantly U-234). Hospital emergency facilities, the emergency vehicle, and attending personnel were surveyed and no contamination was detected. The employee also received a minor intake of radioactive material, with a preliminary estimated committed effective dose equivalent of 3.85 mSv (385 mrem). The operator was placed on work restriction pending completion of the dose assessment. The licensee has added additional pressure gauges to allow the operators to easily see the pressure existing in the pipe and added an additional vent path to allow easier venting of the pipe when required. The licensee also made procedural changes and conducted training with operators and supervisors to ensure that operators are aware of the hazards of the operation and have clear procedures to avoid injury or equipment damage.

Event Date: 01/27/2002

Discovery Date: 01/27/2002

Report Date: 01/28/2002

**Licensee/Reporting Party Information:**

Agreement State Regulated:	NO	Reciprocity:	NONE
License Number:	SNM-0124	Name:	NUCLEAR FUEL SERVICES, INC.
NRC Docket Number:	07000143	City:	ERWIN
NRC Program Code:	21210	State:	TN      Zip Code: 376509718
Responsible NRC Region:	2		

**Site of Event:**

Site Name	ERWIN	State:	TN
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**Additional Involved Party:**

License Number:	NA	Name:	NA
		City:	NA
		State:	NA      Zip Code: NA

**Other Information:**

NRC Reportable Event:	Y	Abnormal Occurrence:	N
Agreement State Reportable Event:	N	Investigation:	Y
Atomic Energy Act Material:	Y	Record Complete:	Y
Consultant Hired:	N	Event Closed:	N

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS

Cause: CONTAMINATED OR POTENTIALLY CONTAMINATED WORKER TRANSPORTED TO AN OFFSITE MEDICAL FACILITY

RLM - RADIOACTIVE MATERIAL REL.

Cause: CONTAMINATED OR POTENTIALLY CONTAMINATED WORKER TRANSPORTED TO AN OFFSITE MEDICAL FACILITY

**Corrective Actions Information:**

Action Number: Corrective Action:

FCP

- 1 NEW EQUIPMENT OBTAINED
- 2 PROCEDURE MODIFIED
- 3 PERSONNEL RECEIVED ADDITIONAL TRAINING

RLM

- 1 NEW EQUIPMENT OBTAINED
- 2 PROCEDURE MODIFIED
- 3 PERSONNEL RECEIVED ADDITIONAL TRAINING

**Release of Material or Contamination Information:**

Type or Release or Contamination:	Activity:	Radionuclide:	Effect of Release or Contamination:
PERSON	0.000000038 Ci      0.00001406 GBq	U-234	

**Source of Radiation:**

FCP



**Source Number: 1**

Source/Material: FUEL FABRICATION MATERIAL Radionuclide or Voltage (kVp/MeV): U-234  
 Device Name: NA Activity: 0.000000038 Ci 0.000001406 GBq  
 Manufacturer: NR  
 Model Number: NA  
 Serial Number: NA

RLM

**Source Number: 1**

Source/Material: FUEL FABRICATION MATERIAL Radionuclide or Voltage (kVp/MeV): U-234  
 Device Name: NA Activity: 0.000000038 Ci 0.000001406 GBq  
 Manufacturer: NR  
 Model Number: NA  
 Serial Number: NA

**Reporting Requirements:**

FCP

Reporting Requirement: 70.50(b)(3) - Event that requires unplanned medical treatment at a medical facility of an individual with spreadable radioactive contamination on the individual's clothing or body.  
 Mode Reported: Written

RLM

Reporting Requirement: 70.50(b)(3) - Event that requires unplanned medical treatment at a medical facility of an individual with spreadable radioactive contamination on the individual's clothing or body.  
 Mode Reported: Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN38655	01/29/2002		DCH	EVENT NOTIFICATION
	- Unmarked Legacy Reference			
PN202003	01/29/2002		DCH	PRELIMINARY NOTIFICATION
	- Unmarked Legacy Reference			
ML020740260	04/01/2002		RLS	LICENSEE REPORT
	- Unmarked Legacy Reference			
ML020880758	04/15/2002		RLS	INSPECTION REPORT
	- Unmarked Legacy Reference			
ML020880758	04/15/2002		RLS	NRC LETTER
	- Unmarked Legacy Reference			
LTR020422	04/22/2002		DCH	NRC LETTER
	- Unmarked Legacy Reference			
ML020300030	10/01/2002		RLS	PRELIMINARY NOTIFICATION
	- Unmarked Legacy Reference			
TN02019	11/22/2002		RLS	AGREEMENT STATE EVENT REPORT
	- Unmarked Legacy Reference			



Item Number: FC020156

Last Updated: 09/13/2002

**Narrative:**

The licensee reported the discovery of leak in a uranium check source used by [REDACTED] personnel. A small amount of uranium oxide powder escaped through a hole created by a missing retaining pin that had become dislodged from the source. Contamination was identified in the areas where the source had been used. [REDACTED] personnel were tested for contamination, and ten [REDACTED] were found to have low level contamination on their clothing. These [REDACTED] underwent further testing including nasal smears and surveys of their homes and automobiles. No contamination was found. Bioassay samples were also obtained and sent offsite for analysis. To prevent recurrence, the licensee replaced the source with two equivalent sources composed of Am-241 and Cs-137 and enhanced their controls for check sources.

Event Date: 11/21/2001

Discovery Date: 11/21/2001

Report Date: 11/23/2001

**Licensee/Reporting Party Information:**

Agreement State Regulated:	NO	Reciprocity:	NONE
License Number:	SNM-0042	Name:	BWX TECHNOLOGIES, INC.
NRC Docket Number:	07000027	City:	LYNCHBURG
NRC Program Code:	21210	State:	VA      Zip Code: 24505-0785
Responsible NRC Region:	2		

**Site of Event:**

Site Name	LYNCHBURG	State:	VA
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**Additional Involved Party:**

License Number:	NA	Name:	NA
		City:	NA
		State:	NA      Zip Code: NA

**Other Information:**

NRC Reportable Event:	Y	Abnormal Occurrence:	N
Agreement State Reportable Event:	N	Investigation:	Y
Atomic Energy Act Material:	Y	Record Complete:	N
Consultant Hired:	N	Event Closed:	Y

**Event Cause:**

EQP - EQUIPMENT  
Cause: DEFECTIVE OR FAILED PART

FCP - FUEL CYCLE PROBLEMS  
Cause: DEFECTIVE OR FAILED PART

LKS - LEAKING SOURCE  
Cause: DEFECTIVE OR FAILED PART

**Corrective Actions Information:**

Action Number:	Corrective Action:
EQP	
1	NEW EQUIPMENT OBTAINED
2	PROCEDURE MODIFIED
FCP	
1	NEW EQUIPMENT OBTAINED
2	PROCEDURE MODIFIED
LKS	
1	NEW EQUIPMENT OBTAINED
2	PROCEDURE MODIFIED

**Source of Radiation:**

EQP			
<b>Source Number:</b>	1		
Source/Material:	SEALED SOURCE CALIB/MARKER	Radionuclide or Voltage (kVp/MeV):	U-OXIDE
Device Name:	NA	Activity:	NR Ci      NR GBq
Manufacturer:	NR	Problem with Source:	
Model Number:	NR		
Serial Number:	NR		
FCP			



**Source Number: 1**

Source/Material:	SEALED SOURCE CALIB/MARKER	Radionuclide or Voltage (kVp/MeV):	U-OXIDE	
Device Name:	NA	Activity:	NR Ci	NR GBq
Manufacturer:	NR			
Model Number:	NR			
Serial Number:	NR			

LKS

**Source Number: 1**

Source/Material:	SEALED SOURCE CALIB/MARKER	Radionuclide or Voltage (kVp/MeV):	U-OXIDE	
Device Name:	NA	Activity:	NR Ci	NR GBq
Manufacturer:	NR	Problem with Source:		
Model Number:	NR	Leak Test Result:	NR uCi	NR kBq
Serial Number:	NR			

**Reporting Requirements:**

EQP

Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.  
 Mode Reported: Written

FCP

Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.  
 Mode Reported: Written

LKS

Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.  
 Mode Reported: Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
ML020220012	02/04/2002		RLS	INSPECTION REPORT
	- Unmarked Legacy Reference			
ML020220012	02/04/2002		RLS	NRC LETTER
	- Unmarked Legacy Reference			
LTR020214	02/18/2002		DCH	NRC LETTER
	- Unmarked Legacy Reference			
ML022360002	09/11/2002		RLS	INSPECTION REPORT
	- Unmarked Legacy Reference			
ML022360002	09/11/2002		RLS	NRC LETTER
	- Unmarked Legacy Reference			



**Narrative:**

The licensee reported that a maintenance worker received an internal exposure of 426.57 derived air concentration-hours (DAC-hrs) in one day. This was above the licensee's administrative action level of 4 DAC-hrs/day, and resulted in the worker receiving a committed effect dose equivalent (CEDE) of 1.068 cSv (rem). The worker was connecting a HEPA filter to an unused mechanical press in preparation for the press's dismantlement and removal. The worker was instructed to check for the existence of old filter media and remove it, if necessary. The work control documents specified the use of respiratory protection by the worker. However, the worker deliberately installed the HEPA filters and removed two contaminated filter elements without respiratory protection. The filters were bagged and inappropriately placed in an unventilated glovebox with a nuclear criticality safety posting prohibiting [REDACTED] material. This improper storage created the potential for an unnecessary dose to a co-worker. The worker was reprimanded and restricted from working with radioactive material pending further bioassay results and a fitness for duty evaluation. Licensee management personnel reviewed the incident and re-emphasized to staff that the requirements of work control documents, procedures, and postings must be followed.

Event Date: 12/07/2001

Discovery Date: 12/07/2001

Report Date: 12/07/2001

**Licensee/Reporting Party Information:**

Agreement State Regulated:	NO	Reciprocity:	NONE
License Number:	SNM-0042	Name:	BWX TECHNOLOGIES, INC.
NRC Docket Number:	07000027	City:	LYNCHBURG
NRC Program Code:	21210	State:	VA Zip Code: 24505-0785
Responsible NRC Region:	2		

**Site of Event:**

Site Name	LYNCHBURG	State:	VA
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**Additional Involved Party:**

License Number:	NA	Name:	NA
		City:	NA
		State:	NA Zip Code: NA

**Other Information:**

NRC Reportable Event:	N	Abnormal Occurrence:	N
Agreement State Reportable Event:	N	Investigation:	Y
Atomic Energy Act Material:	Y	Record Complete:	Y
Consultant Hired:	N	Event Closed:	

**Event Cause:**

EXP - OVEREXPOSURE  
Cause: INTENTIONAL VIOLATION  
FCP - FUEL CYCLE PROBLEMS  
Cause: INTENTIONAL VIOLATION

**Corrective Actions Information:**

Action Number: Corrective Action:  
EXP  
1 PERSONNEL REPRIMANDED  
2 PERSONNEL RECEIVED ADDITIONAL TRAINING  
FCP  
1 PERSONNEL REPRIMANDED  
2 PERSONNEL RECEIVED ADDITIONAL TRAINING

**Exposure Detail:**

Person Number:	Exposure Dose:	Type of Dose:	Effect of Exposure:
	rem Sv		
1	1.068 0.01068	INTERNAL (CEDE), OCCUPATIONAL	

**Demographics:**

Person ID No: Description:  
EXP  
1 MALE

**Source of Radiation:**

EXP



**Source Number: 1**

Source/Material:	FUEL FABRICATION MATERIAL	Radionuclide or Voltage (kVp/MeV):	NR	
Device Name:	FILTER, OTHER	Activity:	NR Ci	NR GBq
Manufacturer:	NR			
Model Number:	NA			
Serial Number:	NA			

FCP

**Source Number: 1**

Source/Material:	FUEL FABRICATION MATERIAL	Radionuclide or Voltage (kVp/MeV):	NR	
Device Name:	FILTER, OTHER	Activity:	NR Ci	NR GBq
Manufacturer:	NR			
Model Number:	NA			
Serial Number:	NA			

**Device/Associated Equipment:**

EXP

**Device Number: 1**

Device Name:	FILTER, OTHER	Model Number:	NR
Manufacturer:	NR	Serial Number:	NA

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
ML020220012	02/04/2002		RLS	INSPECTION REPORT
	- Unmarked Legacy Reference			
ML020220012	02/04/2002		RLS	NRC LETTER
	- Unmarked Legacy Reference			
ML021900567	07/24/2002		RLS	NRC LETTER
	- Unmarked Legacy Reference			
ML022260050	08/30/2002		RLS	NOTICE OF VIOLATION
	- Unmarked Legacy Reference			
ML022260050	08/30/2002		RLS	NRC LETTER
	- Unmarked Legacy Reference			



Item Number: FC020475

Last Updated: 06/23/2004

**Narrative:**

The licensee reported receiving a breached package containing uranium and/or thorium compounds with contamination on the exterior of the package. The limited quantity package was shipped via Federal Express from Environmental Enterprises in Royersford, Pennsylvania, and arrived damaged with a one-inch hole in the outer container. The package contained 11 small bottles of dry material consisting of uranium and/or thorium compounds. Contamination on the exterior of the package and on the floor of the truck was determined to be approximately 20,000 dpm/100 cm<sup>2</sup> (alpha) and 200,000 dpm/100 cm<sup>2</sup> (beta). The radiation levels on the surface of the package were approximately 10 mR/hour at contact and 0.12 mR/hour at one meter. The licensee surveyed the Federal Express Depot in Lynchburg, Virginia, and found a small amount of contamination in a large steel box (unit load device) at a level of approximately 6,000 dpm/100 cm<sup>2</sup> (alpha). The licensee also surveyed previous facilities on the driver's route and found no additional contamination. The licensee determined that the contamination came from one of the bottles that had broken inside of the package. The INL has requested additional information for this event.

Event Date: 05/01/2002

Discovery Date: 05/01/2002

Report Date: 05/01/2002

**Licensee/Reporting Party Information:**

Agreement State Regulated:	NO	Reciprocity:	NONE
License Number:	SNM-0042	Name:	BWX TECHNOLOGIES, INC.
NRC Docket Number:	07000027	City:	LYNCHBURG
NRC Program Code:	21210	State:	VA      Zip Code: 24505-0785
Responsible NRC Region:	2		

**Site of Event:**

Site Name	LYNCHBURG	State:	VA
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**Additional Involved Party:**

License Number:	NR	Name:	ENVIRONMENTAL ENTERPRISES
		City:	ROYERSFORD
		State:	PA      Zip Code: NR

**Other Information:**

NRC Reportable Event:	Y	Abnormal Occurrence:	N
Agreement State Reportable Event:	N	Investigation:	N
Atomic Energy Act Material:	Y	Record Complete:	R
Consultant Hired:	N	Event Closed:	N

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: DEFECTIVE OR FAILED PART

TRS - TRANSPORTATION  
Cause: DEFECTIVE OR FAILED PART

**Corrective Actions Information:**

Action Number:	Corrective Action:
FCP	
1	NOT REPORTED
TRS	
1	NOT REPORTED

**Source of Radiation:**

FCP

<b>Source Number:</b>	1		
Source/Material:	FUEL FABRICATION MATERIAL	Radionuclide or Voltage (kVp/MeV):	NR
Device Name:	CONTAINER, SHIPPING	Activity:	NR Ci      NR GBq
Manufacturer:	NR		
Model Number:	NA		
Serial Number:	NA		

TRS



**Source Number:** 1

Source/Material:	FUEL FABRICATION MATERIAL	Radionuclide or Voltage (kVp/MeV):	NR
Device Name:	CONTAINER, SHIPPING	Activity:	NR Ci NR GBq
Manufacturer:	NR		
Model Number:	NA		
Serial Number:	NA		

**Device/Associated Equipment:**

FCP

**Device Number:** 1

Device Name:	CONTAINER, SHIPPING	Model Number:	NR
Manufacturer:	NR	Serial Number:	NR

TRS

**Device Number:** 1

Device Name:	CONTAINER, SHIPPING	Model Number:	NR
Manufacturer:	NR	Serial Number:	NR

**Reporting Requirements:**

FCP

Reporting Requirement: 20.1906(d)(1) - Transported package exceeds removable surface contamination limits.  
 Mode Reported: Telephone

TRS

Reporting Requirement: 20.1906(d)(1) - Transported package exceeds removable surface contamination limits.  
 Mode Reported: Telephone

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN38889	05/02/2002		DCH	EVENT NOTIFICATION
	- Unmarked Legacy Reference			
PN202018	05/06/2002		DCH	PRELIMINARY NOTIFICATION
	- Unmarked Legacy Reference			
DOT2002050419	08/30/2002		RLS	OTHER
	- Unmarked Legacy Reference			
LTR040623	06/23/2004		RLS	NRC LETTER
	- Unmarked Legacy Reference			





ML021840336

07/17/2002



RLS

NRC LETTER



- Unmarked Legacy Reference



Item Number: FC020647

Last Updated: 12/17/2003

**Narrative:**

The licensee reported that shipments of high-enriched uranium did not conform to the conditions of approval in certificate of compliance (COC) [redacted] for package identification [redacted], model [redacted]. The COC limit is [redacted] of material with a H/U ratio between [redacted] and [redacted]. In a shipment of UN [redacted] on [redacted] packages exceeded the limit. An investigation identified that within the last three years, two additional shipments also exceeded the limit on 4/10/2002 (5 of 45 packages) and on 1/30/2001 (4 of 44 packages). Calculations indicated that the shipments did not present a criticality safety hazard. The cause of these events was inadequate operator training and inadequate administrative control. To prevent recurrence, the licensee retrained personnel and modified their procedure to require a second verification of satisfactory package limits.

Event Date: 04/30/2002

Discovery Date: 05/01/2002

Report Date: 05/31/2002

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0042 Name: BWX TECHNOLOGIES, INC.  
NRC Docket Number: 07000027 City: LYNCHBURG  
NRC Program Code: 21210 State: VA Zip Code: 24505-0785  
Responsible NRC Region: 2

**Site of Event:**

Site Name LYNCHBURG State: VA

**Additional Involved Party:**

License Number: NR Name: NR  
City: NR  
State: NR Zip Code: NR

**Other Information:**

NRC Reportable Event: Y Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: Y  
Atomic Energy Act Material: Y Record Complete: Y  
Consultant Hired: N Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: INADEQUATE TRAINING  
TRS - TRANSPORTATION  
Cause: INADEQUATE TRAINING

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 PERSONNEL RECEIVED ADDITIONAL TRAINING  
2 PROCEDURE MODIFIED  
TRS  
1 PERSONNEL RECEIVED ADDITIONAL TRAINING  
2 PROCEDURE MODIFIED

**Source of Radiation:**

FCP  
**Source Number:** 1  
Source/Material: FUEL FABRICATION MATERIAL Radionuclide or Voltage (kVp/MeV): SNM  
Device Name: CONTAINER, SHIPPING Activity: NR Ci NR GBq  
Manufacturer: NR  
Model Number: NA  
Serial Number: NA  
TRS



Source Number: 1

Source/Material: FUEL FABRICATION MATERIAL Radionuclide or Voltage (kVp/MeV): SNM  
 Device Name: CONTAINER, SHIPPING Activity: NR Ci NR GBq  
 Manufacturer: NR  
 Model Number: NA  
 Serial Number: NA

**Device/Associated Equipment:**

FCP

Device Number: 1

Device Name: CONTAINER, SHIPPING Model Number: 5X22  
 Manufacturer: BMX TECHNOLOGIES Serial Number: NR

TRS

Device Number: 1

Device Name: CONTAINER, SHIPPING Model Number: 5X22  
 Manufacturer: BMX TECHNOLOGIES Serial Number: NR

**Reporting Requirements:**

FCP

Reporting Requirement: 71.95(c) - old - (SUPERSEDED) THE 30 DAY REPORT OF ANY INSTANCES IN WHICH THE CONDITIONS OF APPROVAL IN THE CERTIFICATE OF COMPLIANCE WERE NOT OBSERVED IN MAKING A SHIPMENT.

Mode Reported:

TRS

Reporting Requirement: 71.95(c) - old - (SUPERSEDED) THE 30 DAY REPORT OF ANY INSTANCES IN WHICH THE CONDITIONS OF APPROVAL IN THE CERTIFICATE OF COMPLIANCE WERE NOT OBSERVED IN MAKING A SHIPMENT.

Mode Reported: Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
ML021690235	07/08/2002		RLS	LICENSEE REPORT
				- Unmarked Legacy Reference
ML033220011	12/04/2003		RLS	OTHER
				- Unmarked Legacy Reference
ML033290280	12/17/2003		RLS	INSPECTION REPORT
				- Unmarked Legacy Reference
ML033290280	12/17/2003		RLS	NOTICE OF VIOLATION
				- Unmarked Legacy Reference
ML033290280	12/17/2003		RLS	NRC LETTER
				- Unmarked Legacy Reference



**Narrative:**

The licensee reported that a process [REDACTED], containing highly concentrated uranium material in solution, leaked approximately 50 liters to the process floor. The licensee uses the floor as a safe slab geometry control; therefore geometry control of the material was never lost. Also, there are no unsafe geometry containers or floor drains in the area of the spill for the material to collect in. During the initial leak, an operator in the area came in contact with the material. The operator had skin contamination as a result with contamination levels up to 100,000 dpm/cm2. The operator was decontaminated and the area was quarantined for clean up. Health Physics representatives as well as Nuclear Criticality engineers supervised the cleaning process. The cleaning operation used cloth rags, which were placed in controlled two-liter bottles. During the cleaning operation, one of the cleaning personnel fainted and was contaminated when she fell back into some equipment. She was later revived and decontaminated. The NRC Region II Office discussed the event with a NRC Headquarters Senior Criticality Safety inspector and concluded that the event is of low criticality safety significance. Corrective actions taken by the licensee included modifications in the design of the equipment with further modifications planned. The skin dose to the operator was considered low due to the nature of the material and to the quick decontamination. The maximum individual dose was less than 40 uSv (4 mrem) CEDE. The contaminated area was closed off for approximately 10 days.

Event Date: 07/07/2002

Discovery Date: 07/07/2002

Report Date: 07/08/2002

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0124 Name: NUCLEAR FUEL SERVICES, INC.  
NRC Docket Number: 07000143 City: ERWIN  
NRC Program Code: 21210 State: TN Zip Code: 376509718  
Responsible NRC Region: 2

**Site of Event:**

Site Name ERWIN State: TN

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: N  
Atomic Energy Act Material: Y Record Complete: Y  
Consultant Hired: N Event Closed:

**Event Cause:**

EQP - EQUIPMENT  
Cause: DEFECTIVE OR FAILED PART  
FCP - FUEL CYCLE PROBLEMS  
Cause: DEFECTIVE OR FAILED PART  
RLM - RADIOACTIVE MATERIAL REL.  
Cause: DEFECTIVE OR FAILED PART

**Corrective Actions Information:**

Action Number: Corrective Action:  
EQP  
1 REPAIRS MADE WITH ENGINEERING CHANGE TO SYSTEM  
FCP  
1 REPAIRS MADE WITH ENGINEERING CHANGE TO SYSTEM  
RLM  
1 REPAIRS MADE WITH ENGINEERING CHANGE TO SYSTEM

**Release of Material or Contamination Information:**

Type or Release or Contamination:	Activity:	Radionuclide:	Effect of Release or Contamination:
SURFACE	Ci GBq NR NR	UF6	

**Source of Radiation:**

EQP



**Source Number: 1**

Source/Material:	FUEL FABRICATION MATERIAL	Radionuclide or Voltage (kVp/MeV):	UF6	
Device Name:	CONTAINER, OTHER	Activity:	NR Ci	NR GBq
Manufacturer:	NR	Problem with Source:		
Model Number:	NA			
Serial Number:	NA			

FCP

**Source Number: 1**

Source/Material:	FUEL FABRICATION MATERIAL	Radionuclide or Voltage (kVp/MeV):	UF6	
Device Name:	CONTAINER, OTHER	Activity:	NR Ci	NR GBq
Manufacturer:	NR			
Model Number:	NA			
Serial Number:	NA			

RLM

**Source Number: 1**

Source/Material:	FUEL FABRICATION MATERIAL	Radionuclide or Voltage (kVp/MeV):	UF6	
Device Name:	CONTAINER, OTHER	Activity:	NR Ci	NR GBq
Manufacturer:	NR			
Model Number:	NA			
Serial Number:	NA			

**Device/Associated Equipment:**

EQP

**Device Number: 1**

Device Name:	CONTAINER, OTHER	Model Number:	NR
Manufacturer:	NR	Serial Number:	NR
		Problem with Equipment:	

FCP

**Device Number: 1**

Device Name:	CONTAINER, OTHER	Model Number:	NR
Manufacturer:	NR	Serial Number:	NR

RLM

**Device Number: 1**

Device Name:	CONTAINER, OTHER	Model Number:	NR
Manufacturer:	NR	Serial Number:	NR

**Reporting Requirements:**

EQP

Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.  
 Mode Reported: Telephone

FCP

Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
 Mode Reported: Telephone

RLM

Reporting Requirement: 70.50(b)(1) - Unplanned contamination event.  
 Mode Reported: Telephone

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN39044	07/08/2002		DCH	EVENT NOTIFICATION
	- Unmarked Legacy Reference			
MR2020011	07/09/2002		DCH	MORNING REPORT
	- Unmarked Legacy Reference			
LTR021002	10/02/2002		DCH	NRC LETTER
	- Unmarked Legacy Reference			





Item Number: FC020705

Last Updated: 07/29/2002

**Narrative:**

The licensee reported a potential unusual event in the [REDACTED] Facility, Nuclear Products Division. An individual discovered a small pinhole leak in the coolant loop on the bottom of the plate supporting the [REDACTED] furnace [REDACTED]. Approximately one cup of coolant was found in the bottom of the furnace. At no time did coolant contact fuel material in the furnace, and the U [REDACTED] remained in the [REDACTED]. The loading in the furnace during the time the leak existed was U-235. The coolant is poisoned with boric acid such that a homogenous sphere of U [REDACTED] coolant is subcritical. Integrated Safety Analysis of the [REDACTED] operation postulated [REDACTED] in the furnace [REDACTED] as an initiating event in a criticality accident scenario. The Integrated Safety Analysis appropriately identified [REDACTED] criticality accident given the occurrence of a major leak. The identified leak was of a lesser magnitude than assumed in the Integrated Safety Analysis; however, because control of the coolant as a moderator was degraded, the licensee reported this event. Appropriate corrective actions have been taken. Fuel was removed from the furnace, operation of the furnace was immediately suspended, and an investigation team was assigned. The leak has been cleaned up and the pinhole will be repaired and tested prior to re-start of operations.

Event Date: 07/25/2002

Discovery Date: 07/25/2002

Report Date: 07/25/2002

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0042 Name: BWX TECHNOLOGIES, INC.  
NRC Docket Number: 07000027 City: LYNCHBURG  
NRC Program Code: 21210 State: VA Zip Code: 24505-0785  
Responsible NRC Region: 2

**Site of Event:**

Site Name LYNCHBURG State: VA

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: N  
Atomic Energy Act Material: Y Record Complete: N  
Consultant Hired: N Event Closed:

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: DEFECTIVE OR FAILED PART

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 NOT REPORTED

**Reporting Requirements:**

FCP  
Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported: Telephone

**References:**

Reference Number: Entry Date: Retraction Date: Coder Initials: Reference Type:  
EN39092 07/29/2002 DCH EVENT NOTIFICATION

[REDACTED] - Unmarked Legacy Reference

Item Number: FC030042

Last Updated: 02/04/2003

**Narrative:**

The licensee reported that an employee was burned by steam and scalding water released from a tank. There was no radioactivity involved in this event. The employee was treated at an emergency room and then transferred to the University of Virginia Hospital. The employee died on 1/15/2003.

Event Date: 01/02/2003

Discovery Date: 01/02/2003

Report Date: 01/15/2003

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BWX TECHNOLOGIES, INC.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name LYNCHBURG	State: VA
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**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: N	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: N
Atomic Energy Act Material: Y	Record Complete: Y
Consultant Hired: N	Event Closed: N

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS

Cause: NOT REPORTED

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 NOT REPORTED

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN39511	01/16/2003		DCH	EVENT NOTIFICATION
[REDACTED]				- Unmarked Legacy Reference
ML030210022	02/04/2003		DCH	PRELIMINARY NOTIFICATION
[REDACTED]				- Unmarked Legacy Reference
PN203001	02/04/2003		DCH	PRELIMINARY NOTIFICATION
[REDACTED]				- Unmarked Legacy Reference

**Narrative:**

The licensee reported that a leak was discovered in the line originating from the [REDACTED] of the [REDACTED] Sump. This was a low volume leak (approximately 500 gallons) in an uncontrolled area that was inaccessible and low lying. Considering the inclement weather conditions at the time, there was significant standing water in the area underneath the leak and it could not be determined whether this was from the leak or from snow melt. The area surrounding the leak was roped off, the line was isolated, and the standing water pumped back into the equalization tank system. The liquid was determined to be hazardous waste (due to the pH of 1.1). A 10-ml sample of the standing water was analyzed on a low background alpha/beta proportional system. This sample had an activity of 740 Bq/liter (20 nCi/liter) alpha and 1.78 kBq/liter (48 nCi/liter) beta. The licensee estimated that 500 gallons was the maximum amount of liquid released. They stated that this amount equated to approximately 1.4MBq (37.9 uCi) of U-234 and 3.22 MBq (87.1 uCi) of Sr-90. The licensee assumed that all alpha activity was U-234 and all beta activity was Sr-90 (conservative estimate). The leaking pipe/flange was replaced and the impacted area cleaned to the extent practical. Clean gravel was placed in the impacted area. Repairs and cleanup were performed within a 24-hour time period.

Event Date: 02/19/2003

Discovery Date: 02/19/2003

Report Date: 02/19/2003

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0042 Name: BWX TECHNOLOGIES, INC.  
NRC Docket Number: 07000027 City: LYNCHBURG  
NRC Program Code: 21210 State: VA Zip Code: 24505-0785  
Responsible NRC Region: 2

**Site of Event:**

Site Name LYNCHBURG State: VA

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: N Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: N  
Atomic Energy Act Material: Y Record Complete: Y  
Consultant Hired: N Event Closed: N

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: DEFECTIVE OR FAILED PART  
RLM - RADIOACTIVE MATERIAL REL.  
Cause: DEFECTIVE OR FAILED PART

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 NEW EQUIPMENT OBTAINED  
RLM  
1 NEW EQUIPMENT OBTAINED

**Release of Material or Contamination Information:**

Type or Release or Contamination:	Activity:		Radionuclide:	Effect of Release or Contamination:
	Ci	GBq		
SURFACE	0.0000379	0.0014023	U-234	
SURFACE	0.0000871	0.0032227	SR-90	

**Source of Radiation:**

FCP  
**Source Number:** 1  
Source/Material: FUEL FABRICATION MATERIAL Radionuclide or Voltage (kVp/MeV): U-234  
Device Name: NA Activity: 0.0000379 Ci 0.0014023 GBq  
Manufacturer: NR  
Model Number: NA  
Serial Number: NA



**Source Number: 2**

Source/Material: FUEL FABRICATION MATERIAL Radionuclide or Voltage (kVp/MeV): SR-90  
 Device Name: NA Activity: 0.0000871 Ci 0.0032227 GBq  
 Manufacturer: NR  
 Model Number: NA  
 Serial Number: NA

RLM

**Source Number: 1**

Source/Material: FUEL FABRICATION MATERIAL Radionuclide or Voltage (kVp/MeV): U-234  
 Device Name: NA Activity: 0.0000379 Ci 0.0014023 GBq  
 Manufacturer: NR  
 Model Number: NA  
 Serial Number: NA

**Source Number: 2**

Source/Material: FUEL FABRICATION MATERIAL Radionuclide or Voltage (kVp/MeV): SR-90  
 Device Name: NA Activity: 0.0000871 Ci 0.0032227 GBq  
 Manufacturer: NR  
 Model Number: NA  
 Serial Number: NA

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN39597	02/20/2003		DCH	EVENT NOTIFICATION

- Unmarked Legacy Reference

LTR030611	06/11/2003		DCH	NRC LETTER
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- Unmarked Legacy Reference



**Narrative:**

The licensee reported that during a routine check of the in-line monitor on a low-level waste solution stream, the monitor was observed to be "refreshing" but appeared to have an unusual background reading. Approximately [redacted] of solution with a U-235 concentration of approximately 0.02 grams U-235 per liter was discharged to a WD waste tank. The Non-Destructive Assay (NDA) specialist confirmed that the in-line monitoring system (Canberra Model 1510) had failed. The system was shut down and the valves on the input lines to the WD tanks were closed. An NDA scan determined that approximately [redacted] U-235 were in the tank being filled. The samples obtained from the tank were analyzed and matched the concentration of the liquid waste being discharged to the tank. The cause of the failure of the in-line monitor was the failure of the high voltage power supply that supplies voltage to the monitor's detector head. The power supply was replaced and the system was successfully tested. Also, a shutoff switch was installed on the monitoring system to allow immediate shutdown if the system functions abnormally. There were no releases, contamination, or personnel exposures associated with the incident.

Event Date: 03/10/2003

Discovery Date: 03/10/2003

Report Date: 03/10/2003

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0124 Name: NUCLEAR FUEL SERVICES, INC.  
NRC Docket Number: 07000143 City: ERWIN  
NRC Program Code: 21210 State: TN Zip Code: 376509718  
Responsible NRC Region: 2

**Site of Event:**

Site Name ERWIN State: TN

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: Y  
Atomic Energy Act Material: Y Record Complete: Y  
Consultant Hired: N Event Closed: N

**Event Cause:**

EQP - EQUIPMENT  
Cause: DEFECTIVE OR FAILED PART  
FCP - FUEL CYCLE PROBLEMS  
Cause: DEFECTIVE OR FAILED PART

**Corrective Actions Information:**

Action Number: Corrective Action:  
EQP  
1 REPAIRS MADE WITH ENGINEERING CHANGE TO SYSTEM  
FCP  
1 REPAIRS MADE WITH ENGINEERING CHANGE TO SYSTEM

**Source of Radiation:**

EQP

Source Number: 1  
Source/Material: UNSEALED SOURCE SNM Radionuclide or Voltage (kVp/MeV): U-235  
Device Name: TANK, STORAGE, WASTE Activity: NR Ci NR GBq  
Manufacturer: NR Problem with Source:  
Model Number: NA  
Serial Number: NA

FCP

Source Number: 1  
Source/Material: UNSEALED SOURCE SNM Radionuclide or Voltage (kVp/MeV): U-235  
Device Name: TANK, STORAGE, WASTE Activity: NR Ci NR GBq  
Manufacturer: NR  
Model Number: NA  
Serial Number: NA



**Device/Associated Equipment:**

EQP

**Device Number: 1**

Device Name: TANK, STORAGE, WASTE  
Manufacturer: NR

Model Number: NA  
Serial Number: NA  
Problem with Equipment:

**Device Number: 2**

Device Name: DETECTOR, RADIATION  
Manufacturer: CANBERRA INDUSTRIES

Model Number: 1510  
Serial Number: NR  
Problem with Equipment:

FCP

**Device Number: 1**

Device Name: TANK, STORAGE, WASTE  
Manufacturer: NR

Model Number: NA  
Serial Number: NA

**Device Number: 2**

Device Name: DETECTOR, RADIATION  
Manufacturer: CANBERRA INDUSTRIES

Model Number: 1510  
Serial Number: NR

**Reporting Requirements:**

EQP

Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported: Written

FCP

Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported: Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN39656	03/12/2003		DCH	EVENT NOTIFICATION
	- Unmarked Legacy Reference			
ML030990013	04/30/2003		RLS	LICENSEE REPORT
	- Unmarked Legacy Reference			
ML031330432	06/30/2003		RLS	INSPECTION REPORT
	- Unmarked Legacy Reference			
ML031330432	06/30/2003		RLS	NRC LETTER
	- Unmarked Legacy Reference			



**Narrative:**

The licensee reported that criticality monitoring system equipment had been damaged by a lightning strike. Because of an electrical storm in the area, a storm watch had been initiated such that personnel were stationed throughout the facility with monitors to compensate for a loss of detection or an inadvertent howler sounding. A lightning strike occurred during the storm watch, resulting in several high level alarms and one low level alarm. All high level alarms were immediately reset, but the low level alarm resulted from lightning damage to a detector and monitor in the hazardous waste building. The damaged detector and monitor were replaced. The following day, six other detectors were found to be impaired (three in the vault and three in the hazardous waste/laundry/super compactor area). No work was in progress in these areas. These failures were not discovered earlier because a technician failed to perform a complete system test as required after a lightning strike. All detectors and monitors were repaired and functionally tested. Despite the damaged detectors, a subsequent analysis determined that it was extremely unlikely that a criticality accident in the area would have gone undetected. The licensee also determined that the detectors were designed such that they would not fail in a safe mode. The licensee's corrective actions included implementation of a procedure requirement to perform a source check following any unintentional detector alarm or an electrical storm and retraining all technicians on the importance of performing source checks. The licensee will also review the Criticality Monitoring System for vulnerabilities to lighting effects and investigate the monitor design to identify potential design changes.

Event Date: 05/10/2003

Discovery Date: 05/10/2003

Report Date: 05/12/2003

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0042 Name: BWX TECHNOLOGIES, INC.  
NRC Docket Number: 07000027 City: LYNCHBURG  
NRC Program Code: 21210 State: VA Zip Code: 24505-0785  
Responsible NRC Region: 2

**Site of Event:**

Site Name LYNCHBURG State: VA

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: Y  
Atomic Energy Act Material: Y Record Complete: Y  
Consultant Hired: N Event Closed: N

**Event Cause:**

EQP - EQUIPMENT  
Cause: WEATHER OR AMBIENT CONDITION  
FCP - FUEL CYCLE PROBLEMS  
Cause: WEATHER OR AMBIENT CONDITION

**Corrective Actions Information:**

Action Number: Corrective Action:  
EQP  
1 REPAIRS MADE WITHOUT ENGINEERING CHANGE TO SYSTEM  
2 PROCEDURE MODIFIED  
3 PERSONNEL RECEIVED ADDITIONAL TRAINING  
FCP  
1 REPAIRS MADE WITHOUT ENGINEERING CHANGE TO SYSTEM  
2 PROCEDURE MODIFIED  
3 PERSONNEL RECEIVED ADDITIONAL TRAINING

**Device/Associated Equipment:**

EQP  
Device Number: 1  
Device Name: DETECTOR, CRITICALITY Model Number: NR  
Manufacturer: EBERLINE Serial Number: NR  
Problem with Equipment:



**Device Number: 2**

Device Name: DETECTOR, CRITICALITY  
Manufacturer: EBERLINE

Model Number: NR  
Serial Number: NR  
Problem with Equipment:

**Device Number: 3**

Device Name: DETECTOR, CRITICALITY  
Manufacturer: EBERLINE

Model Number: NR  
Serial Number: NR  
Problem with Equipment:

**Device Number: 4**

Device Name: DETECTOR, CRITICALITY  
Manufacturer: EBERLINE

Model Number: NR  
Serial Number: NR  
Problem with Equipment:

**Device Number: 5**

Device Name: DETECTOR, CRITICALITY  
Manufacturer: EBERLINE

Model Number: NR  
Serial Number: NR  
Problem with Equipment:

**Device Number: 6**

Device Name: DETECTOR, CRITICALITY  
Manufacturer: EBERLINE

Model Number: NR  
Serial Number: NR  
Problem with Equipment:

**Device Number: 7**

Device Name: DETECTOR, CRITICALITY  
Manufacturer: EBERLINE

Model Number: NR  
Serial Number: NR  
Problem with Equipment:

FCP

**Device Number: 1**

Device Name: DETECTOR, CRITICALITY  
Manufacturer: EBERLINE

Model Number: NR  
Serial Number: NR

**Device Number: 2**

Device Name: DETECTOR, CRITICALITY  
Manufacturer: EBERLINE

Model Number: NR  
Serial Number: NR

**Device Number: 3**

Device Name: DETECTOR, CRITICALITY  
Manufacturer: EBERLINE

Model Number: NR  
Serial Number: NR

**Device Number: 4**

Device Name: DETECTOR, CRITICALITY  
Manufacturer: EBERLINE

Model Number: NR  
Serial Number: NR

**Device Number: 5**

Device Name: DETECTOR, CRITICALITY  
Manufacturer: EBERLINE

Model Number: NR  
Serial Number: NR

**Device Number: 6**

Device Name: DETECTOR, CRITICALITY  
Manufacturer: EBERLINE

Model Number: NR  
Serial Number: NR

**Device Number: 7**

Device Name: DETECTOR, CRITICALITY  
Manufacturer: EBERLINE

Model Number: NR  
Serial Number: NR

**Reporting Requirements:**





EQP

Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.

Mode Reported: Telephone

Reporting Requirement: 21.21(d)(1)(ii) - A failure to comply or a defect affecting a basic component that is supplied for a facility or an activity that is subject to licensing requirements.

Mode Reported: Written

FCP

Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.

Mode Reported: Telephone

Reporting Requirement: 21.21(d)(1)(ii) - A failure to comply or a defect affecting a basic component that is supplied for a facility or an activity that is subject to licensing requirements.

Mode Reported: Written

References:

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN39839	05/13/2003		RLS	EVENT NOTIFICATION
	- Unmarked Legacy Reference			
ML031640389	07/08/2003		DCH	INSPECTION REPORT
	- Unmarked Legacy Reference			
ML031640389	07/08/2003		DCH	NOTICE OF VIOLATION
	- Unmarked Legacy Reference			
ML031640389	07/08/2003		DCH	NRC LETTER
	- Unmarked Legacy Reference			
ML031690377	07/15/2003		RLS	LICENSEE REPORT
	- Unmarked Legacy Reference			
ML032230486	09/02/2003		RLS	NOTICE OF VIOLATION
	- Unmarked Legacy Reference			
ML032230486	09/02/2003		RLS	NRC LETTER
	- Unmarked Legacy Reference			



**Narrative:**

The licensee reported a small chemical release. An operator identified a low caustic gauge on a small local scrubber that serves the [REDACTED]. When this was investigated, it was immediately determined that a pressure relief valve had opened, allowing hydrogen chloride to be discharged directly into the glovebox, bypassing the small local scrubber. The discharge of this glovebox goes through a set of HEPA filters and is subsequently discharged from a stack on the roof of the [REDACTED] facility. The system ran for approximately five hours in this mode, with a maximum possible hydrogen chloride release of 1.32 pounds/hour. Radiological releases for the period were reviewed and indicate no increase in radiological effluent. Additionally, calculations demonstrate that the quality of hydrogen chloride released was relatively small and would not have resulted in detectable offsite concentrations. A root cause investigation determined that material incompatibility between the gas and the pressure relief valve sealing material caused the valve to leak. An inadequate design review failed to recognize this incompatibility issue. Corrective actions included removing the pressure relief valve, re-routing the release path such that any future releases would be directed to a scrubber system, and reviewing this event with design engineers.

Event Date: 09/07/2003

Discovery Date: 09/07/2003

Report Date: 09/08/2003

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO  
License Number: SNM-0042  
NRC Docket Number: 07000027  
NRC Program Code: 21210  
Responsible NRC Region: 2  
Reciprocity: NONE  
Name: BWX TECHNOLOGIES, INC.  
City: LYNCHBURG  
State: VA Zip Code: 24505-0785

**Site of Event:**

Site Name LYNCHBURG State: VA

**Additional Involved Party:**

License Number: NA  
Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: N Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: Y  
Atomic Energy Act Material: Y Record Complete: Y  
Consultant Hired: N Event Closed: N

**Event Cause:**

EQP - EQUIPMENT  
Cause: DEFECTIVE OR FAILED PART  
FCP - FUEL CYCLE PROBLEMS  
Cause: DEFECTIVE OR FAILED PART

**Corrective Actions Information:**

Action Number: Corrective Action:  
EQP  
1 REPAIRS MADE WITH ENGINEERING CHANGE TO SYSTEM  
2 PERSONNEL RECEIVED ADDITIONAL TRAINING  
FCP  
1 REPAIRS MADE WITH ENGINEERING CHANGE TO SYSTEM  
2 PERSONNEL RECEIVED ADDITIONAL TRAINING

**Device/Associated Equipment:**

EQP  
Device Number: 1  
Device Name: VALVE, OTHER Model Number: NR  
Manufacturer: NR Serial Number: NR  
Problem with Equipment:

FCP  
Device Number: 1  
Device Name: VALVE, OTHER Model Number: NR  
Manufacturer: NR Serial Number: NR



**References:**

<b>Reference Number:</b>	<b>Entry Date:</b>	<b>Retraction Date:</b>	<b>Coder Initials:</b>	<b>Reference Type:</b>
EN40140	09/09/2003		DCH	EVENT NOTIFICATION
	- Unmarked Legacy Reference			
ML032950040	01/30/2004		RLS	INSPECTION REPORT
	- Unmarked Legacy Reference			
ML032950040	01/30/2004		RLS	NRC LETTER
	- Unmarked Legacy Reference			



Item Number: FC030752

Last Updated: 09/22/2003

**Narrative:**

The licensee discovered [REDACTED] system that [REDACTED]. Compensatory actions have been taken.

Event Date: 09/17/2003

Discovery Date: 09/17/2003

Report Date: 09/17/2003

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BWX TECHNOLOGIES, INC.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name LYNCHBURG State: VA

**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: N	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: N
Atomic Energy Act Material: Y	Record Complete: N
Consultant Hired: N	Event Closed: N

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: NOT REPORTED

**Corrective Actions Information:**

Action Number:	Corrective Action:
FCP	
1	NOT REPORTED

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN40167	09/22/2003		DCH	EVENT NOTIFICATION
[REDACTED]				- Unmarked Legacy Reference

Item Number: FC030802

Last Updated: 10/09/2003

**Narrative:**

The licensee reported an onsite release of hazardous material, consisting of two to three gallons of nitric acid. This event occurred as a result of a leaky valve on the [REDACTED] Building. The licensee notified the EPA.

Event Date: 10/07/2003

Discovery Date: 10/07/2003

Report Date: 10/08/2003

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BWX TECHNOLOGIES, INC.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name LYNCHBURG State: VA

**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: N	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: N
Atomic Energy Act Material: Y	Record Complete: Y
Consultant Hired: N	Event Closed: N

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: DEFECTIVE OR FAILED PART

**Corrective Actions Information:**

Action Number:	Corrective Action:
FCP	
1	NOT REPORTED

**Device/Associated Equipment:**

FCP			
<b>Device Number:</b>	1		
Device Name:	VALVE, OTHER	Model Number:	NA
Manufacturer:	NA	Serial Number:	NA

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN40230	10/09/2003		DCH	EVENT NOTIFICATION

[REDACTED] - Unmarked Legacy Reference

Item Number: FC030834

Last Updated: 12/11/2003

**Narrative:**

The licensee reported that the NFS [redacted] area H/X limits were exceeded for materials received in two containers from an off-site facility. The material involved was [redacted] uranium [redacted] with a U-235 enrichment of 93%. The two containers had [redacted] of U-235, respectively. The safety significance associated with the handling and storage of the containers is minor. Upon identification of this event, all shipments were suspended until the shipper provided the required H/X information. An investigation determined although the H/X requirements were communicated to the shipper, they were not identified in the Shipper/Receiver Agreement. Corrective actions included revision of the Shipper/Receiver Agreement and modification of licensee procedures for the receipt of radioactive materials. Other contracts and Shipper/Receiver Agreements were reviewed and several are being modified to include the H/X requirements.

Event Date: 10/17/2003

Discovery Date: 10/17/2003

Report Date: 10/17/2003

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0124 Name: NUCLEAR FUEL SERVICES, INC.  
NRC Docket Number: 07000143 City: ERWIN  
NRC Program Code: 21210 State: TN Zip Code: 376509718  
Responsible NRC Region: 2

**Site of Event:**

Site Name ERWIN State: TN

**Additional Involved Party:**

License Number: NR Name: NR  
City: NR  
State: NR Zip Code: NR

**Other Information:**

NRC Reportable Event: Y Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: N  
Atomic Energy Act Material: Y Record Complete: Y  
Consultant Hired: N Event Closed: N

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: MANAGEMENT DEFICIENCY

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 PROCEDURE MODIFIED

**Source of Radiation:**

FCP

**Source Number: 1**  
Source/Material: FUEL FABRICATION MATERIAL Radionuclide or Voltage (kVp/MeV): U-235  
Device Name: CONTAINER, SHIPPING Activity: NR Ci NR GBq  
Manufacturer: NR  
Model Number: NA  
Serial Number: NA  
**Source Number: 2**  
Source/Material: FUEL FABRICATION MATERIAL Radionuclide or Voltage (kVp/MeV): U-235  
Device Name: CONTAINER, SHIPPING Activity: NR Ci NR GBq  
Manufacturer: NR  
Model Number: NA  
Serial Number: NA

**Device/Associated Equipment:**

FCP

**Device Number: 1**  
Device Name: CONTAINER, SHIPPING Model Number: NR  
Manufacturer: NR Serial Number: NR



**Device Number:** 2

Device Name: CONTAINER, SHIPPING

Manufacturer: NR

Model Number: NR

Serial Number: NR

**Reporting Requirements:**

FCP

Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.

Mode Reported: Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN40257	10/20/2003		DCH	EVENT NOTIFICATION

 - Unmarked Legacy Reference

ML033230050	12/11/2003		RLS	LICENSEE REPORT
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 - Unmarked Legacy Reference



Item Number: FC030835

Last Updated: 05/11/2004

**Narrative:**

The licensee reported an onsite release of approximately 20 gallons of Macron Cutting Oil at the [REDACTED]. The release occurred when a gasket failed on a bolted joint on the oil piping supply line. The majority of the spilled oil (approximately 1,800 gallons) was contained within the oil tank's lined containment berm. However, approximately 20 gallons spilled over the berm wall due to the elevated location of the failed gasket. The licensee removed and replaced the affected ground cover (gravel). To prevent recurrence, the licensee replaced the bolted joint with a welded fitting.

Event Date: 10/06/2003

Discovery Date: 10/06/2003

Report Date: 10/20/2003

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BWX TECHNOLOGIES, INC.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name LYNCHBURG	State: VA
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**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: N	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: Y
Atomic Energy Act Material: Y	Record Complete: Y
Consultant Hired: N	Event Closed: Y

**Event Cause:**

EQP - EQUIPMENT  
Cause: DEFECTIVE OR FAILED PART

FCP - FUEL CYCLE PROBLEMS  
Cause: DEFECTIVE OR FAILED PART

**Corrective Actions Information:**

Action Number:	Corrective Action:
EQP	
1	REPAIRS MADE WITH ENGINEERING CHANGE TO SYSTEM
FCP	
1	REPAIRS MADE WITH ENGINEERING CHANGE TO SYSTEM

**Device/Associated Equipment:**

EQP

<b>Device Number: 1</b>			
Device Name: FLANGE, OTHER	Model Number: NA		
Manufacturer: NR	Serial Number: NA		
	Problem with Equipment: NA		

FCP

<b>Device Number: 1</b>			
Device Name: FLANGE, OTHER	Model Number: NA		
Manufacturer: NR	Serial Number: NA		

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN40260	10/21/2003		DCH	EVENT NOTIFICATION
[REDACTED]				- Unmarked Legacy Reference
ML041110626	05/11/2004		RLS	INSPECTION REPORT
[REDACTED]				- Unmarked Legacy Reference

ML041110626

05/11/2004

[REDACTED]

RLS

NRC LETTER

[REDACTED] - Unmarked Legacy Reference

[REDACTED]

**Narrative:**

The licensee reported receiving a package with excessive radiation levels. The licensee received two Type A packages from Baker Hughes in Houston, Texas. For handling convenience, the packages were inside a wooden container. When the licensee opened the wooden container, they discovered that the external radiation levels for one of the Type A packages, which contained a 92.5 GBq (2.5 Ci) Cs-137 source, exceeded the [redacted] limit. A small spot on the package measured 375 mR/hour on contact and 40 mR/hr at one meter, but the surface smears were within limits and the package was intact. The wooden container had a maximum external surface radiation level of 40 mR/hr. The licensee notified Baker Hughes and the transport company (Emery Worldwide) of the problem. The cause of the unexpectedly high radiation readings appears to be a defect in the container's poured lead shield. The same source placed in a different container of the same type read only 80 mR/hour. Baker Hughes proposed destructive testing of the container to determine the problem (possibly a bubble within the lead shield). Corrective actions currently hinge on the fact that this event is disputed by Baker Hughes, whose initial and follow up surveys do not exceed 200 mR/hour. Those surveys were independently confirmed by the Texas Department of Health. There is a question as to the calibration accuracy of the licensee's instrumentation.

Event Date: 01/27/2004

Discovery Date: 01/27/2004

Report Date: 01/28/2004

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO  
License Number: SNM-0042  
NRC Docket Number: 07000027  
NRC Program Code: 21210  
Responsible NRC Region: 2  
Reciprocity: NONE  
Name: BWX TECHNOLOGIES, INC.  
City: LYNCHBURG  
State: VA Zip Code: 24505-0785

**Site of Event:**

Site Name LYNCHBURG State: VA

**Additional Involved Party:**

License Number: TX-L00446  
Name: BAKER HUGHES OILFIELD OPERATIONS  
City: HOUSTON  
State: TX Zip Code: NR

**Other Information:**

NRC Reportable Event: Y Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: Y  
Atomic Energy Act Material: Y Record Complete: N  
Consultant Hired: N Event Closed: N

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: NOT REPORTED  
TRS - TRANSPORTATION  
Cause: NOT REPORTED

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 NOT REPORTED  
TRS  
1 NOT REPORTED

**Source of Radiation:**

FCP  
Source Number: 1  
Source/Material: SEALED SOURCE WELL LOGGING Radionuclide or Voltage (kVp/MeV): CS-137  
Device Name: CONTAINER, SHIPPING Activity: 2.5 Ci 92.5 GBq  
Manufacturer: NR  
Model Number: NR  
Serial Number: NR  
TRS



**Source Number:** 1

Source/Material:	SEALED SOURCE WELL LOGGING	Radionuclide or Voltage (kVp/MeV):	CS-137
Device Name:	CONTAINER, SHIPPING	Activity:	2.5 Ci 92.5 GBq
Manufacturer:	NR		
Model Number:	NR		
Serial Number:	NR		

**Device/Associated Equipment:**

FCP

**Device Number:** 1

Device Name:	CONTAINER, SHIPPING	Model Number:	NA
Manufacturer:	NR	Serial Number:	NA

TRS

**Device Number:** 1

Device Name:	CONTAINER, SHIPPING	Model Number:	NA
Manufacturer:	NR	Serial Number:	NA

**Reporting Requirements:**

FCP

Reporting Requirement: 20.1906(d)(2) - Transported package exceeds external radiation limits.  
 Mode Reported: Written

TRS

Reporting Requirement: 20.1906(d)(2) - Transported package exceeds external radiation limits.  
 Mode Reported: Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN40485	01/29/2004		DCH	EVENT NOTIFICATION
Official Use Only - Unmarked Legacy Reference				
ML041110626	05/11/2004		RLS	INSPECTION REPORT
Official Use Only - Unmarked Legacy Reference				
ML041110626	05/11/2004		RLS	NOTICE OF VIOLATION
Official Use Only - Unmarked Legacy Reference				
ML041110626	05/11/2004		RLS	NRC LETTER
Official Use Only - Unmarked Legacy Reference				
LTR040528	06/08/2004		DCH	NRC LETTER
Official Use Only - Unmarked Legacy Reference				
LTR040609	06/09/2004		DCH	AGREEMENT STATE LETTER
Official Use Only - Unmarked Legacy Reference				
ML041460205	06/10/2004		RLS	LICENSEE REPORT
Official Use Only - Unmarked Legacy Reference				
LTR040623	06/23/2004		RLS	NRC LETTER
Official Use Only - Unmarked Legacy Reference				



**Narrative:**

The licensee reported that an Integrated Safety Analysis (ISA) review being performed for a system modification identified a previously unidentified failure mode for a piece of Safety Related Equipment (SRE). The SRE item (a conductivity probe) was in place to detect and prevent the transfer of moderating materials to a fissile material storage column. The conductivity probe was subsequently tested and found to not meet the currently required performance criteria. The operation was already in a shutdown state and all fissile material had been removed from the system when the test was performed on the probe. Compensatory measures (both administrative and engineered) were drafted and reviewed by the plant safety review committee. The system will remain shutdown until all compensatory measures are approved and in place.

Event Date: 05/14/2004

Discovery Date: 05/14/2004

Report Date: 05/14/2004

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0124 Name: NUCLEAR FUEL SERVICES, INC.  
NRC Docket Number: 07000143 City: ERWIN  
NRC Program Code: 21210 State: TN Zip Code: 376509718  
Responsible NRC Region: 2

**Site of Event:**

Site Name ERWIN State: TN

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: N  
Atomic Energy Act Material: Y Record Complete: N  
Consultant Hired: N Event Closed: N

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: DEFECTIVE OR FAILED PART

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 NOT REPORTED

**Source of Radiation:**

FCP  
Source Number: 1  
Source/Material: FUEL FABRICATION MATERIAL Radionuclide or Voltage (kVp/MeV): U-235  
Device Name: DETECTOR, OTHER Activity: NR Ci NR GBq  
Manufacturer: NR  
Model Number: NA  
Serial Number: NA

**Device/Associated Equipment:**

FCP  
Device Number: 1  
Device Name: DETECTOR, OTHER Model Number: NR  
Manufacturer: NR Serial Number: NR

**Reporting Requirements:**

FCP  
Reporting Requirement: NRCB 91-01 - Loss of criticality safety controls.  
Mode Reported: Telephone

**References:**

Reference Number: Entry Date: Retraction Date: Coder Initials: Reference Type:

EN40750

05/17/2004



DCH

EVENT NOTIFICATION

Official Use Only - Unmarked Legacy Reference



Item Number: FC040391

Last Updated: 06/01/2004

**Narrative:**

The licensee reported that one of two criticality detectors for [REDACTED] failed a routine source check. The failure resulted in the detector not being able to give a high alarm, which resulted in the loss of criticality detector coverage for [REDACTED] at the [REDACTED]. The event presented no risk to the public or workers, since the [REDACTED] have not had any fuel since 2/20/2001. The last time the [REDACTED] criticality detectors were source checked (successfully) was on 4/11/2004. However, [REDACTED] was authorized for fuel operations; therefore, criticality detectors were required to be functional.

Event Date: 05/27/2004

Discovery Date: 05/27/2004

Report Date: 05/28/2004

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BWX TECHNOLOGIES, INC.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name LYNCHBURG	State: VA
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**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: N
Atomic Energy Act Material: Y	Record Complete: N
Consultant Hired: N	Event Closed: N

**Event Cause:**

EQP - EQUIPMENT  
Cause: DEFECTIVE OR FAILED PART

FCP - FUEL CYCLE PROBLEMS  
Cause: DEFECTIVE OR FAILED PART

**Corrective Actions Information:**

Action Number:	Corrective Action:
EQP	
1	NOT REPORTED
FCP	
1	NOT REPORTED

**Device/Associated Equipment:**

EQP

<b>Device Number: 1</b>	
Device Name: ALARM, CRITICALITY	Model Number: NR
Manufacturer: NR	Serial Number: NR
	Problem with Equipment:

FCP

<b>Device Number: 1</b>	
Device Name: ALARM, CRITICALITY	Model Number: NR
Manufacturer: NR	Serial Number: NR

**Reporting Requirements:**

EQP

Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.

Mode Reported: Telephone



FCP

Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.  
Mode Reported: Telephone

**References:**

<b>Reference Number:</b>	<b>Entry Date:</b>	<b>Retraction Date:</b>	<b>Coder Initials:</b>	<b>Reference Type:</b>
EN40782	06/01/2004		DCH	EVENT NOTIFICATION

Official Use Only - Unmarked Legacy Reference



**Narrative:**

The licensee reported that a tanker truck from their facility, containing a load of approximately 3,000 gallons of natural uranium uranyl nitrate, was discovered leaking. The tanker had developed a leak and was parked at an Interstate 26 weigh station near Hendersonville, North Carolina. A licensee team of radiological control personnel responded to the scene to determine the extent of the problem and determine the source of the leak. A State of North Carolina hazard material team and radiological control staff also responded to the scene to monitor and perform independent assessments. A tanker rupture disc was determined to be ruptured, which allowed liquid to build up in the manway enclosure and drain to an overflow tank. Leakage was observed to have occurred at both the manway enclosure lid and connections to the overflow tank. The leak rate from the overflow tank drain was estimated to be 10 to 20 drops/minute. Three spots of uranium contamination were identified at the weigh station, the highest being 8,000 dpm/100 cm2 alpha and 150,000 dpm/100 cm2 beta. The rupture disc was replaced and the licensee's response team tightened other potential sources of leakage. The weigh station was decontaminated and plans to reopen on 6/28/2004. The licensee plans to remove the tanker truck pending inspection and approval by the North Carolina Motor Vehicle Division.

Event Date: 06/24/2004

Discovery Date: 06/24/2004

Report Date: 06/24/2004

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0124 Name: NUCLEAR FUEL SERVICES, INC.  
NRC Docket Number: 07000143 City: ERWIN  
NRC Program Code: 21210 State: TN Zip Code: 376509718  
Responsible NRC Region: 2

**Site of Event:**

Site Name HENDERSONVILLE State: NC

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: U Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: Y  
Atomic Energy Act Material: Y Record Complete: N  
Consultant Hired: N Event Closed: N

**Event Cause:**

EQP - EQUIPMENT  
Cause: DEFECTIVE OR FAILED PART  
FCP - FUEL CYCLE PROBLEMS  
Cause: DEFECTIVE OR FAILED PART  
LAS - LOST/ABANDONED/STOLEN  
Cause: DEFECTIVE OR FAILED PART  
RLM - RADIOACTIVE MATERIAL REL.  
Cause: DEFECTIVE OR FAILED PART  
TRS - TRANSPORTATION  
Cause: DEFECTIVE OR FAILED PART

**Corrective Actions Information:**

Action Number: Corrective Action:  
EQP  
1 REPAIRS MADE WITHOUT ENGINEERING CHANGE TO SYSTEM  
FCP  
1 REPAIRS MADE WITHOUT ENGINEERING CHANGE TO SYSTEM  
LAS  
1 REPAIRS MADE WITHOUT ENGINEERING CHANGE TO SYSTEM  
RLM  
1 REPAIRS MADE WITHOUT ENGINEERING CHANGE TO SYSTEM  
TRS  
1 REPAIRS MADE WITHOUT ENGINEERING CHANGE TO SYSTEM

**Release of Material or Contamination Information:**

Type or Release or Activity: Radionuclide: Effect of Release



Contamination:                      Ci                      GBq                      or Contamination:  
 SURFACE                      NR                      NR                      U-NAT

**Source of Radiation:**

EQP

**Source Number:**                      1  
 Source/Material:                      FUEL FABRICATION MATERIAL                      Radionuclide or Voltage (kVp/MeV):                      U-NAT  
 Device Name:                      CONTAINER, SHIPPING                      Activity:                      NR                      Ci                      NR                      GBq  
 Manufacturer:                      NR                      Problem with Source:                      NA  
 Model Number:                      NA  
 Serial Number:                      NA

FCP

**Source Number:**                      1  
 Source/Material:                      FUEL FABRICATION MATERIAL                      Radionuclide or Voltage (kVp/MeV):                      U-NAT  
 Device Name:                      CONTAINER, SHIPPING                      Activity:                      NR                      Ci                      NR                      GBq  
 Manufacturer:                      NR  
 Model Number:                      NA  
 Serial Number:                      NA

LAS

**Source Number:**                      1  
 Source/Material:                      FUEL FABRICATION MATERIAL                      Radionuclide or Voltage (kVp/MeV):                      U-NAT  
 Device Name:                      CONTAINER, SHIPPING                      Activity:                      NR                      Ci                      NR                      GBq  
 Manufacturer:                      NR  
 Model Number:                      NA  
 Serial Number:                      NA

RLM

**Source Number:**                      1  
 Source/Material:                      FUEL FABRICATION MATERIAL                      Radionuclide or Voltage (kVp/MeV):                      U-NAT  
 Device Name:                      CONTAINER, SHIPPING                      Activity:                      NR                      Ci                      NR                      GBq  
 Manufacturer:                      NR  
 Model Number:                      NA  
 Serial Number:                      NA

TRS

**Source Number:**                      1  
 Source/Material:                      FUEL FABRICATION MATERIAL                      Radionuclide or Voltage (kVp/MeV):                      U-NAT  
 Device Name:                      CONTAINER, SHIPPING                      Activity:                      NR                      Ci                      NR                      GBq  
 Manufacturer:                      NR  
 Model Number:                      NA  
 Serial Number:                      NA

**Device/Associated Equipment:**

EQP

**Device Number:**                      1  
 Device Name:                      CONTAINER, SHIPPING                      Model Number:                      NA  
 Manufacturer:                      NR                      Serial Number:                      NA  
 Problem with Equipment:                      NA

FCP

**Device Number:**                      1  
 Device Name:                      CONTAINER, SHIPPING                      Model Number:                      NA  
 Manufacturer:                      NR                      Serial Number:                      NA

LAS

**Device Number:**                      1  
 Device Name:                      CONTAINER, SHIPPING                      Model Number:                      NA  
 Manufacturer:                      NR                      Serial Number:                      NA

RLM





**Device Number: 1**

Device Name: CONTAINER, SHIPPING  
Manufacturer: NR

Model Number: NA  
Serial Number: NA

TRS

**Device Number: 1**

Device Name: CONTAINER, SHIPPING  
Manufacturer: NR

Model Number: NA  
Serial Number: NA

**Keywords:**

LAS

MATERIAL LOST AND NOT FOUND

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN40839	07/22/2004		DCH	EVENT NOTIFICATION
Official Use Only - Unmarked Legacy Reference				
LTR040628	07/22/2004		DCH	NRC LETTER
Official Use Only - Unmarked Legacy Reference				
ML041770515	07/22/2004		DCH	PRELIMINARY NOTIFICATION
Official Use Only - Unmarked Legacy Reference				
NC040022	07/22/2004		DCH	AGREEMENT STATE EVENT REPORT
Official Use Only - Unmarked Legacy Reference				
PN204005	07/22/2004		DCH	PRELIMINARY NOTIFICATION
Official Use Only - Unmarked Legacy Reference				



**Narrative:**

The licensee reported a hydrogen fire in the off-gas system in Building [REDACTED]. Prior to beginning operations, a temporary manifold was installed for calibration purposes on the [REDACTED] units. Due to delays in performing the calibration, the manifold was unknowingly left on the equipment after the work request for the installation of the system was completed. By that time, operations personnel were authorized to begin introducing chemicals into the new units. Shortly after the introduction of chemicals, a fire occurred in the neighboring units due to explosive gases traveling through the temporary manifold into the inert gas lines. A small flame occurred for a period of several minutes inside ventilated containment until it was extinguished by operations personnel. The filtration in the ventilation system remained intact and operational. The radiological hazard involved approximately [REDACTED] of highly enriched uranium. Health Physics, Fire Safety, and Nuclear Criticality Safety personnel responded. There was no loss of containment and no personnel injury. Repairs are being made to the off-gas train involved and recovery is underway. Surveys show no evidence of occupational exposure, contamination, or environmental release. The cause of this event was the failure to note changes that deviated from the approved installation and the failure to close the gas sampling lines associated with the temporary manifold. Corrective actions included procedure revision.

Event Date: 07/27/2004

Discovery Date: 07/27/2004

Report Date: 07/28/2004

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0124 Name: NUCLEAR FUEL SERVICES, INC.  
NRC Docket Number: 07000143 City: ERWIN  
NRC Program Code: 21210 State: TN Zip Code: 376509718  
Responsible NRC Region: 2

**Site of Event:**

Site Name ERWIN State: TN

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: Y  
Atomic Energy Act Material: Y Record Complete: Y  
Consultant Hired: N Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: HUMAN ERROR

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 REPAIRS MADE WITHOUT ENGINEERING CHANGE TO SYSTEM  
2 PROCEDURE MODIFIED

**Source of Radiation:**

FCP  
Source Number: 1  
Source/Material: UNSEALED SOURCE SNM Radionuclide or Voltage (kVp/MeV): U-HE  
Device Name: VENTILATION SYSTEM Activity: NR Ci NR GBq  
Manufacturer: NR  
Model Number: NA  
Serial Number: NA

**Device/Associated Equipment:**

FCP  
Device Number: 1  
Device Name: VENTILATION SYSTEM Model Number: NA  
Manufacturer: NR Serial Number: NA

**Reporting Requirements:**

FCP

Reporting Requirement: 70.50(b)(4) - Unplanned fire or explosion damaging any licensed material or any device, container, or equipment containing licensed material.

Mode Reported: Written

**References:**

<b>Reference Number:</b>	<b>Entry Date:</b>	<b>Retraction Date:</b>	<b>Coder Initials:</b>	<b>Reference Type:</b>
EN40901	11/02/2005		RLS	EVENT NOTIFICATION
Official Use Only - Not for Public Dissemination				
ML042510424	11/02/2005		RLS	LICENSEE REPORT
Official Use Only				
ML042650512	11/02/2005		RLS	INSPECTION REPORT
Official Use Only - Proprietary Information				
ML042650512	11/02/2005		RLS	NRC LETTER
Official Use Only - Proprietary Information				
ML043520421	11/02/2005		RLS	INSPECTION REPORT
Official Use Only - Proprietary Information				
ML043520421	11/02/2005		RLS	NOTICE OF VIOLATION
Official Use Only - Proprietary Information				
ML043520421	11/02/2005		RLS	NRC LETTER
Official Use Only - Proprietary Information				

**Narrative:**

The licensee reported that they initiated a transfer of low concentration highly enriched uranium solution from the favorable geometry caustic discard tanks associated with the [REDACTED] dissolution process to an unfavorable geometry receiving tank. The transfer was initiated based on samples from a previously transferred solution batch. The transfer was terminated by activation of an active engineered control. The licensee initiated a full team TapRoot investigation and a facility safety-stand-down. Immediate corrective actions included isolation of the storage columns, sampling and laboratory analysis of the solution held up in the discharge line, and non-destructive analysis scans of the receiving tank and transfer lines. A followup licensee investigation verified that less than a safe mass of enriched uranium was involved in the transfer (less than 10 grams of Uranium with an enrichment of approximately 65 weight percent U-235). This event was caused by the failure of the shift supervisor to follow procedural requirements to sample the solution prior to discard. Inadequate checklists, poor shift turnover communication, and malfunctioning equipment (plugged differential pressure lines for the level indicators) contributed to this event. Corrective actions included procedure revision, improved shift turnovers, and improved training.

Event Date: 10/25/2004

Discovery Date: 10/25/2004

Report Date: 10/26/2004

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0124 Name: NUCLEAR FUEL SERVICES, INC.  
NRC Docket Number: 07000143 City: ERWIN  
NRC Program Code: 21210 State: TN Zip Code: 376509718  
Responsible NRC Region: 2

**Site of Event:**

Site Name ERWIN State: TN

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: Y  
Atomic Energy Act Material: Y Record Complete: Y  
Consultant Hired: N Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS

Cause: FAILURE TO FOLLOW PROCEDURE OR WRONG PROCEDURE USED

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 PROCEDURE MODIFIED  
2 PERSONNEL RECEIVED ADDITIONAL TRAINING

**Source of Radiation:**

FCP

Source Number: 1  
Source/Material: UNSEALED SOURCE SNM Radionuclide or Voltage (kVp/MeV): U-HE  
Device Name: CONTAINER, STORAGE Activity: NR Ci NR GBq  
Manufacturer: NR  
Model Number: NA  
Serial Number: NA

**Device/Associated Equipment:**

FCP

Device Number: 1  
Device Name: CONTAINER, STORAGE Model Number: NA  
Manufacturer: NR Serial Number: NA

**Reporting Requirements:**



FCP

Reporting Requirement: 70.App A(b)(2) - Loss or degradation of IROFSs that results in failure to meet the performance requirement of 70.61.

Mode Reported: Written

**References:**

<b>Reference Number:</b>	<b>Entry Date:</b>	<b>Retraction Date:</b>	<b>Coder Initials:</b>	<b>Reference Type:</b>
EN41149	11/03/2005		RLS	EVENT NOTIFICATION
Official Use Only - Not for Public Dissemination				
ML043290372	11/03/2005		RLS	INSPECTION REPORT
Official Use Only				
ML043360248	11/03/2005		RLS	LICENSEE REPORT
Official Use Only				
ML050410409	11/03/2005		RLS	INSPECTION REPORT
Official Use Only				



Item Number: FC050003

Last Updated: 11/03/2005

**Narrative:**

The licensee reported the transfer of materials to a storage area without being transferred through a particular device as required by the Standard Operating Procedure (SOP). Verbal instructions were given by the Process Engineer through the Supervisor to the operator to transfer the materials to the storage area. The operator interpreted the instructions as transferring the materials without the particular device. This device prevents a more reactive/incorrect material type from being transferred to the storage area. The material involved was approximately 9,940 grams of Uranium enriched to 95.13 weight percent U-235. A root cause investigation was initiated as a result of the event. Transfers via the Area equipment were suspended until compensatory measures could be put in place. A Letter of Authorization (LOA) was put in place which highlighted the use of the transfer device and which required additional labeling of the components in the system. In addition, the Nuclear Criticality Safety Evaluation was reviewed to determine whether the device should have been credited as an administrative control or eliminated altogether as a control.

Event Date: 12/17/2004

Discovery Date: 12/20/2004

Report Date: 12/21/2004

**Licensee/Reporting Party Information:**

Agreement State Regulated:	NO	Reciprocity:	NONE
License Number:	SNM-0124	Name:	NUCLEAR FUEL SERVICES, INC.
NRC Docket Number:	07000143	City:	ERWIN
NRC Program Code:	21210	State:	TN      Zip Code: 376509718
Responsible NRC Region:	2		

**Site of Event:**

Site Name	ERWIN	State:	TN
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**Additional Involved Party:**

License Number:	NA	Name:	NA
		City:	NA
		State:	NA      Zip Code: NA

**Other Information:**

NRC Reportable Event:	Y	Abnormal Occurrence:	N
Agreement State Reportable Event:	N	Investigation:	Y
Atomic Energy Act Material:	Y	Record Complete:	Y
Consultant Hired:	N	Event Closed:	N

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: FAILURE TO FOLLOW PROCEDURE OR WRONG PROCEDURE USED

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1      PROCEDURE MODIFIED

**Source of Radiation:**

FCP

<b>Source Number:</b>	1		
Source/Material:	UNSEALED SOURCE SNM	Radionuclide or Voltage (kVp/MeV):	U-HE
Device Name:	NA	Activity:	NR Ci      NR GBq
Manufacturer:	NR		
Model Number:	NA		
Serial Number:	NA		

**Reporting Requirements:**

FCP  
Reporting Requirement: 70.App A(b)(1) - Event or condition that results in the facility being in a state not analyzed, improperly analyzed, or different from that analyzed, and results in failure to meet the performance requirements of 70.61.  
Mode Reported: Written

**References:**

<b>Reference Number:</b>	<b>Entry Date:</b>	<b>Retraction Date:</b>	<b>Coder Initials:</b>	<b>Reference Type:</b>
EN41274	11/03/2005		RLS	EVENT NOTIFICATION

Official Use Only - Not for Public Dissemination



ML050210094 11/03/2005  
Official Use Only  
ML050410409 11/03/2005  
Official Use Only

RLS LICENSEE REPORT  
RLS INSPECTION REPORT



Item Number: FC050004

Last Updated: 11/07/2005

**Narrative:**

The licensee reported that the Programmable Logic Controller (PLC) for the oxide dissolution operation had a negative holdup value, which resulted in the PLC using an artificially high mass limit and could allow the system mass limit to be exceeded. The PLC is used to control the mass input into the system. It is an item relied upon for safety and is credited as one of the mass controls in the safety basis. The material involved was approximately 9,900 grams of Uranium enriched to about 65 weight percent U-235. Operations were shutdown until compensatory measures could be put in place and operations personnel verified that the correct material type and quantity had been added to the system. The probable cause of this event was an undetected programming error in the PLC. Corrective actions included issuing a Letter of Authorization (LOA) that required the equipment to be visually inspected and verified as being empty prior to each batch. Similar errors were not observed in other PLCs.

Event Date: 01/07/2005

Discovery Date: 01/07/2005

Report Date: 01/07/2005

**Licensee/Reporting Party Information:**

Agreement State Regulated:	NO	Reciprocity:	NONE
License Number:	SNM-0124	Name:	NUCLEAR FUEL SERVICES, INC.
NRC Docket Number:	07000143	City:	ERWIN
NRC Program Code:	21210	State:	TN      Zip Code: 376509718
Responsible NRC Region:	2		

**Site of Event:**

Site Name      ERWIN      State:      TN

**Additional Involved Party:**

License Number:	NA	Name:	NA
		City:	NA
		State:	NA      Zip Code: NA

**Other Information:**

NRC Reportable Event:	Y	Abnormal Occurrence:	N
Agreement State Reportable Event:	N	Investigation:	Y
Atomic Energy Act Material:	Y	Record Complete:	Y
Consultant Hired:	N	Event Closed:	N

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS

Cause:      DESIGN, MANUFACTURING, OR INSTALLATION ERROR

**Corrective Actions Information:**

Action Number:      Corrective Action:

FCP

1      PROCEDURE MODIFIED

**Source of Radiation:**

FCP

<b>Source Number:</b>	1		
Source/Material:	UNSEALED SOURCE SNM	Radionuclide or Voltage (kVp/MeV):	U-HE
Device Name:	NA	Activity:	NR Ci      NR GBq
Manufacturer:	NR		
Model Number:	NA		
Serial Number:	NA		

**Reporting Requirements:**

FCP

Reporting Requirement: 70.App A(b)(2) - Loss or degradation of IROFSs that results in failure to meet the performance requirement of 70.61.

Mode Reported:      Written

**References:**

<b>Reference Number:</b>	<b>Entry Date:</b>	<b>Retraction Date:</b>	<b>Coder Initials:</b>	<b>Reference Type:</b>
EN41316	11/07/2005		RLS	EVENT NOTIFICATION

Official Use Only - Not for Public Dissemination



ML050470480	11/07/2005	RLS	LICENSEE REPORT
Official Use Only			
ML050540178	11/07/2005	RLS	INSPECTION REPORT
Official Use Only - Proprietary Information			
ML050540178	11/07/2005	RLS	NRC LETTER
Official Use Only - Proprietary Information			



Item Number: FC050005

Last Updated: 11/07/2005

**Narrative:**

The licensee reported receiving a shipment that exceeded the Transportation Index (TI) limit of 10. On 2/16/2005, Baker Hughes Inteq shipped [redacted] Am-Be well logging sources with a total activity of 1,480 GBq (40 Ci) from Houston, Texas, to the licensee's facility. The shipment arrived at the licensee's facility on 2/21/2005. Emery Worldwide indicated that the shipment mode had a TI reading of 9; however, the licensee's reading was 12.6. Radiation surveys of the package revealed 0.833 mSv/hr (83.3 mrem/hr) at contact and 0.126 mSv/hr (12.6 mrem/hr) at one meter. The licensee placed the package in a restricted area to minimize personnel exposure. The Region IV State Agreements Officer was informed of the event for additional review by the State of Texas with the shipper.

Event Date: 02/16/2005

Discovery Date: 02/21/2005

Report Date: 02/21/2005

**Licensee/Reporting Party Information:**

Agreement State Regulated:	NO	Reciprocity:	NONE
License Number:	SNM-0042	Name:	BWX TECHNOLOGIES, INC.
NRC Docket Number:	07000027	City:	LYNCHBURG
NRC Program Code:	21210	State:	VA      Zip Code: 24505-0785
Responsible NRC Region:	2		

**Site of Event:**

Site Name	HOUSTON	State:	TX
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**Additional Involved Party:**

License Number:	NR	Name:	BAKER HUGHES INTEQ
		City:	HOUSTON
		State:	TX      Zip Code: NR

**Other Information:**

NRC Reportable Event:	Y	Abnormal Occurrence:	N
Agreement State Reportable Event:	N	Investigation:	Y
Atomic Energy Act Material:	Y	Record Complete:	N
Consultant Hired:	N	Event Closed:	N

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: NOT REPORTED

TRS - TRANSPORTATION  
Cause: NOT REPORTED

**Corrective Actions Information:**

Action Number:	Corrective Action:
FCP	
1	NOT REPORTED
TRS	
1	NOT REPORTED

**Source of Radiation:**

FCP

<b>Source Number:</b>	1		
Source/Material:	SEALED SOURCE WELL LOGGING	Radionuclide or Voltage (kVp/MeV):	AM-BE
Device Name:	CONTAINER, SHIPPING	Activity:	40 Ci      1480 GBq
Manufacturer:	BAKER HUGHES		
Model Number:	NR		
Serial Number:	AGGREGATE		

TRS

<b>Source Number:</b>	1		
Source/Material:	SEALED SOURCE WELL LOGGING	Radionuclide or Voltage (kVp/MeV):	AM-BE
Device Name:	CONTAINER, SHIPPING	Activity:	40 Ci      1480 GBq
Manufacturer:	BAKER HUGHES		
Model Number:	NR		
Serial Number:	AGGREGATE		

**Device/Associated Equipment:**

FCP



**Device Number: 1**

Device Name: CONTAINER, SHIPPING  
Manufacturer: NR

Model Number: NR  
Serial Number: NR

TRS

**Device Number: 1**

Device Name: CONTAINER, SHIPPING  
Manufacturer: NR

Model Number: NR  
Serial Number: NR

**Reporting Requirements:**

FCP

Reporting Requirement: 20.1906(d)(2) - Transported package exceeds external radiation limits.  
Mode Reported: Written

TRS

Reporting Requirement: 20.1906(d)(2) - Transported package exceeds external radiation limits.  
Mode Reported: Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN41427	11/07/2005		RLS	EVENT NOTIFICATION
Official Use Only - Not for Public Dissemination				
ML051220596	11/07/2005		RLS	INSPECTION REPORT
Official Use Only - Proprietary Information				
ML051220596	11/07/2005		RLS	NRC LETTER
Official Use Only - Proprietary Information				



**Narrative:**

The licensee reported the identification of a solution accumulation in the HEPA filter housing on the roof of Building [REDACTED] during operation of the uranium-aluminum system. The event was discovered upon investigating a low vacuum alarm received on the hydrogen dilution system. Analysis of the solution determined the liquid to be a caustic solution with 0.08 grams/liter of uranium at 65 weight percent U-235 with a total of 3 grams of Uranium in the HEPA housing and filter. Approximately 9 liters of solution were removed from the housing. The cause was an incorrect valve alignment that occurred on 4/7/2005 when transferring caustic discard solution. The operator failed to follow the valve lineup procedure and the supervisory verification was not performed in an independent manner. The solution was inadvertently transferred to the off-service centrifuge system. A number of process alarms were received, but operators believed the alarms to be false because they were associated with a system not believed to be in operation. The solution was subsequently pushed up through the hydrogen dilution system and into the hydrogen off-gas ductwork. Approximately 20 liters of solution overflowed from a drain located on the ductwork. However, the significance of the event was not immediately recognized. The process was not in operation when the solution in the filter housing was found, and remained shutdown pending system design changes. Corrective actions included re-training personnel and system modifications.

Event Date: 04/07/2005

Discovery Date: 04/28/2005

Report Date: 04/29/2005

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0124 Name: NUCLEAR FUEL SERVICES, INC.  
NRC Docket Number: 07000143 City: ERWIN  
NRC Program Code: 21210 State: TN Zip Code: 376509718  
Responsible NRC Region: 2

**Site of Event:**

Site Name ERWIN State: TN

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: Y  
Atomic Energy Act Material: Y Record Complete: Y  
Consultant Hired: N Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: FAILURE TO FOLLOW PROCEDURE OR WRONG PROCEDURE USED

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 PERSONNEL RECEIVED ADDITIONAL TRAINING  
2 ENGINEERING CHANGE TO SYSTEM

**Source of Radiation:**

FCP  
Source Number: 1  
Source/Material: UNSEALED SOURCE SNM Radionuclide or Voltage (kVp/MeV): U-HE  
Device Name: FILTER, HEPA Activity: NR Ci NR GBq  
Manufacturer: NR  
Model Number: NA  
Serial Number: NA

**Device/Associated Equipment:**

FCP  
Device Number: 1  
Device Name: FILTER, HEPA Model Number: NR  
Manufacturer: NR Serial Number: NA

**Reporting Requirements:**



FCP

Reporting Requirement: 70.App A(b)(1) - Event or condition that results in the facility being in a state not analyzed, improperly analyzed, or different from that analyzed, and results in failure to meet the performance requirements of 70.61.

Mode Reported: Written

**References:**

<b>Reference Number:</b>	<b>Entry Date:</b>	<b>Retraction Date:</b>	<b>Coder Initials:</b>	<b>Reference Type:</b>
EN41651	11/07/2005		RLS	EVENT NOTIFICATION
Official Use Only - Not for Public Dissemination				
ML051430475	11/07/2005		RLS	INSPECTION REPORT
Official Use Only				
ML051580189	11/07/2005		RLS	LICENSEE REPORT
Official Use Only				
ML051780418	11/07/2005		RLS	INSPECTION REPORT
Official Use Only - Proprietary Information				
ML051780418	11/07/2005		RLS	NRC LETTER
Official Use Only - Proprietary Information				



Item Number: FC050007

Last Updated: 11/30/2005

**Narrative:**

The licensee reported the receipt of a Type A package from Baker Hughes of Houston, Texas, with radiation levels in excess of the 2 mSv/hr (200 mrem/hr) limit for contact handling. The external surface reading was 2.63 mSv/hr (263 mrem/hr). The bill of lading showed that the shipment consisted of [redacted] pieces in [redacted] crates, with only one container above the limit. NRC inspectors determined that the package did not represent any immediate radiological risk to the workers or public.

Event Date: 05/10/2005

Discovery Date: 05/10/2005

Report Date: 05/10/2005

**Licensee/Reporting Party Information:**

Agreement State Regulated:	NO	Reciprocity:	NONE
License Number:	SNM-0042	Name:	BWX TECHNOLOGIES, INC.
NRC Docket Number:	07000027	City:	LYNCHBURG
NRC Program Code:	21210	State:	VA Zip Code: 24505-0785
Responsible NRC Region:	2		

**Site of Event:**

Site Name	LYNCHBURG	State:	VA
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**Additional Involved Party:**

License Number:	NR	Name:	BAKER HUGHES
		City:	HOUSTON
		State:	TX Zip Code: 77073

**Other Information:**

NRC Reportable Event:	Y	Abnormal Occurrence:	N
Agreement State Reportable Event:	N	Investigation:	Y
Atomic Energy Act Material:	Y	Record Complete:	N
Consultant Hired:	N	Event Closed:	N

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS

Cause: NOT REPORTED

TRS - TRANSPORTATION

Cause: NOT REPORTED

**Corrective Actions Information:**

Action Number: Corrective Action:

FCP

1 NOT REPORTED

TRS

1 NOT REPORTED

**Source of Radiation:**

FCP

Source Number: 1

Source/Material:	UNSEALED SOURCE OTHER	Radionuclide or Voltage (kVp/MeV):	NR
Device Name:	CONTAINER, SHIPPING	Activity:	NR Ci NR GBq
Manufacturer:	NR		
Model Number:	NA		
Serial Number:	NA		

TRS

Source Number: 1

Source/Material:	UNSEALED SOURCE OTHER	Radionuclide or Voltage (kVp/MeV):	NR
Device Name:	CONTAINER, SHIPPING	Activity:	NR Ci NR GBq
Manufacturer:	NR		
Model Number:	NA		
Serial Number:	NA		

**Device/Associated Equipment:**

FCP



**Device Number: 1**

Device Name: CONTAINER, SHIPPING  
Manufacturer: NR

Model Number: NA  
Serial Number: NA

TRS

**Device Number: 1**

Device Name: CONTAINER, SHIPPING  
Manufacturer: NR

Model Number: NA  
Serial Number: NA

**Reporting Requirements:**

FCP

Reporting Requirement: 20.1906(d)(2) - Transported package exceeds external radiation limits.  
Mode Reported: Written

TRS

Reporting Requirement: 20.1906(d)(2) - Transported package exceeds external radiation limits.  
Mode Reported: Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN41686	11/30/2005		RLS	EVENT NOTIFICATION
Official Use Only - Not for Public Dissemination				
ML052070418	11/30/2005		RLS	INSPECTION REPORT
Official Use Only - Proprietary Information				
ML052070418	11/30/2005		RLS	NRC LETTER
Official Use Only - Proprietary Information				



**Narrative:**

The licensee reported a safety equipment failure in which fire detection alarm system communications were lost from the Lynchburg Technology Center (LTC) to the Alarm Station. A functional test performed on the LTC alarm panel, following a storm watch, indicated that alarms were not being received by the monitors in the alarm station. The licensee immediately implemented compensatory measures to provide manual coverage and communication of the LTC alarm panel until repairs corrected the condition on 7/6/2005. The cause of this event could not be ascertained, but may be related to maintenance performed on another part of the alarm's communication system on 7/2/2005. Corrective actions included the installation of an upgraded alarm communication system and implementation of a post maintenance checklist to verify communications. This event is related to event FC050009.

Event Date: 07/05/2005

Discovery Date: 07/05/2005

Report Date: 07/06/2005

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0042 Name: BWX TECHNOLOGIES, INC.  
NRC Docket Number: 07000027 City: LYNCHBURG  
NRC Program Code: 21210 State: VA Zip Code: 24505-0785  
Responsible NRC Region: 2

**Site of Event:**

Site Name LYNCHBURG State: VA

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: Y  
Atomic Energy Act Material: Y Record Complete: Y  
Consultant Hired: N Event Closed: N

**Event Cause:**

EQP - EQUIPMENT  
Cause: DEFECTIVE OR FAILED PART  
FCP - FUEL CYCLE PROBLEMS  
Cause: DEFECTIVE OR FAILED PART

**Corrective Actions Information:**

Action Number: Corrective Action:  
EQP  
1 REPAIRS MADE WITH ENGINEERING CHANGE TO SYSTEM  
FCP  
1 REPAIRS MADE WITH ENGINEERING CHANGE TO SYSTEM

**Device/Associated Equipment:**

EQP  
**Device Number: 1**  
Device Name: ALARM, CRITICALITY Model Number: NA  
Manufacturer: NR Serial Number: NA  
Problem with Equipment: NA

FCP  
**Device Number: 1**  
Device Name: ALARM, CRITICALITY Model Number: NA  
Manufacturer: NR Serial Number: NA

**Reporting Requirements:**

EQP  
Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.  
Mode Reported: Written



FCP

Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.  
Mode Reported: Written

**References:**

<b>Reference Number:</b>	<b>Entry Date:</b>	<b>Retraction Date:</b>	<b>Coder Initials:</b>	<b>Reference Type:</b>
EN41822	11/30/2005		RLS	EVENT NOTIFICATION
Official Use Only - Not for Public Dissemination				
ML052240262	11/30/2005		RLS	LICENSEE REPORT
Official Use Only				
ML052450394	11/30/2005		RLS	INSPECTION REPORT
Official Use Only - Proprietary Information				
ML052450394	11/30/2005		RLS	NRC LETTER
Official Use Only - Proprietary Information				



Item Number: FC050009

Last Updated: 11/30/2005

**Narrative:**

The licensee reported a safety equipment failure in which criticality and fire detection alarm system communications were lost from the Lynchburg Technology Center (LTC) to the Alarm Station. A functional test, following a lightning strike during a severe electrical storm, identified that communications were lost between the LTC alarm panel and the alarm station. Compensatory measures were invoked and the condition was corrected. The cause of the failure was a power surge. Corrective actions included the installation of a surge suppressor. This event is related to event FC050008.

Event Date: 07/13/2005

Discovery Date: 07/14/2005

Report Date: 07/14/2005

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BWX TECHNOLOGIES, INC.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name LYNCHBURG	State: VA
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**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: Y
Atomic Energy Act Material: Y	Record Complete: Y
Consultant Hired: N	Event Closed: N

**Event Cause:**

EQP - EQUIPMENT  
Cause: WEATHER OR AMBIENT CONDITION

FCP - FUEL CYCLE PROBLEMS  
Cause: WEATHER OR AMBIENT CONDITION

**Corrective Actions Information:**

Action Number: Corrective Action:

EQP  
1 REPAIRS MADE WITH ENGINEERING CHANGE TO SYSTEM

FCP  
1 REPAIRS MADE WITH ENGINEERING CHANGE TO SYSTEM

**Device/Associated Equipment:**

EQP

**Device Number: 1**

Device Name: ALARM, CRITICALITY	Model Number: NA
Manufacturer: NR	Serial Number: NA
	Problem with Equipment:

FCP

**Device Number: 1**

Device Name: ALARM, CRITICALITY	Model Number: NA
Manufacturer: NR	Serial Number: NA

**Reporting Requirements:**

EQP

Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.

Mode Reported: Written



FCP

Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.  
Mode Reported: Written

**References:**

<b>Reference Number:</b>	<b>Entry Date:</b>	<b>Retraction Date:</b>	<b>Coder Initials:</b>	<b>Reference Type:</b>
EN41843	11/30/2005		RLS	EVENT NOTIFICATION
Official Use Only - Not for Public Dissemination				
ML052450394	11/30/2005		RLS	INSPECTION REPORT
Official Use Only - Proprietary Information				
ML052450394	11/30/2005		RLS	NRC LETTER
Official Use Only - Proprietary Information				
ML052760230	11/30/2005		RLS	LICENSEE REPORT
Official Use Only				



**Narrative:**

The licensee reported that a small fire occurred in the [redacted] calciner while it was loaded with low-level contaminated scrap materials. The radioactive material involved was less than 70 grams of uranium [redacted]. The door gasket had a small leak which the operator attempted to stop by tightening the door; however the leak became worse. The operator attempted to return the door to its original tightness, but the door became overly loose and the O-ring gasket dislodged and fell into the glovebox. Air contacted the hot gases leaking from the calciner and the gases ignited. A flash of flame came out of the calciner and into the glovebox enclosure. The flame was also drawn into the connecting ventilation ductwork. A prefilter in the vent duct caught fire, the HEPA filter was damaged, and part of the vent duct melted. The fire quickly self-extinguished and no containment breach or spread of contamination occurred. The fire alarm was not sounded due to confusion between the scene of the fire and the alarm station operator who received a verbal report from the scene. Therefore, the fire brigade did not respond to the scene. The licensee conducted training to improve the recognition of and appropriate response to emergency condition. Corrective actions include the installation of a new ventilation connection made of corrosion resistant metal.

Event Date: 07/09/2005

Discovery Date: 07/09/2005

Report Date: 07/13/2005

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0124 Name: NUCLEAR FUEL SERVICES, INC.  
NRC Docket Number: 07000143 City: ERWIN  
NRC Program Code: 21210 State: TN Zip Code: 376509718  
Responsible NRC Region: 2

**Site of Event:**

Site Name ERWIN State: TN

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: Y  
Atomic Energy Act Material: Y Record Complete: Y  
Consultant Hired: N Event Closed: N

**Event Cause:**

EQP - EQUIPMENT  
Cause: EQUIPMENT FAILURE  
FCP - FUEL CYCLE PROBLEMS  
Cause: EQUIPMENT FAILURE

**Corrective Actions Information:**

Action Number: Corrective Action:  
EQP  
1 REPAIRS MADE WITH ENGINEERING CHANGE TO SYSTEM  
2 PERSONNEL RECEIVED ADDITIONAL TRAINING  
FCP  
1 REPAIRS MADE WITH ENGINEERING CHANGE TO SYSTEM  
2 PERSONNEL RECEIVED ADDITIONAL TRAINING

**Source of Radiation:**

EQP  
**Source Number:** 1  
Source/Material: UNSEALED SOURCE SNM Radionuclide or Voltage (kVp/MeV): U-HE  
Device Name: FURNACE, OTHER Activity: NR Ci NR GBq  
Manufacturer: NR Problem with Source: NA  
Model Number: NA  
Serial Number: NA  
FCP



**Source Number: 1**

Source/Material: UNSEALED SOURCE SNM Radionuclide or Voltage (kVp/MeV): U-HE  
 Device Name: FURNACE, OTHER Activity: NR Ci NR GBq  
 Manufacturer: NR  
 Model Number: NA  
 Serial Number: NA

**Device/Associated Equipment:**

EQP

**Device Number: 1**

Device Name: FURNACE, OTHER Model Number: NR  
 Manufacturer: NR Serial Number: NR  
 Problem with Equipment: NA

FCP

**Device Number: 1**

Device Name: FURNACE, OTHER Model Number: NR  
 Manufacturer: NR Serial Number: NR

**Reporting Requirements:**

EQP

Reporting Requirement: 70.50(b)(4) - Unplanned fire or explosion damaging any licensed material or any device, container, or equipment containing licensed material.

Mode Reported: Written

FCP

Reporting Requirement: 70.50(b)(4) - Unplanned fire or explosion damaging any licensed material or any device, container, or equipment containing licensed material.

Mode Reported: Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN41839	11/30/2005		RLS	EVENT NOTIFICATION
Official Use Only - Not for Public Dissemination				
ML052280071	11/30/2005		RLS	LICENSEE REPORT
Official Use Only				
ML052630018	11/30/2005		RLS	INSPECTION REPORT
Official Use Only - Proprietary Information				
ML052630018	11/30/2005		RLS	NRC LETTER
Official Use Only - Proprietary Information				
ML052920557	11/30/2005		RLS	LICENSEE REPORT
Official Use Only				
ML053050389	12/12/2005		RLS	INSPECTION REPORT
Official Use Only - Proprietary Information				
ML053050389	12/12/2005		RLS	NRC LETTER
Official Use Only - Proprietary Information				



**Narrative:**

The licensee reported a safety equipment failure in which the criticality alarm system in the NDA/loading dock area was inoperable due to detector failure. An Eberline RMS-3 radiation monitor display unit reset internal scaling factors and alarm values to factory values. This failure was not detected until a monthly test was conducted on 10/8/2005, when the licensee determined that the NDA RMS-3 detector pair stopped communicating with the RadNet computer in early September 2005. This event was retracted on 11/4/2005 when the licensee determined that the area monitored by the detector was also monitored by several other detectors in adjacent areas. Also, further testing of the detector demonstrated that a redundant circuit in the unit would have enabled it to initiate an alarm in a criticality event. Due to uncertainty in how the failure occurred, the licensee committed to perform a weekly verification of alarm system function until this issue is fully resolved.

Event Date: 09/01/2005

Discovery Date: 10/08/2005

Report Date: 10/08/2005

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0124	Name: NUCLEAR FUEL SERVICES, INC.
NRC Docket Number: 07000143	City: ERWIN
NRC Program Code: 21210	State: TN Zip Code: 376509718
Responsible NRC Region: 2	

**Site of Event:**

Site Name ERWIN State: TN

**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: N	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: Y
Atomic Energy Act Material: Y	Record Complete: Y
Consultant Hired: N	Event Closed: N

**Event Cause:**

EQP - EQUIPMENT  
Cause: DEFECTIVE OR FAILED PART

FCP - FUEL CYCLE PROBLEMS  
Cause: DEFECTIVE OR FAILED PART

**Corrective Actions Information:**

Action Number:	Corrective Action:
EQP	
1	NOT REPORTED
FCP	
1	NOT REPORTED

**Device/Associated Equipment:**

EQP

<b>Device Number:</b> 1			
Device Name: DETECTOR, RADIATION	Model Number: RMS-3		
Manufacturer: EBERLINE	Serial Number: NR		
	Problem with Equipment: NA		

FCP

<b>Device Number:</b> 1			
Device Name: DETECTOR, RADIATION	Model Number: RMS-3		
Manufacturer: EBERLINE	Serial Number: NR		

**References:**

<b>Reference Number:</b>	<b>Entry Date:</b>	<b>Retraction Date:</b>	<b>Coder Initials:</b>	<b>Reference Type:</b>
EN42047	12/07/2005	11/04/2005	RLS	EVENT NOTIFICATION



ML053530311 12/20/2005  
Official Use Only - Department of Energy

RLS INSPECTION REPORT

ML053530311 12/20/2005  
Official Use Only - Department of Energy

RLS NRC LETTER







FCP

Reporting Requirement: 70.App A(b)(1) - Event or condition that results in the facility being in a state not analyzed, improperly analyzed, or different from that analyzed, and results in failure to meet the performance requirements of 70.61.

Mode Reported: Written

**References:**

<b>Reference Number:</b>	<b>Entry Date:</b>	<b>Retraction Date:</b>	<b>Coder Initials:</b>	<b>Reference Type:</b>
EN42089	12/07/2005		RLS	EVENT NOTIFICATION
Official Use Only - Not for Public Dissemination				
ML053360476	12/08/2005		RLS	LICENSEE REPORT
Official Use Only				
ML053530311	12/20/2005		RLS	INSPECTION REPORT
Official Use Only - Department of Energy				
ML053530311	12/20/2005		RLS	NOTICE OF VIOLATION
Official Use Only - Department of Energy				
ML053530311	12/20/2005		RLS	NRC LETTER
Official Use Only - Department of Energy				
ML060250141	01/30/2006		RLS	LICENSEE REPORT
Official Use Only				



**Narrative:**

The licensee reported the failure of an administrative item relied on for safety (IROF) for the Environmental Safety Program. On 10/16/2005, 48,604 liters of caustic solution containing 2,703 grams of uranium were transferred from Tank XX-0013 to Tank XX-0011. On 10/19/2005, an additional 4,002 liters containing 217 grams of uranium were transferred for a total of 2,920 grams of uranium in Tank XX-0011. The uranium contained U-235 with an enrichment of 65 weigh percent. The administrative environmental IROF limit for Tank XX-0011 was 2,400 grams of uranium. The event was discovered on 11/8/2005 and was caused by the lack of understanding on the part of operations personnel that a lower IROF limit had been established for Tank XX-0011 than for Tank XX-0013 (although the two tanks have identical capacity, dimension, and construction). Tank XX-0011 was quarantined and the accident sequence for the transfer was re-evaluated. This event did not involve or violate any criticality controls, and no release occurred. Corrective actions included reinforcement of the importance for strict compliance with procedural guidelines and a review of applicable IROFs. New consistent IROFs were established for the tanks.

Event Date: 10/19/2005

Discovery Date: 11/08/2050

Report Date: 11/09/2005

**Licensee/Reporting Party Information:**

Agreement State Regulated:	NO	Reciprocity:	NONE
License Number:	SNM-0124	Name:	NUCLEAR FUEL SERVICES, INC.
NRC Docket Number:	07000143	City:	ERWIN
NRC Program Code:	21210	State:	TN      Zip Code: 376509718
Responsible NRC Region:	2		

**Site of Event:**

Site Name      ERWIN      State:      TN

**Additional Involved Party:**

License Number:	NA	Name:	NA
		City:	NA
		State:	NA      Zip Code: NA

**Other Information:**

NRC Reportable Event:	Y	Abnormal Occurrence:	N
Agreement State Reportable Event:	N	Investigation:	Y
Atomic Energy Act Material:	Y	Record Complete:	Y
Consultant Hired:	N	Event Closed:	N

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause:      INATTENTION TO DETAIL

**Corrective Actions Information:**

Action Number:      Corrective Action:

FCP

1	PROCEDURE MODIFIED
2	PERSONNEL RECEIVED ADDITIONAL TRAINING

**Source of Radiation:**

FCP

**Source Number:**      1

Source/Material:	FUEL FABRICATION MATERIAL	Radionuclide or Voltage (kVp/MeV):	U-HE
Device Name:	TANK, STORAGE	Activity:	NR Ci      NR GBq
Manufacturer:	NR		
Model Number:	NA		
Serial Number:	NA		

**Device/Associated Equipment:**

FCP

**Device Number:**      1

Device Name:	TANK, STORAGE	Model Number:	NA
Manufacturer:	NR	Serial Number:	NA

**Reporting Requirements:**



FCP

Reporting Requirement: 70.App A(b)(1) - Event or condition that results in the facility being in a state not analyzed, improperly analyzed, or different from that analyzed, and results in failure to meet the performance requirements of 70.61.

Mode Reported: Written

**References:**

<b>Reference Number:</b>	<b>Entry Date:</b>	<b>Retraction Date:</b>	<b>Coder Initials:</b>	<b>Reference Type:</b>
EN42131 ATTACHM Official Use Only	12/07/2005		RLS	OTHER
EN42131 Official Use Only	12/07/2005		RLS	EVENT NOTIFICATION
ML053460366 Official Use Only	12/13/2005		RLS	LICENSEE REPORT
ML060230353 Official Use Only - Department of Energy	01/30/2006		RLS	INSPECTION REPORT
ML060230353 Official Use Only - Department of Energy	01/30/2006		RLS	NRC LETTER



Item Number: FC060001

Last Updated: 05/10/2007

**Narrative:**

The licensee reported the loss and recovery of a shipment of thorium metal shavings. The shipment consisted of 10 kg of natural thorium with a calculated activity of 81.4 MBq (2,200 uCi). On 11/11/2005, the licensee shipped a 55-gallon drum of thorium shavings to LR International, Incorporated. The drum was then to be shipped to Highways International of Holland. On or about 11/22/2005, Highways International notified the licensee that the shipment had not arrived, although the licensee's records indicated that it had been delivered on 11/21/2005. On 12/7/2005, the licensee determined that the shipment was lost. On or about 12/13/2005, the licensee learned that the shipment had been found at the shipping facility. The shipment was returned to the licensee. Because the shipment was found within 30 days of the licensee's determination that it was lost, the licensee retracted this event. Also, the licensee identified that the shipment exceeded the allowed weight limit for the general license documented on the shipping papers. Since the shipment was ultimately bound for Holland, the licensee claimed an oversight in that the shipping papers should have cited the limit. The shipping personnel were in a hurry and interchanged the appropriate regulating reference, the correlating weight, and the proper weight units. Corrective actions included re-instructing shipping personnel on the applicable requirements.

Event Date: 12/08/2005

Discovery Date: 12/08/2005

Report Date: 12/08/2005

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0124 Name: NUCLEAR FUEL SERVICES, INC.  
NRC Docket Number: 07000143 City: ERWIN  
NRC Program Code: 21210 State: TN Zip Code: 376509718  
Responsible NRC Region: 2

**Site of Event:**

Site Name ERWIN State: TN

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: Y  
Atomic Energy Act Material: Y Record Complete: Y  
Consultant Hired: N Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: MANAGEMENT DEFICIENCY  
LAS - LOST/ABANDONED/STOLEN  
Cause: MANAGEMENT DEFICIENCY

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 PERSONNEL RECEIVED ADDITIONAL TRAINING  
LAS  
1 PERSONNEL RECEIVED ADDITIONAL TRAINING

**Source of Radiation:**

FCP  
**Source Number:** 1  
Source/Material: UNSEALED SOURCE OTHER Radionuclide or Voltage (kVp/MeV): TH-NAT  
Device Name: CONTAINER, SHIPPING Activity: 0.0022 Ci 0.0814 GBq  
Manufacturer: NR  
Model Number: NA  
Serial Number: NA  
LAS



**Source Number: 1**

Source/Material: UNSEALED SOURCE OTHER Radionuclide or Voltage (kVp/MeV): TH-NAT  
 Device Name: CONTAINER, SHIPPING Activity: 0.0022 Ci 0.0814 GBq  
 Manufacturer: NR  
 Model Number: NA  
 Serial Number: NA

**Device/Associated Equipment:**

FCP

**Device Number: 1**

Device Name: CONTAINER, SHIPPING Model Number: NR  
 Manufacturer: NR Serial Number: NR

LAS

**Device Number: 1**

Device Name: CONTAINER, SHIPPING Model Number: NR  
 Manufacturer: NR Serial Number: NR

**Reporting Requirements:**

FCP

Reporting Requirement: 20.2201(a)(1)(ii) - Lost, stolen, or missing licensed material in a quantity greater than 10 times the Appendix C quantities.  
 Mode Reported: Telephone

LAS

Reporting Requirement: 20.2201(a)(1)(ii) - Lost, stolen, or missing licensed material in a quantity greater than 10 times the Appendix C quantities.  
 Mode Reported: Telephone

**Keywords:**

LAS

MATERIAL LOST AND FOUND

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
ML060230353	01/30/2006		RLS	INSPECTION REPORT
Official Use Only - Department of Energy				
ML060230353	01/30/2006		RLS	NRC LETTER
Official Use Only - Department of Energy				
EN42191	02/01/2006	12/13/2005	RLS	EVENT NOTIFICATION
Official Use Only - Not for Public Dissemination				
ML062760023	05/10/2007		RLS	INSPECTION REPORT
Official Use Only - Department of Energy				
ML062760023	05/10/2007		RLS	NRC LETTER
Official Use Only - Department of Energy				



**Narrative:**

While performing semi-annual testing of the criticality accident alarm system, one unit in a pair of detectors in the [redacted] Complex failed to initiate the site-wide audible alarm during the alarm/alarm test condition (however, alarm indication did occur at the local read-out panel). The cause of the alarm failure was determined to be a failed electronic relay switch in the alarm circuitry, in which the "normal" contacts opened as designed, but the "alarm" contacts failed to close on the high alarm relay. This allowed the unit to alarm, but prevented the signaling of the site-wide audible evacuation alarm. The equipment involved was a Thermo Electron Corporation RMS-3 radiation monitoring meter and its Potter and Brumfield auxiliary electronic relay switch (model RT424012F). The unit was replaced and successfully tested. The licensee determined that this event was the result of a design defect in the electronic relay switch used in the RMS-3 read-out meter.

Event Date: 12/22/2005

Discovery Date: 12/22/2005

Report Date: 12/23/2005

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0124 Name: NUCLEAR FUEL SERVICES, INC.  
NRC Docket Number: 07000143 City: ERWIN  
NRC Program Code: 21210 State: TN Zip Code: 376509718  
Responsible NRC Region: 2

**Site of Event:**

Site Name ERWIN State: TN

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: Y  
Atomic Energy Act Material: Y Record Complete: Y  
Consultant Hired: N Event Closed: N

**Event Cause:**

EQP - EQUIPMENT  
Cause: DESIGN, MANUFACTURING, OR INSTALLATION ERROR  
FCP - FUEL CYCLE PROBLEMS  
Cause: DESIGN, MANUFACTURING, OR INSTALLATION ERROR

**Corrective Actions Information:**

Action Number: Corrective Action:  
EQP  
1 NEW EQUIPMENT OBTAINED  
FCP  
1 NEW EQUIPMENT OBTAINED

**Device/Associated Equipment:**

EQP  
**Device Number: 1**  
Device Name: DETECTOR, RADIATION Model Number: RMS-3  
Manufacturer: THERMO ELECTRON Serial Number: NR  
Problem with Equipment: NA  
**Device Number: 2**  
Device Name: RELAY, OTHER Model Number: RT424012F  
Manufacturer: POTTER & BRUMFIELD Serial Number: NA  
Problem with Equipment:  
FCP  
**Device Number: 1**  
Device Name: DETECTOR, RADIATION Model Number: RMS-3  
Manufacturer: THERMO ELECTRON Serial Number: NR



**Device Number: 2**

Device Name: RELAY, OTHER  
Manufacturer: POTTER & BRUMFIELD

Model Number: RT424012F  
Serial Number: NA

**Reporting Requirements:**

EQP

Reporting Requirement: 21.21(d)(1)(ii) - A failure to comply or a defect affecting a basic component that is supplied for a facility or an activity that is subject to licensing requirements.

Mode Reported: Written

FCP

Reporting Requirement: 21.21(d)(1)(ii) - A failure to comply or a defect affecting a basic component that is supplied for a facility or an activity that is subject to licensing requirements.

Mode Reported: Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
ML060240387	01/30/2006		RLS	LICENSEE REPORT
EN42226	02/01/2006		RLS	EVENT NOTIFICATION
ML060750244	03/20/2006		RLS	LICENSEE REPORT
Official Use Only				
ML060660229	04/18/2006		RLS	INSPECTION REPORT
Official Use Only - Department of Energy				
ML060660229	04/18/2006		RLS	NRC LETTER
Official Use Only - Department of Energy				



**Narrative:**

The licensee reported that the set-point for the Building [redacted] condensate tank in-line uranium concentration monitor was set at a non-conservative value. This monitor is relied on to maintain mass control for the condensate tank and to maintain concentration control for tanks in the Waste Water Treatment Facility (WWTF). The required set-point for mass control is [redacted] grams U-235/liter, while the required set-point for concentration control is [redacted] grams U-235/liter. The monitor was set at [redacted] grams U-235/liter and was thus non-conservative with respect to concentration control. Upon discovery, transfer operations to the condensate tank were suspended. Samples results for the WWTF tanks showed extremely low uranium concentrations. The set-point for the in-line monitor was set to the most conservative concentration value and the monitor was recalibrated and re-tested. A review of all other in-line monitor set-points found no additional problems. The event was caused by the lack of a set-point verification requirement on the Nuclear Criticality Safety Evaluation control flowdown/field verification form.. Corrective actions included the use of a modified checklist.

Event Date: 01/05/2006

Discovery Date: 01/06/2006

Report Date: 01/06/2006

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0124 Name: NUCLEAR FUEL SERVICES, INC.  
NRC Docket Number: 07000143 City: ERWIN  
NRC Program Code: 21210 State: TN Zip Code: 376509718  
Responsible NRC Region: 2

**Site of Event:**

Site Name ERWIN State: TN

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: Y  
Atomic Energy Act Material: Y Record Complete: Y  
Consultant Hired: N Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: DEFECTIVE OR INADEQUATE PROCEDURE

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 PROCEDURE MODIFIED

**Device/Associated Equipment:**

FCP  
Device Number: 1  
Device Name: DETECTOR, RADIATION Model Number: NR  
Manufacturer: NR Serial Number: NR

**Reporting Requirements:**

FCP  
Reporting Requirement: 70.App A(b)(2) - Loss or degradation of IROFSs that results in failure to meet the performance requirement of 70.61.  
Mode Reported: Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN42244	02/02/2006		RLS	EVENT NOTIFICATION
Official Use Only - Not for Public Dissemination				
ML060380263	02/09/2006		RLS	LICENSEE REPORT
Official Use Only				



ML060660229 04/18/2006  
Official Use Only - Department of Energy

RLS INSPECTION REPORT

ML060660229 04/18/2006  
Official Use Only - Department of Energy

RLS NRC LETTER







**Device Number: 1**

Device Name: GLOVEBOX

Model Number: NA

Manufacturer: NR

Serial Number: NA

**Reporting Requirements:**

FCP

Reporting Requirement: 70.App A(b)(1) - Event or condition that results in the facility being in a state not analyzed, improperly analyzed, or different from that analyzed, and results in failure to meet the performance requirements of 70.61.

Mode Reported: Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
ML060770002	03/20/2006		RLS	CONFIRMATORY ACTION LETTER
Official Use Only - Department of Energy				
EN42393	03/23/2006		RLS	EVENT NOTIFICATION
Official Use Only				
ML061040239	04/17/2006		RLS	LICENSEE REPORT
Official Use Only				
ML061070130	04/18/2006		RLS	INSPECTION REPORT
Official Use Only - Department of Energy				
ML061070130	04/18/2006		RLS	NOTICE OF VIOLATION
Official Use Only - Department of Energy				
ML061070130	04/18/2006		RLS	NRC LETTER
Official Use Only - Department of Energy				
ML061080566	04/19/2006		RLS	INSPECTION REPORT
Official Use Only - Department of Energy				
ML061080566	04/19/2006		RLS	NRC LETTER
Official Use Only - Department of Energy				
LTR060505	06/12/2006		RLS	NRC LETTER
Official Use Only - Department of Energy				
LTR060511	06/12/2006		RLS	NRC LETTER
Official Use Only - Department of Energy				
ML060970473	06/12/2006		RLS	LICENSEE REPORT
Official Use Only - Department of Energy				
ML060970483	06/12/2006		RLS	LICENSEE REPORT
Official Use Only - Department of Energy				
ML060970486	06/12/2006		RLS	LICENSEE REPORT
Official Use Only - Department of Energy				
ML061000699	06/12/2006		RLS	ADAMS DOCUMENT PACKAGE
Official Use Only - Department of Energy				
ML061000733	06/12/2006		RLS	NRC LETTER
Official Use Only - Department of Energy				
ML061250018	06/12/2006		RLS	INSPECTION REPORT
Official Use Only - Department of Energy				
ML061250018	06/12/2006		RLS	NRC LETTER
Official Use Only - Department of Energy				
ML061630373	07/10/2006		RLS	INSPECTION REPORT
Official Use Only - Department of Energy				



ML061630373	07/10/2006	RLS	NRC LETTER
Official Use Only - Department of Energy			
ML062060594	08/07/2006	RLS	NRC LETTER
Official Use Only - Department of Energy			
ML062330322	08/23/2006	RLS	LICENSEE REPORT
Official Use Only			
ML062330322	08/23/2006	RLS	NRC LETTER
Official Use Only - Department of Energy			
ML062370433	09/07/2006	RLS	NRC LETTER
Official Use Only - Department of Energy			
ML063330644	12/06/2006	RLS	INSPECTION REPORT
Official Use Only - Department of Energy			
ML063330644	12/06/2006	RLS	NRC LETTER
Official Use Only - Department of Energy			
LTR070116	01/17/2007	RLS	NRC LETTER
ML070520603	02/26/2007	RLS	NRC LETTER
Official Use Only - Department of Energy			
ML070520607	02/26/2007	RLS	OTHER
Official Use Only - Department of Energy			
06-01	05/09/2007	RLS	ABNORMAL OCCURRENCE NUMBER
ML071080195	05/09/2007	RLS	ABNORMAL OCCURRENCE NUMBER
ML071910431	07/23/2007	RLS	NOTIFICATION OF SIGNIFICANT ENFORCEMENT ACTION
ML071930522	08/07/2007	RLS	NRC LETTER
ML071990558	08/07/2007	RLS	NRC LETTER
ML072630328	09/26/2007	RLS	INSPECTION REPORT
ML072630328	09/26/2007	RLS	NRC LETTER
ML081300424	05/16/2008	RLS	ABNORMAL OCCURRENCE NUMBER

**Narrative:**

The licensee reported the potential degradation of glovebox overflow drains in the uranium-aluminum dissolution process. This condition was identified when an NRC inspector questioned the impact of the glovebox enclosure vacuum on the design and function of glovebox overflow drains. The enclosure vacuum was not considered in the set-point analysis for these drains such that, under vacuum circumstances above normal, the drains may not function as intended. This event was caused by an oversight by project engineering personnel. The licensee suspended operations in the affected enclosures pending resolution. Modifications were made to all affected enclosure overflow drains to account for the absolute worst case enclosure vacuum for the facility.

Event Date: 10/21/2005

Discovery Date: 10/21/2005

Report Date: 11/10/2005

**Licensee/Reporting Party Information:**

Agreement State Regulated:	NO	Reciprocity:	NONE
License Number:	SNM-0124	Name:	NUCLEAR FUEL SERVICES, INC.
NRC Docket Number:	07000143	City:	ERWIN
NRC Program Code:	21210	State:	TN      Zip Code: 376509718
Responsible NRC Region:	2		

**Site of Event:**

Site Name	ERWIN	State:	TN
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**Additional Involved Party:**

License Number:	NA	Name:	NA
		City:	NA
		State:	NA      Zip Code: NA

**Other Information:**

NRC Reportable Event:	Y	Abnormal Occurrence:	N
Agreement State Reportable Event:	N	Investigation:	Y
Atomic Energy Act Material:	Y	Record Complete:	Y
Consultant Hired:	N	Event Closed:	Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: HUMAN ERROR

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1      REPAIRS MADE WITH ENGINEERING CHANGE TO SYSTEM

**Source of Radiation:**

FCP  
**Source Number:** 1

Source/Material:	UNSEALED SOURCE SNM	Radionuclide or Voltage (kVp/MeV):	U-HE
Device Name:	GLOVEBOX	Activity:	NR Ci      NR GBq
Manufacturer:	NR		
Model Number:	NA		
Serial Number:	NA		

**Device/Associated Equipment:**

FCP  
**Device Number:** 1

Device Name:	GLOVEBOX	Model Number:	NR
Manufacturer:	NR	Serial Number:	NR

**Reporting Requirements:**

FCP  
Reporting Requirement: 70.App A(b)(2) - Loss or degradation of IROFSs that results in failure to meet the performance requirement of 70.61.  
Mode Reported: Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
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EN42133	07/10/2006	RLS	EVENT NOTIFICATION
Official Use Only			
ML053470021	07/10/2006	RLS	LICENSEE REPORT
Official Use Only			
ML053530311	07/10/2006	RLS	INSPECTION REPORT
Official Use Only - Department of Energy			
ML053530311	07/10/2006	RLS	NRC LETTER
Official Use Only - Department of Energy			
ML060260384	07/10/2006	RLS	NRC LETTER
Official Use Only - Department of Energy			

**Narrative:**

The licensee reported a possible unanalyzed condition due to a fixture failure. A large [redacted] component (a commercial fuel assembly) was being removed from a vertical cold water rinse tank using a crane. While suspended directly over the tank, the fixture failed and the component dropped into the tank. There was no significant damage to the tank or the component, but approximately 20 gallons of water was expelled from the tank and the crane was damaged from the recoil of the crane hook. The component was subsequently removed from the tank using a different type of fixture and a different crane. The licensee determined that the fixture failed due to inadequate design. The designer failed to account for a lateral bending stress applied during movement, and, as a result, a small crack developed and grew until failure following a few months of use. Corrective actions included redesign of the fixture, revised inspection procedures, and personnel training. After an investigation, the licensee determined that this event was [redacted] in the original Integrated Safety Analysis; therefore, at no time was the facility in an unanalyzed condition.

Event Date: 02/20/2006

Discovery Date: 02/20/2006

Report Date: 02/21/2006

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0042 Name: BWX TECHNOLOGIES, INC.  
NRC Docket Number: 07000027 City: LYNCHBURG  
NRC Program Code: 21210 State: VA Zip Code: 24505-0785  
Responsible NRC Region: 2

**Site of Event:**

Site Name LYNCHBURG State: VA

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: N Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: Y  
Atomic Energy Act Material: Y Record Complete: Y  
Consultant Hired: N Event Closed: N

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: DESIGN, MANUFACTURING, OR INSTALLATION ERROR

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 ENGINEERING CHANGE TO SYSTEM  
2 PROCEDURE MODIFIED  
3 PERSONNEL RECEIVED ADDITIONAL TRAINING

**Source of Radiation:**

FCP  
Source Number: 1  
Source/Material: FUEL PELLETT Radionuclide or Voltage (kVp/MeV): SNM  
Device Name: FUEL ASSEMBLY Activity: NR Ci NR GBq  
Manufacturer: BABCOCK & WILCOX  
Model Number: NA  
Serial Number: NA

**Device/Associated Equipment:**

FCP  
Device Number: 1  
Device Name: FUEL ASSEMBLY Model Number: NA  
Manufacturer: BABCOCK & WILCOX Serial Number: NA

**References:**

Reference Number: Entry Date: Retraction Date: Coder Initials: Reference Type:



EN42352	07/10/2006	RLS	EVENT NOTIFICATION
Official Use Only			
ML060900468	07/10/2006	RLS	LICENSEE REPORT
Official Use Only			
ML061310511	01/31/2007	RLS	INSPECTION REPORT
Official Use Only - Department of Energy			
ML061310511	01/31/2007	RLS	NRC LETTER
Official Use Only - Department of Energy			



**Narrative:**

The licensee reported the identification of a potential unsecured accumulation point. During facility inspections, licensee personnel identified an out-of-service equipment elevator. When the elevator door was opened, personnel discovered a pit area that was approximately 8.5 inches below the building floor level. Although no actual material accumulation had occurred, there was no item relied on for safety (IROFS) or formal controls in place to prevent a solution leak from entering this location. This event was caused by the failure to identify and control the elevator pit during initial construction and operation of the facility. Corrective actions included filling the pit with concrete and welding the first floor doors open. This event was discovered in response to event FC060004.

Event Date: 03/13/2006

Discovery Date: 03/13/2006

Report Date: 03/13/2006

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0124	Name: NUCLEAR FUEL SERVICES, INC.
NRC Docket Number: 07000143	City: ERWIN
NRC Program Code: 21210	State: TN      Zip Code: 376509718
Responsible NRC Region: 2	

**Site of Event:**

Site Name      ERWIN	State:      TN
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**Additional Involved Party:**

License Number: NA	Name:      NA
	City:      NA
	State:      NA      Zip Code: NA

**Other Information:**

NRC Reportable Event:	Y	Abnormal Occurrence:	Y
Agreement State Reportable Event:	N	Investigation:	Y
Atomic Energy Act Material:	Y	Record Complete:	Y
Consultant Hired:	N	Event Closed:	N

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause:      MANAGEMENT DEFICIENCY

**Corrective Actions Information:**

Action Number:    Corrective Action:  
FCP  
1      ENGINEERING CHANGE TO SYSTEM

**Reporting Requirements:**

FCP  
Reporting Requirement: 70.App A(a)(4)(ii) - Event or condition such that no IROFSs remain available and reliable to prevent a nuclear criticality accident (i.e., loss of all controls in a particular sequence).  
Mode Reported:      Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN42411	07/10/2006		RLS	EVENT NOTIFICATION
Official Use Only				
LTR060505	07/10/2006		RLS	NRC LETTER
LTR060511	07/10/2006		RLS	NRC LETTER
ML060770002	07/10/2006		RLS	NRC LETTER
Official Use Only - Department of Energy				
ML060970473	07/10/2006		RLS	LICENSEE REPORT
Official Use Only - Department of Energy				

ML060970483	07/10/2006	RLS	LICENSEE REPORT
Official Use Only - Department of Energy			
ML060970486	07/10/2006	RLS	LICENSEE REPORT
Official Use Only - Department of Energy			
ML061000699	07/10/2006	RLS	ADAMS DOCUMENT PACKAGE
Official Use Only - Department of Energy			
ML061000733	07/10/2006	RLS	NRC LETTER
Official Use Only - Department of Energy			
ML061040239	07/10/2006	RLS	LICENSEE REPORT
Official Use Only			
ML061070130	07/10/2006	RLS	INSPECTION REPORT
Official Use Only - Department of Energy			
ML061070130	07/10/2006	RLS	NRC LETTER
Official Use Only - Department of Energy			
ML061080566	07/10/2006	RLS	INSPECTION REPORT
Official Use Only - Department of Energy			
ML061080566	07/10/2006	RLS	NRC LETTER
Official Use Only - Department of Energy			
ML061100097	07/10/2006	RLS	LICENSEE REPORT
Official Use Only			
ML061630373	07/10/2006	RLS	INSPECTION REPORT
Official Use Only - Department of Energy			
ML061630373	07/10/2006	RLS	NRC LETTER
Official Use Only - Department of Energy			
ML062060594	08/07/2006	RLS	NRC LETTER
Official Use Only - Department of Energy			
ML062330322	08/23/2006	RLS	LICENSEE REPORT
Official Use Only			
ML062330322	08/23/2006	RLS	NRC LETTER
Official Use Only - Department of Energy			
ML062370433	09/07/2006	RLS	NRC LETTER
Official Use Only - Department of Energy			
ML063330644	12/06/2006	RLS	INSPECTION REPORT
Official Use Only - Department of Energy			
ML063330644	12/06/2006	RLS	NRC LETTER
Official Use Only - Department of Energy			
LTR070116	01/17/2007	RLS	NRC LETTER
ML070520603	02/26/2007	RLS	NRC LETTER
Official Use Only - Department of Energy			
ML070520607	02/26/2007	RLS	OTHER
Official Use Only - Department of Energy			
06-01	05/09/2007	RLS	ABNORMAL OCCURRENCE NUMBER

			
ML071080195	05/09/2007	RLS	ABNORMAL OCCURRENCE NUMBER
ML071910431	07/23/2007	RLS	NOTIFICATION OF SIGNIFICANT ENFORCEMENT ACTION
ML071930522	08/07/2007	RLS	NRC LETTER
ML071990558	08/07/2007	RLS	NRC LETTER
ML072630328	09/26/2007	RLS	INSPECTION REPORT
ML072630328	09/26/2007	RLS	NRC LETTER
ML081300424	05/16/2008	RLS	ABNORMAL OCCURRENCE NUMBER



Item Number: FC060008

Last Updated: 09/21/2006

**Narrative:**

The licensee reported the discovery of low levels of Tc-99 contamination in two shallow groundwater monitoring wells (FEP-1 and FEP-2) adjacent to the Final Effluent Ponds. The Tc-99 levels were 52.1 and 229.62 Bq/L (1,408 and 6,206 pCi/L) for wells FEP-1 and FEP-2, respectively. These levels are above the license action level for beta activity. The gross beta levels were also above the gross beta screening levels for groundwater and surface water. The licensee's initial investigation concluded that the contamination is contained on their site and there is no potential for the contamination to migrate to offsite groundwater or to affect onsite drinking water. The licensee notified the Virginia Department of Environmental Quality.

Event Date: 08/14/2006

Discovery Date: 08/14/2006

Report Date: 08/14/2006

**Licensee/Reporting Party Information:**

Agreement State Regulated:	NO	Reciprocity:	NONE
License Number:	SNM-0042	Name:	BWX TECHNOLOGIES, INC.
NRC Docket Number:	07000027	City:	LYNCHBURG
NRC Program Code:	21210	State:	VA      Zip Code: 24505-0785
Responsible NRC Region:	2		

**Site of Event:**

Site Name	LYNCHBURG	State:	VA
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**Additional Involved Party:**

License Number:	NA	Name:	NA
		City:	NA
		State:	NA      Zip Code: NA

**Other Information:**

NRC Reportable Event:	N	Abnormal Occurrence:	N
Agreement State Reportable Event:	N	Investigation:	N
Atomic Energy Act Material:	Y	Record Complete:	Y
Consultant Hired:	N	Event Closed:	N

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: NOT REPORTED

RLM - RADIOACTIVE MATERIAL REL.  
Cause: NOT REPORTED

**Corrective Actions Information:**

Action Number:	Corrective Action:
FCP	
1	NOT REPORTED
RLM	
1	NOT REPORTED

**Release of Material or Contamination Information:**

Type or Release or Contamination:	Activity:	Radionuclide:	Effect of Release or Contamination:
	Ci      GBq		
WATER	NR      NR	TC-99	

**Source of Radiation:**

FCP

<b>Source Number:</b>	1		
Source/Material:	UNSEALED SOURCE OTHER	Radionuclide or Voltage (kVp/MeV):	TC-99
Device Name:	NA	Activity:	NR Ci      NR GBq
Manufacturer:	NR		
Model Number:	NA		
Serial Number:	NA		

RLM



**Source Number:** 1

Source/Material: UNSEALED SOURCE OTHER Radionuclide or Voltage (kVp/MeV): TC-99  
Device Name: NA Activity: NR Ci NR GBq  
Manufacturer: NR  
Model Number: NA  
Serial Number: NA

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN42809	09/21/2006		RLS	EVENT NOTIFICATION

Official Use Only



Item Number: FC070001

Last Updated: 01/04/2007

**Narrative:**

The licensee reported receiving a shipment of natural uranium oxide powder on 6/24/2004 from CAMECO in which one of the 55-gallon drums was found to be contaminated on the bottom. The survey result was 455 dpm/100 cm2. Access to the drum was restricted by placing it in a roped off area. This event was retracted on 7/1/2004 because the contamination limit for natural uranium is 22 dpm/cm2, which converts to 2,200 dpm/100 cm2.

Event Date: 06/24/2004

Discovery Date: 06/24/2004

Report Date: 06/24/2004

**Licensee/Reporting Party Information:**

Agreement State Regulated:	NO	Reciprocity:	NONE
License Number:	SNM-0124	Name:	NUCLEAR FUEL SERVICES, INC.
NRC Docket Number:	07000143	City:	ERWIN
NRC Program Code:	21210	State:	TN      Zip Code: 376509718
Responsible NRC Region:	2		

**Site of Event:**

Site Name      ERWIN      State:      TN

**Additional Involved Party:**

License Number:	NR	Name:	CAMECO
		City:	NR
		State:	NR      Zip Code: NR

**Other Information:**

NRC Reportable Event:	N	Abnormal Occurrence:	N
Agreement State Reportable Event:	N	Investigation:	N
Atomic Energy Act Material:	Y	Record Complete:	Y
Consultant Hired:	N	Event Closed:	N

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS

Cause: NOT REPORTED

TRS - TRANSPORTATION

Cause: NOT REPORTED

**Corrective Actions Information:**

Action Number: Corrective Action:

FCP

1      NOT REPORTED

TRS

1      NOT REPORTED

**Source of Radiation:**

FCP

Source Number: 1

Source/Material:	UNSEALED SOURCE NORM	Radionuclide or Voltage (kVp/MeV):	U-NAT
Device Name:	CONTAINER, SHIPPING	Activity:	NR Ci      NR GBq
Manufacturer:	CAMECO		
Model Number:	NA		
Serial Number:	NA		

TRS

Source Number: 1

Source/Material:	UNSEALED SOURCE NORM	Radionuclide or Voltage (kVp/MeV):	U-NAT
Device Name:	CONTAINER, SHIPPING	Activity:	NR Ci      NR GBq
Manufacturer:	CAMECO		
Model Number:	NA		
Serial Number:	NA		

**Device/Associated Equipment:**

FCP



**Device Number:** 1

Device Name: CONTAINER, SHIPPING

Manufacturer: NR

Model Number: NR

Serial Number: NR

TRS

**Device Number:** 1

Device Name: CONTAINER, SHIPPING

Manufacturer: NR

Model Number: NR

Serial Number: NR

**References:**

<b>Reference Number:</b>	<b>Entry Date:</b>	<b>Retraction Date:</b>	<b>Coder Initials:</b>	<b>Reference Type:</b>
EN40840	01/04/2007	07/01/2004	RLS	EVENT NOTIFICATION

Official Use Only - Not for Public Dissemination



**Narrative:**

The licensee reported that safety-related needle valves were in the incorrect position. The needle valves on rotometers [redacted] and [redacted] in the BLEU Preparation Facility were closed on the U-Aluminum dissolver system when they were required to be open to allow a nitrogen purge in the dissolver to protect against a hydrogen explosion in the enclosure or at the dissolver/enclosure interface. A nitrogen trickle system was in place and operating to partially mitigate a potential hydrogen explosion. Upon discovery of the valve closure, valves were immediately opened. It was determined that the valves were closed on 9/30/2004 due to a level switch malfunction causing a caustic solution spill. On 10/5/2004, the system was restarted but the procedure did not provide guidance to check the status of needle valves. Corrective actions included procedure modification.

Event Date: 10/05/2004

Discovery Date: 10/06/2004

Report Date: 10/06/2004

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0124 Name: NUCLEAR FUEL SERVICES, INC.  
NRC Docket Number: 07000143 City: ERWIN  
NRC Program Code: 21210 State: TN Zip Code: 376509718  
Responsible NRC Region: 2

**Site of Event:**

Site Name ERWIN State: TN

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: U Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: Y  
Atomic Energy Act Material: Y Record Complete: N  
Consultant Hired: N Event Closed: N

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: DEFECTIVE OR INADEQUATE PROCEDURE

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 PROCEDURE MODIFIED

**Device/Associated Equipment:**

FCP  
Device Number: 1  
Device Name: VALVE, OTHER Model Number: NR  
Manufacturer: NR Serial Number: NR

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN41097	01/04/2007		RLS	EVENT NOTIFICATION
Official Use Only - Not for Public Dissemination				
ML043350138	01/04/2007		RLS	LICENSEE REPORT
Official Use Only				
ML043520421	01/04/2007		RLS	INSPECTION REPORT
Official Use Only - Proprietary Information				
ML043520421	01/04/2007		RLS	NRC LETTER
Official Use Only - Proprietary Information				

**Narrative:**

On 11/15/2004, the licensee discovered that the wet off-gas (WOG) line for the raffinate column [REDACTED] in the [REDACTED] area was not properly sized. A review of completed setpoint analyses identified a setpoint analysis for raffinate column WOG vent [REDACTED] that had failed the specified performance criteria. Specifically, WOG vent [REDACTED] could not handle the flow rate when SNM [REDACTED] solution was transferred to sump columns [REDACTED] and [REDACTED] using pump [REDACTED]. Pump [REDACTED] was immediately taken out of service. This event occurred because the process engineer who initially performed the setpoint analysis was transferred to another task. The new process engineer did not recognize that the specified performance criteria was not met and reported the analysis as being passed. Also, there was no formal process for performing setpoint analyses, poor turnover communication, and no verification and validation. An investigation identified several additional setpoint analyses as having not been performed. To prevent recurrence, the licensee modified their procedures setpoint analyses. The licensee also corrected the sizing problem by modifying inputs to the system in order to prevent the WOG lines from being overwhelmed, which could create a criticality issue due to backflow.

Event Date: 11/15/2004

Discovery Date: 11/15/2004

Report Date: 11/15/2004

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0124 Name: NUCLEAR FUEL SERVICES, INC.  
NRC Docket Number: 07000143 City: ERWIN  
NRC Program Code: 21210 State: TN Zip Code: 376509718  
Responsible NRC Region: 2

**Site of Event:**

Site Name ERWIN State: TN

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: U Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: Y  
Atomic Energy Act Material: Y Record Complete: N  
Consultant Hired: N Event Closed: N

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: MANAGEMENT DEFICIENCY

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 ENGINEERING CHANGE TO SYSTEM  
2 PROCEDURE MODIFIED

**Device/Associated Equipment:**

FCP  
Device Number: 1  
Device Name: LINE, TRANSFER Model Number: NA  
Manufacturer: NR Serial Number: NA

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN41197	01/04/2007		RLS	EVENT NOTIFICATION
Official Use Only - Not for Public Dissemination				
ML043640538	01/04/2007		RLS	LICENSEE REPORT
Official Use Only				
ML051780418	01/04/2007		RLS	INSPECTION REPORT
Official Use Only - Proprietary Information				



ML051780418      01/04/2007  
Official Use Only - Proprietary Information

ML053050389      01/04/2007  
Official Use Only - Proprietary Information

ML053050389      01/04/2007  
Official Use Only - Proprietary Information

RLS      NRC LETTER

RLS      INSPECTION REPORT

RLS      NRC LETTER



**Narrative:**

On 1/17/2005, personnel [REDACTED] were unable to detect any information from the facility fire protection system and declared the system inoperable. Compensatory measures were put in place, including patrolling the facility with special emphasis on radiologically controlled areas. The system was restored in approximately 4 hours. An investigation determined that the root cause of this event was the failure to implement adequate administrative controls for maintenance of the fire detection system computers. A vendor-recommended preventive maintenance task to re-initialize the computers monthly was deleted when a computer technician deemed the task unnecessary. The computer shutdown as a result of several months of operation without being re-initialized. The preventive maintenance task was re-instituted.

Event Date: 01/17/2005

Discovery Date: 01/17/2005

Report Date: 01/17/2005

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0042 Name: BWX TECHNOLOGIES, INC.  
NRC Docket Number: 07000027 City: LYNCHBURG  
NRC Program Code: 21210 State: VA Zip Code: 24505-0785  
Responsible NRC Region: 2

**Site of Event:**

Site Name LYNCHBURG State: VA

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: Y  
Atomic Energy Act Material: Y Record Complete: Y  
Consultant Hired: N Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: MAINTENANCE PROBLEM

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 PROCEDURE MODIFIED

**Device/Associated Equipment:**

FCP  
Device Number: 1  
Device Name: DETECTOR, SMOKE Model Number: NR  
Manufacturer: NR Serial Number: NR

**Reporting Requirements:**

FCP  
Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.  
Mode Reported: Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN41341	01/04/2007		RLS	EVENT NOTIFICATION
Official Use Only - Not for Public Dissemination				
ML050750546	01/04/2007		RLS	INSPECTION REPORT
Official Use Only - Proprietary Information				
ML050750546	01/04/2007		RLS	NRC LETTER
Official Use Only - Proprietary Information				

ML052860261

01/04/2007



RLS

LICENSEE REPORT

Official Use Only



**Narrative:**

On 3/24/2005, the licensee reported that a piece of configuration controlled equipment for a storage rack was not in place for the safe storage of SNM. The piece of equipment prevents containers of SNM from being stored between approved storage positions. No containers were observed to be stored in unapproved locations. Corrective actions included taking the affected storage positions out of service until the piece of equipment was installed and verified. This event was retracted on 4/6/2005 because it was determined that other items relied on for safety (IROFS) listed in the ISA summary were in place such that double contingency protection was maintained.

Event Date: 03/24/2005

Discovery Date: 03/24/2005

Report Date: 03/24/2005

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0124	Name: NUCLEAR FUEL SERVICES, INC.
NRC Docket Number: 07000143	City: ERWIN
NRC Program Code: 21210	State: TN      Zip Code: 376509718
Responsible NRC Region: 2	

**Site of Event:**

Site Name      ERWIN	State:      TN
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**Additional Involved Party:**

License Number: NA	Name:      NA
	City:      NA
	State:      NA      Zip Code: NA

**Other Information:**

NRC Reportable Event:      N	Abnormal Occurrence:      N
Agreement State Reportable Event:      N	Investigation:      Y
Atomic Energy Act Material:      Y	Record Complete:      Y
Consultant Hired:      N	Event Closed:      N

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: NOT REPORTED

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1      ENGINEERING CHANGE TO SYSTEM

**Source of Radiation:**

FCP

<b>Source Number:</b> 1		
Source/Material:      FUEL FABRICATION MATERIAL	Radionuclide or Voltage (kVp/MeV):      SNM	
Device Name:      RACK, STORAGE	Activity:      NR Ci	NR GBq
Manufacturer:      NR		
Model Number:      NA		
Serial Number:      NA		

**Device/Associated Equipment:**

FCP

<b>Device Number:</b> 1		
Device Name:      RACK, STORAGE	Model Number:      NA	
Manufacturer:      NR	Serial Number:      NA	

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN41523	01/08/2007	04/06/2005	RLS	EVENT NOTIFICATION
Official Use Only - Not for Public Dissemination				
ML051110571	01/08/2007		RLS	ADAMS DOCUMENT PACKAGE



ML051110577      01/08/2007  
Official Use Only

RLS                      NRC LETTER

ML051110586      01/08/2007  
Official Use Only

RLS                      INSPECTION REPORT



**Narrative:**

The licensee reported the accumulation of product in a process vessel whose mass was different than analyzed in the Integrated Safety Analysis for a health physics-related consequence. The involved system was shutdown and no similar systems were operating. This event was retracted on 4/13/2006. The health physics consequence evaluation assumed that the entire mass of product was respirable. Measurements on 3/24 and 4/6/2006 showed that less than one percent of the mass was respirable. The actual respirable product mass was three percent of the amount that would result in a high health physics consequence assuming a release of material. Substitution of the actual respirable product mass into the health physics consequence evaluation resulted in a low consequence. Therefore, the performance requirements were met.

Event Date: 03/22/2006

Discovery Date: 03/22/2006

Report Date: 03/22/2006

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0124 Name: NUCLEAR FUEL SERVICES, INC.  
NRC Docket Number: 07000143 City: ERWIN  
NRC Program Code: 21210 State: TN Zip Code: 376509718  
Responsible NRC Region: 2

**Site of Event:**

Site Name ERWIN State: TN

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: N Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: Y  
Atomic Energy Act Material: Y Record Complete: Y  
Consultant Hired: N Event Closed: N

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: NOT REPORTED

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 NOT REPORTED

**Source of Radiation:**

FCP  
**Source Number: 1**  
Source/Material: FUEL FABRICATION MATERIAL Radionuclide or Voltage (kVp/MeV): SNM  
Device Name: UF6 PROCESS Activity: NR Ci NR GBq  
Manufacturer: NR  
Model Number: NA  
Serial Number: NA

**Device/Associated Equipment:**

FCP  
**Device Number: 1**  
Device Name: UF6 PROCESS Model Number: NA  
Manufacturer: NR Serial Number: NA

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN42442	01/08/2007	04/13/2006	RLS	EVENT NOTIFICATION

Official Use Only - Not for Public Dissemination

**Narrative:**

The licensee reported that the criticality accident alarm system (CAAS) in the [redacted] Complex was not capable of providing a site-wide evacuation alarm in the event of a criticality, even though the system control panel showed no indication of a problem. Troubleshooting identified a short in one of the circuit cards in the central panel. The CAAS was operation during a routine test on 5/1/2006. On 5/20/2006, a severe thunderstorm resulted in a lightning strike that damaged electronic components throughout the facility. On 5/31/2006, a full functional test of the CAAS was performed and the system failure was identified. The CAAS was repaired and the licensee implemented a compensatory action to provide additional protection against this type of failure going unnoticed in the future.

Event Date: 05/20/2006

Discovery Date: 05/31/2006

Report Date: 06/01/2006

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0124	Name: NUCLEAR FUEL SERVICES, INC.
NRC Docket Number: 07000143	City: ERWIN
NRC Program Code: 21210	State: TN      Zip Code: 376509718
Responsible NRC Region: 2	

**Site of Event:**

Site Name      ERWIN	State:      TN
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**Additional Involved Party:**

License Number: NA	Name:      NA
	City:      NA
	State:      NA      Zip Code: NA

**Other Information:**

NRC Reportable Event:	Y	Abnormal Occurrence:	N
Agreement State Reportable Event:	N	Investigation:	Y
Atomic Energy Act Material:	Y	Record Complete:	Y
Consultant Hired:	N	Event Closed:	Y

**Event Cause:**

EQP - EQUIPMENT  
Cause: WEATHER OR AMBIENT CONDITION

FCP - FUEL CYCLE PROBLEMS  
Cause: WEATHER OR AMBIENT CONDITION

**Corrective Actions Information:**

Action Number: Corrective Action:

EQP

1	REPAIRS MADE WITHOUT ENGINEERING CHANGE TO SYSTEM
2	PROCEDURE MODIFIED

FCP

1	REPAIRS MADE WITHOUT ENGINEERING CHANGE TO SYSTEM
2	PROCEDURE MODIFIED

**Device/Associated Equipment:**

EQP

**Device Number: 1**

Device Name: DETECTOR, CRITICALITY	Model Number: NR
Manufacturer: NR	Serial Number: NR
	Problem with Equipment: NA

FCP

**Device Number: 1**

Device Name: DETECTOR, CRITICALITY	Model Number: NR
Manufacturer: NR	Serial Number: NR

**Reporting Requirements:**

EQP

Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.  
Mode Reported: Written

FCP

Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.  
Mode Reported: Written

**References:**

<b>Reference Number:</b>	<b>Entry Date:</b>	<b>Retraction Date:</b>	<b>Coder Initials:</b>	<b>Reference Type:</b>
EN42612	01/10/2007		RLS	EVENT NOTIFICATION
Official Use Only - Not for Public Dissemination				
ML061880440	01/10/2007		RLS	INSPECTION REPORT
Official Use Only - Department of Energy				
ML061880440	01/10/2007		RLS	NRC LETTER
Official Use Only - Department of Energy				
ML061980019	01/10/2007		RLS	LICENSEE REPORT
Official Use Only				
ML071360027	07/05/2007		RLS	INSPECTION REPORT
Official Use Only - Department of Energy				
ML071360027	07/05/2007		RLS	NRC LETTER
Official Use Only - Department of Energy				

**Narrative:**

The licensee reported the failure of an in-line gamma spectrometer waste monitor, with the monitor being in a failed state for more than eight hours. The failure was discovered during a routine semi-annual calibration of the Blended Low Enriched Uranium Process Facility (BPF) condensate discharge in-line monitor system. The system failed all calibration efforts, including a self-check. This system is an active engineered IROFS for discharge of low-level condensate waste. One other IROFS remained in place sampling the waste prior to discharge. However, having only one IROFS in place failed to meet the minimum performance criteria. All waste discharges from this and similar facilities were suspended pending demonstration of equipment functionality. A complete review of recent discharges through the system was initiated to ensure that all discharges were within approved discharge limits. An investigation determined that this failure was caused by a reduction of the power supply voltage on the multi-channel analyzer (MCA) board. This failure prevented the monitor from functioning, but did not signal the device trouble indicator. A voltage monitor was installed, the MCA board was replaced, and the system was successfully re-tested and re-calibrated. There were no actual safety consequences to the worker, public, or environment.

Event Date: 01/11/2007

Discovery Date: 01/11/2007

Report Date: 01/11/2007

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0124	Name: NUCLEAR FUEL SERVICES, INC.
NRC Docket Number: 07000143	City: ERWIN
NRC Program Code: 21210	State: TN      Zip Code: 376509718
Responsible NRC Region: 2	

**Site of Event:**

Site Name      ERWIN	State:      TN
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**Additional Involved Party:**

License Number: NA	Name:      NA
	City:      NA
	State:      NA      Zip Code: NA

**Other Information:**

NRC Reportable Event:      Y	Abnormal Occurrence:      N
Agreement State Reportable Event:      N	Investigation:      Y
Atomic Energy Act Material:      Y	Record Complete:      Y
Consultant Hired:      N	Event Closed:      Y

**Event Cause:**

EQP - EQUIPMENT  
Cause:      DEFECTIVE OR FAILED PART

FCP - FUEL CYCLE PROBLEMS  
Cause:      DEFECTIVE OR FAILED PART

**Corrective Actions Information:**

Action Number:      Corrective Action:

EQP

1	REPAIRS MADE WITH ENGINEERING CHANGE TO SYSTEM
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FCP

1	REPAIRS MADE WITH ENGINEERING CHANGE TO SYSTEM
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**Device/Associated Equipment:**

EQP

<b>Device Number:</b> 1			
Device Name:      ELECTRONIC COMPONENT	Model Number:      G-12		
Manufacturer:      EMCO	Serial Number:      NA		
	Problem with Equipment:      NA		

FCP

<b>Device Number:</b> 1			
Device Name:      ELECTRONIC COMPONENT	Model Number:      G-12		
Manufacturer:      EMCO	Serial Number:      NA		

**Reporting Requirements:**



EQP

Reporting Requirement: 70.App A(a)(5) - Loss of controls such that only one IROFS has been available and reliable (for longer than the past eight hours) to prevent a nuclear criticality accident.

Mode Reported: Written

FCP

Reporting Requirement: 70.App A(a)(5) - Loss of controls such that only one IROFS has been available and reliable (for longer than the past eight hours) to prevent a nuclear criticality accident.

Mode Reported: Written

References:

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN43090	02/23/2007		RLS	EVENT NOTIFICATION
Official Use Only - Not for Public Dissemination				
ML070440258	02/23/2007		RLS	LICENSEE REPORT
Official Use Only				
ML070710214	03/26/2007		RLS	INSPECTION REPORT
Official Use Only - Department of Energy				
ML070710214	03/26/2007		RLS	NRC LETTER
Official Use Only - Department of Energy				
ML071090394	04/19/2007		RLS	INSPECTION REPORT
Official Use Only - Department of Energy				
ML071090394	04/19/2007		RLS	NRC LETTER
Official Use Only - Department of Energy				
ML071130256	04/26/2007		RLS	INSPECTION REPORT
Official Use Only - Department of Energy				
ML071130256	04/26/2007		RLS	NRC LETTER
Official Use Only - Department of Energy				
ML071130102	05/02/2007		RLS	INSPECTION REPORT
Official Use Only - Department of Energy				
ML071130102	05/02/2007		RLS	NRC LETTER
Official Use Only - Department of Energy				
ML071360027	07/05/2007		RLS	INSPECTION REPORT
Official Use Only - Department of Energy				
ML071360027	07/05/2007		RLS	NRC LETTER
Official Use Only - Department of Energy				



Item Number: FC070009

Last Updated: 04/26/2007

**Narrative:**

The licensee reported that an operational upset resulted in an excessive amount of fissile material accumulating in a portion of a glove box located in [REDACTED]. This material was suspected to be in excess of the value described in the nuclear criticality safety evaluation (NCSE). The material was promptly placed into a safe geometry container and samples were obtained to determine the actual mass of the material. This event was retracted on 3/3/2007 when sample results demonstrated that the NCSE mass limit was not exceeded.

Event Date: 03/01/2007

Discovery Date: 03/01/2007

Report Date: 03/01/2007

**Licensee/Reporting Party Information:**

Agreement State Regulated:	NO	Reciprocity:	NONE
License Number:	SNM-0124	Name:	NUCLEAR FUEL SERVICES, INC.
NRC Docket Number:	07000143	City:	ERWIN
NRC Program Code:	21210	State:	TN      Zip Code: 376509718
Responsible NRC Region:	2		

**Site of Event:**

Site Name      ERWIN      State:      TN

**Additional Involved Party:**

License Number:	NA	Name:	NA
		City:	NA
		State:	NA      Zip Code: NA

**Other Information:**

NRC Reportable Event:	N	Abnormal Occurrence:	N
Agreement State Reportable Event:	N	Investigation:	Y
Atomic Energy Act Material:	Y	Record Complete:	Y
Consultant Hired:	N	Event Closed:	N

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS

Cause:      NOT REPORTED

**Corrective Actions Information:**

Action Number:      Corrective Action:

FCP

1      NOT REPORTED

**Source of Radiation:**

FCP

Source Number:      1

Source/Material:	FUEL FABRICATION MATERIAL	Radionuclide or Voltage (kVp/MeV):	SNM
Device Name:	NA	Activity:	NR Ci      NR GBq
Manufacturer:	NR		
Model Number:	NA		
Serial Number:	NA		

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN43204	04/17/2007	03/03/2007	RLS	EVENT NOTIFICATION
	Official Use Only - Not for Public Dissemination			
ML071130256	04/26/2007		RLS	INSPECTION REPORT
	Official Use Only - Department of Energy			
ML071130256	04/26/2007		RLS	NRC LETTER
	Official Use Only - Department of Energy			

**Narrative:**

The licensee reported the failure of their capability to maintain ISA documentation, which resulted in weakening the documented Research Test Reactor and Targets (RTRT) safety basis. On 3/22/2007, an NRC inspector questioned the control methods documented in the safety basis regarding the release of hydraulic fluid within the RTRT LEU and HEU glovebox lines. It was not readily apparent from a review of the accident scenarios. RTRT operations removed the gloveboxes from service and the hydraulic presses were locked out from use pending resolution. An investigation determined that hydraulic leaks were addressed in the NCS evaluation supporting the SAR analysis and boxline operations, which demonstrated that the glovebox line remained subcritical and below license limits even if fully flooded with hydraulic fluid. However, revisions to the RTRT SAR resulted in revising, combining, and simplifying the accident scenarios, which resulted in removing detail from the scenarios so that it was difficult to adequately explain the applicability of the written safety basis to specific upset conditions, even though the safety basis was adequate. Corrective actions included documentation and procedure revision.

Event Date: 03/22/2007

Discovery Date: 03/22/2007

Report Date: 03/23/2007

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BWX TECHNOLOGIES, INC.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name LYNCHBURG	State: VA
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**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: N
Atomic Energy Act Material: Y	Record Complete: Y
Consultant Hired: N	Event Closed: N

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: MANAGEMENT DEFICIENCY

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 PROCEDURE MODIFIED

**Reporting Requirements:**

FCP  
Reporting Requirement: 70.App A(b)(1) - Event or condition that results in the facility being in a state not analyzed, improperly analyzed, or different from that analyzed, and results in failure to meet the performance requirements of 70.61.  
Mode Reported: Written

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
ML071200216	05/02/2007		RLS	LICENSEE REPORT
Official Use Only				
EN43255	05/03/2007		RLS	EVENT NOTIFICATION
Official Use Only - Not for Public Dissemination				

**Narrative:**

The licensee reported the improper transfer of solution from favorable geometry columns to an unfavorable geometry waste container. The event occurred in the general purpose area of the Uranium Recovery Facility where used organic solution from the solvent extraction system is purified for re-use or disposal. After uranium extraction, solution that is to be disposed of is required to be sampled prior to transfer to an unpoisoned and unfavorable geometry waste container through an in-line monitor. However, an operator transferred the solution without the required samples or in-line monitor. This resulted in the loss or degradation of IROFS's. However, multiple other IROFS's (dual input sampling, uranium removal processing, and dual sampling prior to transfer) were in place and functioning to prevent a criticality accident. The licensee returned the solution to the favorable geometry columns and suspended associated operations pending an investigation. This event was caused by inadequate communication, inadequate procedures, and inadequate training/experience. Corrective actions included procedure modification and training.

Event Date: 04/17/2007

Discovery Date: 04/18/2007

Report Date: 04/19/2007

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0042 Name: BWX TECHNOLOGIES, INC.  
NRC Docket Number: 07000027 City: LYNCHBURG  
NRC Program Code: 21210 State: VA Zip Code: 24505-0785  
Responsible NRC Region: 2

**Site of Event:**

Site Name LYNCHBURG State: VA

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: N  
Atomic Energy Act Material: Y Record Complete: Y  
Consultant Hired: N Event Closed: N

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS

Cause: HUMAN ERROR

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 PROCEDURE MODIFIED  
2 PERSONNEL RECEIVED ADDITIONAL TRAINING

**Source of Radiation:**

FCP

Source Number: 1

Source/Material: FUEL FABRICATION MATERIAL Radionuclide or Voltage (kVp/MeV): SNM  
Device Name: CONTAINER, WASTE Activity: NR Ci NR GBq  
Manufacturer: NR  
Model Number: NA  
Serial Number: NA

**Device/Associated Equipment:**

FCP

Device Number: 1

Device Name: CONTAINER, WASTE Model Number: NA  
Manufacturer: NR Serial Number: NA

**Reporting Requirements:**



FCP

Reporting Requirement: 70.App A(a)(5) - Loss of controls such that only one IROFS has been available and reliable (for longer than the past eight hours) to prevent a nuclear criticality accident.

Mode Reported: Telephone

Reporting Requirement: 70.App A(b)(2) - Loss or degradation of IROFSs that results in failure to meet the performance requirement of 70.61.

Mode Reported: Telephone

**References:**

<b>Reference Number:</b>	<b>Entry Date:</b>	<b>Retraction Date:</b>	<b>Coder Initials:</b>	<b>Reference Type:</b>
EN43310	05/03/2007		RLS	EVENT NOTIFICATION
Official Use Only - Not for Public Dissemination				
ML071430108	05/31/2007		RLS	LICENSEE REPORT
Official Use Only				



**Narrative:**

The licensee reported that a safety-related acid dump valve failed to pass a weekly test. Safety Management and the Nuclear Criticality Safety Manager were not notified because the test results were not identified by the operators as an actual valve failure. This valve is part of a component acid cleaning operation for [REDACTED] components. The valve is controlled by an automatic timer and is intended to dump the entire acid bath from the tank, thus preventing an item from remaining in the acid long enough to dissolve the [REDACTED] and sufficient SNM to result in a potential safety issue. During a weekly functional test on 4/30/2007, the valve took approximately [REDACTED] to begin the dump cycle. The valve was last successfully tested on 4/24/2007, and was last successfully used on 4/27/2007. [REDACTED] components were processed between 4/27/2007 and 4/30/2007, when the functionality of the valve was in question. This event was caused by a change to the valve/sleeve configuration that was not adequately analyzed. Corrective actions included procedure revision, adding a requirement for daily valve operation, and integrating the valve into a preventive maintenance program.

Event Date: 04/27/2007

Discovery Date: 04/30/2007

Report Date: 04/30/2007

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0042 Name: BWX TECHNOLOGIES, INC.  
NRC Docket Number: 07000027 City: LYNCHBURG  
NRC Program Code: 21210 State: VA Zip Code: 24505-0785  
Responsible NRC Region: 2

**Site of Event:**

Site Name LYNCHBURG State: VA

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: N  
Atomic Energy Act Material: Y Record Complete: Y  
Consultant Hired: N Event Closed: N

**Event Cause:**

EQP - EQUIPMENT  
Cause: DESIGN, MANUFACTURING, OR INSTALLATION ERROR  
FCP - FUEL CYCLE PROBLEMS  
Cause: DESIGN, MANUFACTURING, OR INSTALLATION ERROR

**Corrective Actions Information:**

Action Number: Corrective Action:  
EQP  
1 PROCEDURE MODIFIED  
FCP  
1 PROCEDURE MODIFIED

**Source of Radiation:**

EQP

Source Number: 1  
Source/Material: FUEL FABRICATION MATERIAL Radionuclide or Voltage (kVp/MeV): SNM  
Device Name: VALVE, OTHER Activity: NR Ci NR GBq  
Manufacturer: NR Problem with Source:  
Model Number: NA  
Serial Number: NA

FCP

Source Number: 1  
Source/Material: FUEL FABRICATION MATERIAL Radionuclide or Voltage (kVp/MeV): SNM  
Device Name: VALVE, OTHER Activity: NR Ci NR GBq  
Manufacturer: NR  
Model Number: NA  
Serial Number: NA



**Device/Associated Equipment:**

EQP

**Device Number: 1**

Device Name: VALVE, OTHER

Manufacturer: NR

Model Number: NA

Serial Number: NA

Problem with Equipment:

FCP

**Device Number: 1**

Device Name: VALVE, OTHER

Manufacturer: NR

Model Number: NA

Serial Number: NA

**Reporting Requirements:**

EQP

Reporting Requirement: 70.App A(b)(2) - Loss or degradation of IROFSs that results in failure to meet the performance requirement of 70.61.

Mode Reported:

FCP

Reporting Requirement: 70.App A(b)(2) - Loss or degradation of IROFSs that results in failure to meet the performance requirement of 70.61.

Mode Reported: Telephone

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN43330	05/03/2007		RLS	EVENT NOTIFICATION
Official Use Only - Not for Public Dissemination				
ML071560517	06/06/2007		RLS	LICENSEE REPORT
Official Use Only				
ML072400299	09/06/2007		RLS	LICENSEE REPORT
Official Use Only				



Item Number: FC070013

Last Updated: 11/26/2007

**Narrative:**

BWX Technologies, Incorporated, reported the loss of an item relied on for safety (IROFS) associated with the component acid bath operation. The IROFS that was lost was a fixture that maintains the spacing between components and control of the components. While placing a fixture holding components into the acid solution tank, the fixture impacted the tank, causing of the components to fall into the tank. The operator immediately initiated a manual dump of the acid solution and opened the water valve to rinse any residual acid off of the components in the tank. The components were removed from the tank and the fixture was taken out of service pending a review. The design and use of the fixture was found to be inadequate to prevent components from falling into the tank when retaining wire is not used. Corrective actions included a procedure modification to require the use of retaining wires. On two occasions following the corrective actions, components again became detached. On 6/29/2007, a component fell into an empty tank while being removed from its fixture. On 7/31/2007, a fixture loaded with components struck the side of the tank and several components became dislodged but were captured on the retaining wire. To prevent recurrence, the lifting fixture was redesigned and the Integrated Safety Analysis was revised to correctly identify the IROFS for the acid tanks.

Event Date: 05/24/2007

Discovery Date: 05/24/2007

Report Date: 05/25/2007

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0042 Name: BWX TECHNOLOGIES, INC.  
NRC Docket Number: 07000027 City: LYNCHBURG  
NRC Program Code: 21210 State: VA Zip Code: 24505-0785  
Responsible NRC Region: 2

**Site of Event:**

Site Name LYNCHBURG State: VA

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: Y  
Atomic Energy Act Material: Y Record Complete: Y  
Consultant Hired: N Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: MANAGEMENT DEFICIENCY

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 PROCEDURE MODIFIED  
2 ENGINEERING CHANGE TO SYSTEM

**Source of Radiation:**

FCP  
Source Number: 1  
Source/Material: FUEL FABRICATION MATERIAL Radionuclide or Voltage (kVp/MeV): SNM  
Device Name: TANK, OTHER Activity: NR Ci NR GBq  
Manufacturer: NR  
Model Number: NR  
Serial Number: AGGREGATE

**Device/Associated Equipment:**

FCP  
Device Number: 1  
Device Name: TANK, OTHER Model Number: NA  
Manufacturer: NR Serial Number: NA

**Reporting Requirements:**

FCP

Reporting Requirement: 70.App A(b)(2) - Loss or degradation of IROFSs that results in failure to meet the performance requirement of 70.61.

Mode Reported: Written

**References:**

<b>Reference Number:</b>	<b>Entry Date:</b>	<b>Retraction Date:</b>	<b>Coder Initials:</b>	<b>Reference Type:</b>
EN43389	07/05/2007		RLS	EVENT NOTIFICATION
Official Use Only - Not for Public Dissemination				
ML071840200	07/05/2007		RLS	LICENSEE REPORT
Official Use Only				
ML071720116	09/25/2007		RLS	INSPECTION REPORT
Official Use Only - Department of Energy				
ML071720116	09/25/2007		RLS	NRC LETTER
Official Use Only - Department of Energy				
ML072540491	09/25/2007		RLS	INSPECTION REPORT
ML072540491	09/25/2007		RLS	NRC LETTER
ML072840036	10/17/2007		RLS	LICENSEE REPORT
ML073130533	11/26/2007		RLS	INSPECTION REPORT
ML073130533	11/26/2007		RLS	NRC LETTER

Item Number: FC070014

Last Updated: 07/09/2007

**Narrative:**

The licensee declared an alert condition on 5/8/2007 due to a fire in a radioactive waste drum with a possible uncontrolled release. The fire occurred at the licensee's supercompactor facility where dry active waste is compacted. The fire was extinguished in approximately 20 minutes. This event was retracted on 6/1/2007 when analysis of samples collected during the event indicated no detectable radioactivity. Surveys of potentially impacted areas and responding personnel showed no unusual contamination levels. Also, routine fixed air samples and stack monitors showed no elevated levels of airborne radioactivity.

Event Date: 05/08/2007

Discovery Date: 05/08/2007

Report Date: 05/08/2007

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO	Reciprocity: NONE
License Number: SNM-0042	Name: BWX TECHNOLOGIES, INC.
NRC Docket Number: 07000027	City: LYNCHBURG
NRC Program Code: 21210	State: VA Zip Code: 24505-0785
Responsible NRC Region: 2	

**Site of Event:**

Site Name LYNCHBURG	State: VA
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**Additional Involved Party:**

License Number: NA	Name: NA
	City: NA
	State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: N	Abnormal Occurrence: N
Agreement State Reportable Event: N	Investigation: N
Atomic Energy Act Material: Y	Record Complete: Y
Consultant Hired: N	Event Closed: N

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: NOT REPORTED

RLM - RADIOACTIVE MATERIAL REL.  
Cause: NOT REPORTED

**Corrective Actions Information:**

Action Number:	Corrective Action:
FCP	
1	NOT REPORTED
RLM	
1	NOT REPORTED

**Release of Material or Contamination Information:**

Type or Release or Contamination:	Activity:		Radionuclide:	Effect of Release or Contamination:
	Ci	GBq		
AIR	NR	NR	NR	
SURFACE	NR	NR	NR	

**Source of Radiation:**

FCP

<b>Source Number:</b> 1		
Source/Material:	FUEL FABRICATION MATERIAL	Radionuclide or Voltage (kVp/MeV): NR
Device Name:	CONTAINER, WASTE	Activity: NR Ci NR GBq
Manufacturer:	NR	
Model Number:	NA	
Serial Number:	NA	

RLM



**Source Number:** 1

Source/Material:	FUEL FABRICATION MATERIAL	Radionuclide or Voltage (kVp/MeV):	NR
Device Name:	CONTAINER, WASTE	Activity:	NR Ci NR GBq
Manufacturer:	NR		
Model Number:	NA		
Serial Number:	NA		

**Device/Associated Equipment:**

FCP

**Device Number:** 1

Device Name:	CONTAINER, WASTE	Model Number:	NA
Manufacturer:	NR	Serial Number:	NA

RLM

**Device Number:** 1

Device Name:	CONTAINER, WASTE	Model Number:	NA
Manufacturer:	NR	Serial Number:	NA

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN43350	07/09/2007	06/01/2007	RLS	EVENT NOTIFICATION

Official Use Only - Not for Public Dissemination



Item Number: FC070015

Last Updated: 09/25/2007

**Narrative:**

On 7/13/2007, BWX Technologies reported a loss of double contingency associated with the discovery of an unfavorable geometry in a Raschig ring vacuum cleaner in the [REDACTED] container control area. The vacuum cleaner was left unattended with no top and the hose attached. When the top of the vacuum cleaner is off and the hose is elevated above the level of the Raschig rings, a void space between the drain and the top of the drum is created. This void is considered an unfavorable geometry because it is greater than [REDACTED] deep, greater than [REDACTED] in diameter, and will hold more than [REDACTED] of solution. Uranium [REDACTED] materials were not being processed in the area at the time and the solution in the vacuum cleaner did not occupy the void space, so there was no immediate safety concern. Of two items relied on for safety (IROFS) to prevent an accidental criticality event, one was degraded but the other was not compromised. The vacuum cleaner drum was sampled and found to contain 25.8 liters of liquid with a concentration of less than 0.006 grams of U-235 per liter. Corrective actions included modification of the vacuum cleaner to prevent removal of the top without disconnecting the hose, procedure modification, and personnel training.

Event Date: 07/13/2007

Discovery Date: 07/13/2007

Report Date: 07/13/2007

**Licensee/Reporting Party Information:**

Agreement State Regulated:	NO	Reciprocity:	NONE
License Number:	SNM-0042	Name:	BWX TECHNOLOGIES, INC.
NRC Docket Number:	07000027	City:	LYNCHBURG
NRC Program Code:	21210	State:	VA      Zip Code: 24505-0785
Responsible NRC Region:	2		

**Site of Event:**

Site Name	LYNCHBURG	State:	VA
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**Additional Involved Party:**

License Number:	NA	Name:	NA
		City:	NA
		State:	NA      Zip Code: NA

**Other Information:**

NRC Reportable Event:	Y	Abnormal Occurrence:	N
Agreement State Reportable Event:	N	Investigation:	Y
Atomic Energy Act Material:	Y	Record Complete:	Y
Consultant Hired:	N	Event Closed:	N

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: MANAGEMENT DEFICIENCY

**Corrective Actions Information:**

Action Number: Corrective Action:

FCP

1	PROCEDURE MODIFIED
2	PERSONNEL RECEIVED ADDITIONAL TRAINING
3	ENGINEERING CHANGE TO SYSTEM

**Source of Radiation:**

FCP

**Source Number:** 1

Source/Material:	FUEL FABRICATION MATERIAL	Radionuclide or Voltage (kVp/MeV):	SNM
Device Name:	VACUUM CLEANER	Activity:	NR Ci      NR GBq
Manufacturer:	NR		
Model Number:	NA		
Serial Number:	NA		

**Device/Associated Equipment:**

FCP

**Device Number:** 1

Device Name:	VACUUM CLEANER	Model Number:	NR
Manufacturer:	NR	Serial Number:	NR

**Reporting Requirements:**



FCP

Reporting Requirement: 70.App A(b)(2) - Loss or degradation of IROFSs that results in failure to meet the performance requirement of 70.61.

Mode Reported: Written

**References:**

<b>Reference Number:</b>	<b>Entry Date:</b>	<b>Retraction Date:</b>	<b>Coder Initials:</b>	<b>Reference Type:</b>
ML072290559	08/21/2007		RLS	LICENSEE REPORT
Official Use Only				
EN43490	08/22/2007		RLS	EVENT NOTIFICATION
Official Use Only - Not for Public Dissemination				
ML072540491	09/25/2007		RLS	INSPECTION REPORT
ML072540491	09/25/2007		RLS	NRC LETTER



Item Number: FC070016

Last Updated: 07/09/2008

**Narrative:**

BWX Technologies reported the spill of solution from a portable Raschig ring-filled vacuum cleaner while it was being moved from the Recovery area to the [redacted] on 7/26/2007. The vacuum cleaner was thought to be empty, but actually contained approximately [redacted] of [redacted] solution with [redacted] grams of U-235 per liter (from floor scrubbing operations in the Recovery area). Because the vacuum cleaner had no lifting brackets, it was being moved with one forklift tine. At a doorway ramp in the outside alley [redacted], the vacuum cleaner fell off the forklift and spilled approximately five gallons of solution containing [redacted] grams of U-235. In order to transfer the vacuum cleaner outside of a radiologically controlled area, it had been covered by two 55-gallon plastic bags to contain contamination within the vacuum cleaner (a situation not analyzed by NCS personnel, who assumed that spilled material would disperse freely). When the vacuum cleaner overturned, an unfavorable geometry container was created when the outer plastic bag collected approximately [redacted] liters of solution from the spill separately from the Raschig rings. Due to the low concentration of the solution and a [redacted] collected in the bag, there was little risk of a criticality accident. Approximately 4 liters of solution spilled to the ground and 2.3 liters of solution remained in the vacuum cleaner. Operations associated with the vacuum cleaner were suspended pending appropriate evaluations, isolating the spilled material, and cleaning up the spill. This event was caused by the lack of a lifting device on the vacuum cleaner, the lack of a procedure for transferring Raschig ring-filled vacuum cleaners, an inadequate method to determine that the vacuum cleaner was empty, and transferring the vacuum cleaner using only one tine of the forklift. Corrective actions included eliminating Raschig ring-filled vacuum cleaners used in the Uranium Recovery controlled area, procedure revision, and personnel training.

Event Date: 07/26/2007

Discovery Date: 07/26/2007

Report Date: 07/27/2007

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO  
License Number: SNM-0042  
NRC Docket Number: 07000027  
NRC Program Code: 21210  
Responsible NRC Region: 2  
Reciprocity: NONE  
Name: BWX TECHNOLOGIES, INC.  
City: LYNCHBURG  
State: VA Zip Code: 24505-0785

**Site of Event:**

Site Name LYNCHBURG State: VA

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: Y  
Atomic Energy Act Material: Y Record Complete: Y  
Consultant Hired: N Event Closed: Y

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: HUMAN ERROR

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 PROCEDURE MODIFIED  
2 PERSONNEL RECEIVED ADDITIONAL TRAINING

**Source of Radiation:**

FCP  
Source Number: 1  
Source/Material: FUEL FABRICATION MATERIAL Radionuclide or Voltage (kVp/MeV): SNM  
Device Name: VACUUM CLEANER Activity: NR Ci NR GBq  
Manufacturer: NR  
Model Number: NA  
Serial Number: NA

**Device/Associated Equipment:**

FCP



**Device Number:** 1

Device Name: VACUUM CLEANER

Manufacturer: NR

Model Number: NR

Serial Number: NR

**Reporting Requirements:**

FCP

Reporting Requirement: 70.App A(b)(1) - Event or condition that results in the facility being in a state not analyzed, improperly analyzed, or different from that analyzed, and results in failure to meet the performance requirements of 70.61.

Mode Reported:

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN43528	08/22/2007		RLS	EVENT NOTIFICATION
Official Use Only - Not for Public Dissemination				
ML072470579	09/06/2007		RLS	LICENSEE REPORT
Official Use Only				
ML072500291	09/25/2007		RLS	NRC INFORMATION NOTICE
ML073300450	12/05/2007		RLS	LICENSEE REPORT
Official Use Only				
ML080240498	01/28/2008		RLS	NRC NEWS ANNOUNCEMENT
EN43934	01/30/2008		RLS	EVENT NOTIFICATION
ML072920120	01/30/2008		RLS	INSPECTION REPORT
ML072920120	01/30/2008		RLS	NRC LETTER
ML072980791	01/30/2008		RLS	NRC LETTER
ML080170576	02/13/2008		RLS	NRC NEWS ANNOUNCEMENT
ML080240434	02/13/2008		RLS	INSPECTION REPORT
ML080240434	02/13/2008		RLS	NOTICE OF VIOLATION
ML080240434	02/13/2008		RLS	NRC LETTER
ML080310824	02/21/2008		RLS	LICENSEE REPORT
EN44020	03/05/2008		RLS	EVENT NOTIFICATION
ML080570588	03/05/2008		RLS	NRC LETTER
ML080980016	04/08/2008		RLS	LICENSEE REPORT
ML081770471	07/09/2008		RLS	INSPECTION REPORT



ML081770471

07/09/2008



RLS

NRC LETTER



Item Number: FC070017

Last Updated: 12/05/2007

**Narrative:**

BWX Technologies reported the degradation of an item relied on for safety (IROFS) related to the weight of a pre-filter removed on 8/22/2007 from the saw enclosure ventilation in the [REDACTED]. When the pre-filter was prepared for disposal, it was determined to have a weight gain of about 2,410 grams. Nuclear Criticality Safety (NCS) was notified because the weight gain was more than expected. Non-destructive analysis determined that the filter contained [REDACTED] grams of U-235, significantly less than the limit of [REDACTED] grams. A requirement to implement a minimum change frequency for the pre-filter was not completed and the Integrated Safety Analysis (ISA) was not updated; therefore, the IROFS was not fully implemented. The operation of the saw was suspended until the procedures and ISA were revised.

Event Date: 08/22/2007

Discovery Date: 09/05/2007

Report Date: 09/06/2007

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0042 Name: BWX TECHNOLOGIES, INC.  
NRC Docket Number: 07000027 City: LYNCHBURG  
NRC Program Code: 21210 State: VA Zip Code: 24505-0785  
Responsible NRC Region: 2

**Site of Event:**

Site Name LYNCHBURG State: VA

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: N  
Atomic Energy Act Material: Y Record Complete: Y  
Consultant Hired: N Event Closed: N

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: MANAGEMENT DEFICIENCY

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 PROCEDURE MODIFIED

**Source of Radiation:**

FCP  
Source Number: 1  
Source/Material: FUEL FABRICATION MATERIAL Radionuclide or Voltage (kVp/MeV): SNM  
Device Name: FILTER, PRE-FILTER Activity: NR Ci NR GBq  
Manufacturer: NR  
Model Number: NA  
Serial Number: NA

**Device/Associated Equipment:**

FCP  
Device Number: 1  
Device Name: FILTER, PRE-FILTER Model Number: NR  
Manufacturer: NR Serial Number: NR

**Reporting Requirements:**

FCP  
Reporting Requirement: 70.App A(b)(2) - Loss or degradation of IROFSs that results in failure to meet the performance requirement of 70.61.  
Mode Reported: Written

**References:**

Reference Number: Entry Date: Retraction Date: Coder Initials: Reference Type:



EN43616	11/13/2007	RLS	EVENT NOTIFICATION
Official Use Only - Not for Public Dissemination			
ML072900645	11/13/2007	RLS	LICENSEE REPORT
ML073300451	12/05/2007	RLS	LICENSEE REPORT
Official Use Only			



Item Number: FC080001

Last Updated: 05/13/2008

**Narrative:**

Nuclear Fuel Services, Incorporated reported a safety equipment failure of the criticality alarm system. During testing, two of 18 detector pairs did not generate an alarm signal in all modes. During 12/27 through 12/29/2007, a programmable logic controller monitoring system was attached to the criticality alarm system components. On 12/29/2007, all detector pairs were satisfactorily tested. During 12/31/2007 through 1/5/2008, limited SNM operations were conducted at the plant. Suspect equipment faults occurred during the time frame from 12/29/2007 to 1/5/2008 due to unknown causes. Troubleshooting revealed an equipment fault in each detector pair that failed during testing. Those faults have been corrected and the detector pairs satisfactorily retested. The two affected detector pairs are located in the [redacted] and Building [redacted]. There were no recorded trouble alarms generated by the operable detector in the affected areas during the week when the system was not functioning properly. The fault was identified as loose wiring/connections inside locked cabinets accessible to authorized personnel only.

Event Date: 12/29/2007

Discovery Date: 01/05/2008

Report Date: 01/05/2008

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0124 Name: NUCLEAR FUEL SERVICES, INC.  
NRC Docket Number: 07000143 City: ERWIN  
NRC Program Code: 21210 State: TN Zip Code: 376509718  
Responsible NRC Region: 2

**Site of Event:**

Site Name ERWIN State: TN

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: Y  
Atomic Energy Act Material: Y Record Complete: Y  
Consultant Hired: N Event Closed: N

**Event Cause:**

EQP - EQUIPMENT  
Cause: DEFECTIVE OR FAILED PART  
FCP - FUEL CYCLE PROBLEMS  
Cause: DEFECTIVE OR FAILED PART

**Corrective Actions Information:**

Action Number: Corrective Action:  
EQP  
1 REPAIRS MADE WITHOUT ENGINEERING CHANGE TO SYSTEM  
FCP  
1 REPAIRS MADE WITHOUT ENGINEERING CHANGE TO SYSTEM

**Source of Radiation:**

EQP

Source Number: 1  
Source/Material: FUEL FABRICATION MATERIAL Radionuclide or Voltage (kVp/MeV): U-LE  
Device Name: ALARM, CRITICALITY Activity: NR Ci NR GBq  
Manufacturer: NR Problem with Source: NA  
Model Number: NA  
Serial Number: NA

FCP

Source Number: 1  
Source/Material: FUEL FABRICATION MATERIAL Radionuclide or Voltage (kVp/MeV): U-LE  
Device Name: ALARM, CRITICALITY Activity: NR Ci NR GBq  
Manufacturer: NR  
Model Number: NA  
Serial Number: NA

**Device/Associated Equipment:**

EQP

**Device Number: 1**

Device Name: ALARM, CRITICALITY  
Manufacturer: THERMO SCIENTIFIC

Model Number: RMS-3  
Serial Number: NA  
Problem with Equipment: NA

FCP

**Device Number: 1**

Device Name: ALARM, CRITICALITY  
Manufacturer: THERMO SCIENTIFIC

Model Number: RMS-3  
Serial Number: NA

**Reporting Requirements:**

EQP

Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.  
Mode Reported:

FCP

Reporting Requirement: 70.50(b)(2) - Equipment is disabled or fails to function as designed.  
Mode Reported:

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN43883	01/10/2008		RLS	EVENT NOTIFICATION
ML080370394	02/21/2008		RLS	LICENSEE REPORT
Official Use Only				
ML081270020	05/13/2008		RLS	INSPECTION REPORT
ML081270020	05/13/2008		RLS	NRC LETTER

**Narrative:**

Nuclear Fuels Services (NFS) reported an unanalyzed condition involving inadequate inspections of thru-wall piping penetration sleeves. This issue is associated with sleeved line penetrations thru walls in the [REDACTED]. Since 2004, NFS failed to adequately inspect eight of eleven process sleeves due to the inability to visually verify the condition of the process pipe and sleeve. This visual inspection was prevented by the installation of fire grout between the process pipe and sleeve. During a two-year review of safety-related equipment test, it was determined that the test could not be performed as written and that the test did not verify the continued reliability and availability of the sleeve. In addition, the discussion in the supporting safety analysis was insufficient. Although there was no actual safety consequence and the safety significance was low, potential criticality consequences included a leak of uranium [REDACTED] solution from the pipe and sleeve into the wall. Corrective actions include determining the number and locations of the sleeved lines and revising safety-related equipment tests and safety analyses to better describe the accident sequence/barriers and periodic inspections.

Event Date: 01/15/2008

Discovery Date: 01/15/2008

Report Date: 01/28/2008

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO Reciprocity: NONE  
License Number: SNM-0124 Name: NUCLEAR FUEL SERVICES, INC.  
NRC Docket Number: 07000143 City: ERWIN  
NRC Program Code: 21210 State: TN Zip Code: 376509718  
Responsible NRC Region: 2

**Site of Event:**

Site Name ERWIN State: TN

**Additional Involved Party:**

License Number: NA Name: NA  
City: NA  
State: NA Zip Code: NA

**Other Information:**

NRC Reportable Event: Y Abnormal Occurrence: N  
Agreement State Reportable Event: N Investigation: Y  
Atomic Energy Act Material: Y Record Complete: Y  
Consultant Hired: N Event Closed: N

**Event Cause:**

FCP - FUEL CYCLE PROBLEMS  
Cause: DEFECTIVE OR INADEQUATE PROCEDURE

**Corrective Actions Information:**

Action Number: Corrective Action:  
FCP  
1 PROCEDURE MODIFIED

**Source of Radiation:**

FCP  
Source Number: 1  
Source/Material: FUEL FABRICATION MATERIAL Radionuclide or Voltage (kVp/MeV): SNM  
Device Name: PIPE, OTHER Activity: NR Ci NR GBq  
Manufacturer: NR  
Model Number: NA  
Serial Number: NA

**Device/Associated Equipment:**

FCP  
Device Number: 1  
Device Name: PIPE, OTHER Model Number: NA  
Manufacturer: NR Serial Number: NA

**Reporting Requirements:**

FCP  
Reporting Requirement: 70.App A(b)(1) - Event or condition that results in the facility being in a state not analyzed, improperly analyzed, or different from that analyzed, and results in failure to meet the performance requirements of 70.61.  
Mode Reported:



**References:**

<b>Reference Number:</b>	<b>Entry Date:</b>	<b>Retraction Date:</b>	<b>Coder Initials:</b>	<b>Reference Type:</b>
EN43937	01/30/2008		RLS	EVENT NOTIFICATION
ML080640815	03/05/2008		RLS	LICENSEE REPORT
ML081270020	05/14/2008		RLS	INSPECTION REPORT
ML081270020	05/14/2008		RLS	NOTICE OF VIOLATION
ML081270020	05/14/2008		RLS	NRC LETTER
ML081620069	06/11/2008		RLS	LICENSEE REPORT
ML081620069	07/07/2008		RLS	LICENSEE REPORT

