

**SAFETY EVALUATION REPORT  
SPINOFF AND CHANGE OF CONTROL  
FOR SPECIAL NUCLEAR MATERIALS LICENSES SNM-42, SNM-124, AND SNM-2001**

<b>LICENSEES:</b>	<b>LICENSE NO.</b>	<b>DOCKET NO.:</b>
BWX Technologies, Inc.	SNM-2001	70-3085
Babcock & Wilcox Nuclear Operations Group	SNM-42	70-27
Nuclear Fuel Services, Inc.	SNM-124	70-143

**SITES:**

BWX Technologies, Inc.	Armstrong County, Pennsylvania (PA)
Babcock & Wilcox Nuclear Operations Group	Lynchburg, Virginia (VA)
Nuclear Fuel Services, Inc.	Erwin, Tennessee (TN)

**PROJECT MANAGERS:**

Yolande Norman, FSME	(BWX Technologies, Inc.)
Merritt N. Baker, NMSS	(Babcock & Wilcox Nuclear Operations Group)
Kevin Ramsey, NMSS	(Nuclear Fuel Services, Inc.)

**TECHNICAL REVIEWERS:** Roman Przygodzki, Kenneth Kline, Merritt N. Baker

**SUMMARY AND CONCLUSIONS:**

By letter dated April 1, 2010 (ML100990164), Babcock & Wilcox Nuclear Operations Group (B&W NOG) submitted a request to amend Chapter 1 of special nuclear materials license SNM-42, to remove reference to McDermott International, Inc. (MII) and McDermott Incorporated as part of a planned separation (spinoff) of The Babcock & Wilcox Company (B&W) from MII. This submittal was supplemented by information provided in letters dated May 4, 2010, May 14, 2010, and May 27, 2010, and by information presented during a May 12 meeting, and by Nuclear Fuel Services, Inc. (NFS) letter dated April 28, 2010 (ML101241145). The aforementioned are hereinafter collectively referred to as the "application."

The application contended that the spinoff and associated changes in corporate structure do not constitute a change of control. By U.S. Nuclear Regulatory Commission (NRC) letter dated June 2, 2010, the staff determined that the spinoff and related actions constitute an indirect change of control of SNM-42 and that prior approval from the NRC is thus required in accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 70.36 (ML101410011). In addition to SNM-42, this finding applies to activities at NFS under special nuclear materials license SNM-124, as well as to activities at BWTX's former Parks Township Shallow Land Disposal Area (SLDA) under special nuclear materials license SNM-2001.

NRC is treating the application as if it were a request for approval of a transfer of control of the NRC licenses SNM-42, SNM-124, and SNM-2001 held by B&W NOG, NFS, and BWXT (collectively, the "licensees"), respectively, with B&W as the co-applicant. NRC Special Nuclear Materials Licenses SNM-42 and SNM-124 allow for the fabrication of nuclear fuel at the B&W NOG facilities, Campbell County, VA and NFS facilities in Unicoi County, TN. NRC Materials

License SNM-2001 authorizes the possession and control of a former burial site at the BWX Technologies facility in Armstrong County, PA. The staff found that while an indirect change of control of the NRC licenses will occur, these actions do not raise any public health and safety concerns.

The application was reviewed by NRC staff for an indirect change in control of Title 10 of the *Code of Federal Regulations* (10 CFR) 70 licenses using the guidance in NUREG 1556, Volume 15. NRC staff finds that the application sufficiently describes and documents the transaction and documents B&W's understanding of commitments made the licensees in NRC Special Nuclear Materials Licenses SNM-42, SNM-124, and SNM-2001.

As required by 10 CFR 70.36, NRC staff has reviewed the application and finds that the proposed change of control is in accordance with the Atomic Energy Act of 1954 (the Act), as amended. The staff finds that, the change of control has neither a significant impact on financial assurance nor an impact on key personnel at the licensed facilities, and therefore B&W NOG and NFS will remain qualified to use special nuclear material for the purpose requested, and will continue to have the equipment, facilities, and procedures needed to protect health and minimize danger to life or property.

## **INTRODUCTION**

### **LICENSE HISTORIES**

B&W NOG is holder of materials license SNM-42, which authorizes the possession and use of SNM and irradiated fuel at the B&W NOG facility and the Lynchburg Technology Center in Lynchburg, VA. Letters of Credit (LOC) and a Letter Agreement between B&W NOG and the U.S. Department of Energy (DOE) for decommissioning funding remain in place and are unaffected by the change in parent company ownership (separation of B&W from McDermott International, Inc. [MII]), hereafter referred to as "the spinoff."

NFS is holder of materials license SNM-124, which authorizes the possession and use of SNM at the NFS facility in Erwin, TN. LOC and a Letter Agreement between NFS and DOE for decommissioning funding remain in place and are unaffected by the spinoff.

BWX Technologies is holder of license SNM-2001, which was issued in 1995, to the B&W for the Shallow Land Disposal Area located in Armstrong County, PA. The site is to be remediated by the U.S. Corps of Engineers. Coordination of the activities with the NRC is ongoing. There are no plans to issue a license to the Corps to conduct its activities. A LOC for decommissioning funding, with automatic extensions, remains in place.

### **REGULATORY FRAMEWORK**

Licenses SNM-42, SNM-124, and SNM-2001 were issued under 10 CFR 70, Domestic Licensing of SNM. The Commission is required by 10 CFR 70.36 to determine if the change of control is in accordance with the provisions of the Act and give its consent in writing.

10 CFR 70.36 states:

No license granted under the regulations in this part and no right to possess or utilize special nuclear material granted by any license issued pursuant to the regulations in this

part shall be transferred, assigned or in any manner disposed of, either voluntarily or involuntarily, directly or indirectly, through transfer of control of any license to any person unless the Commission shall after securing full information, find that the transfer is in accordance with the provisions of the Act, and shall give its consent in writing.

The staff's evaluation is based on guidance in NUREG-1556, Volume 15, "*Guidance About Changes of Control and About Bankruptcy Involving Byproduct, Source, or Special Nuclear Materials Licenses*," dated November 2000, the regulatory issue summary 2008-19 "*Lessons-Learned from Recent 10 CFR Part 70 License-Transfer Application Reviews*," dated August 2008, Information Notice 89-25 Rev. 1, "*Unauthorized Transfer of Ownership or Control of Licensed Activities*," dated December 1994, and regulations pertaining to licenses issued under 10 CFR 70.

As discussed in NUREG-1556, Volume 15, NRC is generally using the term "change of control" rather than the statutory term "transfer" to describe the variety of events that could require prior notification and written consent of the NRC.

## **DEFINITION OF CONTROL**

The central issue is whether the authority over the license has changed. The guidance in NUREG-1556, Volume 15, Appendix F, defines control in this context as follows:

Control of a license is in the hands of the person or persons who are empowered to decide when and how that license will be used. That control is to be found in the person or persons who, because of ownership or authority explicitly delegated by the owners, possess the power to determine corporate policy and thus the direction of the activities under the license.

The new parent company resulting from the corporate restructuring, B&W, will have indirect control over when and how the licensee will conduct its operation. Therefore, an indirect change of control of a 10 CFR 70 license will occur, and requires NRC consent.

## **DESCRIPTION OF TRANSACTION**

By letter dated April 1, 2010, B&W NOG, submitted a notice of the proposed spinoff of B&W from MII, entitled "*Request to Amend Chapter 1 of the License No. SNM-42*," (ML100990164). This notice was supplemented by a submission by NFS dated April 28, 2010, entitled "*Notification of 'No Change in Control' due to Plans to Spin-Off The Babcock & Wilcox Company from McDermott International, Inc.*" (ML101241145).

Both of the aforementioned applications contended that the proposed spinoff does not constitute a change of control of either licensee's license(s). NRC staff provided several requests for additional information (RAIs) by email dated May 6, 2010 (ML101330346). Much of the information required to make a determination for B&W NOG overlap with those for NFS. Therefore, no additional information was requested directly from NFS, but requested directly from the parent.

In a closed meeting at NRC headquarters on February 22, 2010, B&W NOG explained that the primary reason for the spin-off is due to Changes to U.S. Federal Acquisition Regulations (74 FR 125), wherein U.S. Federal Agencies are generally prohibited from awarding new contracts

to inverted companies<sup>1</sup>, and their subsidiaries. In a closed meeting on May 12, 2010, B&W NOG and McDermott further clarified that MII would likely be considered an inverted company, and thus B&W NOG and NFS would be considered subsidiaries of an inverted company.

In preparation for the spinoff, MII created a new, wholly owned subsidiary of MII, named B&W, incorporated in the state of Delaware. Per the RAI responses, B&W's purpose is to: (1) serve as a vehicle under which all entities related to B&W's business can be aggregated, so that a single entity can be spun off from MII while retaining all B&W related operations; and (2) facilitate the preparation and presentation of financial statements, representative of B&W operations, for Securities and Exchange Commission Form 10. B&W is a new entity, with a new Employer Identification Number (EIN), that was formed in its own lineage with respect to MII, and was not previously part of the corporate lineage that includes Babcock & Wilcox Holding, Inc. (BHI), BWTX, B&W NOG and NFS.

Per the aforementioned applications, as of December 31, 2009, the following is the relevant corporate lineage:

- NFS, which is a wholly owned subsidiary of
- NOG-Erwin Holdings, Inc., which is a wholly owned subsidiary of
- B&W NOG, which is a wholly owned subsidiary of
- BWX Technologies, Inc., which is a wholly owned subsidiary of
- The Babcock & Wilcox Company (hereinafter referred to as "Old B&W")<sup>2</sup>, which is a wholly owned subsidiary of
- McDermott, Inc. (MI), which is a wholly owned subsidiary of
- McDermott Holdings, Inc. (MHI)<sup>3</sup>, which is a wholly owned subsidiary of
- McDermott Panama Holdings, S.A.<sup>4</sup>, which is subsidiary of
- MII

In preparation for the spinoff, numerous internal changes are being made with respect to corporate structure. Note that while the internal changes were being made, two different entities were named "The Babcock & Wilcox Company." "The Babcock & Wilcox Company", referred to as B&W in this report, is a new entity, incorporated in Delaware, which will be the ultimate parent company of B&W NOG and NFS. "The Babcock & Wilcox Company," referred to as Old

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<sup>1</sup> 48 CFR 3052.209-70 states: "Inverted Domestic Corporation. A foreign incorporated entity shall be treated as an inverted domestic corporation if, pursuant to a plan (or a series of related transactions)--

(1) The entity completes after November 25, 2002, the direct or indirect acquisition of substantially all of the properties held directly or indirectly by a domestic corporation or substantially all of the properties constituting a trade or business of a domestic partnership;

(2) After the acquisition at least 80 percent of the stock (by vote or value) of the entity is held--

(i) In the case of an acquisition with respect to a domestic corporation, by former shareholders of the domestic corporation by reason of holding stock in the domestic corporation; or

(ii) In the case of an acquisition with respect to a domestic partnership, by former partners of the domestic partnership by reason of holding a capital or profits interest in the domestic partnership; and

(3) The expanded affiliated group which after the acquisition includes the entity does not have substantial business activities in the foreign country in which or under the law of which the entity is created or organized when compared to the total business activities of such expanded affiliated group."

<sup>2</sup> This entity was renamed as Babcock & Wilcox Investment Company

<sup>3</sup> This entity was renamed as Babcock & Wilcox Holdings, Inc. (BHI)

<sup>4</sup> McDermott Panama Holdings, S.A is 96.5% owned by MII and 3.5% owned by JRM S.A.

B&W in this report, was renamed as “Babcock & Wilcox Investment Company” (BWICO). The relevant corporate lineage immediately before the spinoff is:

- NFS, which is a wholly owned subsidiary of
- NOG-Erwin Holdings, Inc., which is a wholly owned subsidiary of
- B&W NOG, which is a wholly owned subsidiary of
- BWX Technologies, Inc., which is a wholly owned subsidiary of
- BWICO, which is a wholly owned subsidiary of
- B&W, which is a wholly owned subsidiary of
- MII

After various other changes to corporate structure, an intermediate parent company of the licensees, BHI -- whose subsidiaries include BWXT, B&W NOG and NFS -- will merge with and into B&W, and B&W will thereafter remain as the surviving entity. As stated previously, B&W is a new entity that was not previously part of the corporate lineage that includes BHI, BWXT, B&W NOG and NFS. BHI has power to determine corporate policy, and therefore would have power to direct activities under the licenses. Since B&W is a new entity, control over the above-referenced NRC licensees – and the power to direct licensed activities under those licenses – is indirectly transferred.

Consummation of the spinoff, and the change in corporate structure mentioned above, will result in the indirect change of control of BWXT, B&W NOG and NFS and their associated licenses. B&W NOG’s various submissions include:

- A discussion of the reason for the spinoff
- A discussion of the transaction
- Verification that B&W NOG’s financial assurance mechanisms will not be affected by the spin-off and change of control clauses
- Multiple corporate organizational charts detailing corporate structure before and after the spinoff
- A discussion with charts indicating the expected intermediate changes in corporate structure to facilitate the spinoff
- Statement of incorporation for B&W
- Filings with the Delaware Division of Corporations that detail corporate name changes
- A list of corporate officers and directors, before and after the spinoff, for several corporate entities in the MII lineage
- A discussion of the changes in corporate officers and directors as a result of the spinoff
- Historical and *pro forma* financial statements

BWXT, B&W NOG and NFS will remain as the licensees, however the parent company ownership will change control during the spinoff and the change in corporate structure mentioned above. The NRC staff finds that the application adequately provides a complete and clear description of the transaction, and is consistent with the guidance in NUREG-1556, Volume 15.

#### **FOREIGN OWNERSHIP CONTROL OR INFLUENCE (FOCI)**

In accordance with 10 CFR 95.17(a)(1), B&W has notified the Cognizant Security Agency (CSA) and will inform the NRC of any changes to the original FOCI questions.

## **CHANGES OF PERSONNEL**

There are no personnel changes at the affected sites as a result of the spinoff.

## **CHANGES OF LOCATION, EQUIPMENT, AND PROCEDURES**

There are no changes to location, equipment, or procedures at any of the affected sites as a result of the spinoff.

## **SURVEILLANCE RECORDS**

Surveillance records are complete for all the affected sites and are not altered as a result of the separation.

## **DECOMMISSIONING AND RELATED RECORD TRANSFERS**

NUREG-1556, Volume 15 recommends that license transfer applications include (1) information that ensures the proper transfer and maintenance of records important to the safe and effective decommissioning of facilities involved in licensed activities, and (2) a description of the status of the licensed facility with regard to ambient radiation levels and fixed and/or removable contamination as a result of NRC licensed activities. The application should confirm that the transferee accepts full responsibility for the decommissioning of the site, including any contaminated facilities and equipment.

### Record Transfer

B&W NOG, NFS and B&W confirmed that all of B&W NOG's and NFS's records will remain in possession of B&W NOG and NFS, respectively, after the change of control. In addition, B&W NOG and NFS committed to maintaining the records after the change of control. The NRC staff finds that the application contains information on the maintenance of all records, consistent with the guidance in NUREG-1556, Volume 15.

### Contamination Status

In the various submissions and responses to NRC's RAIs, B&W stated its confidence that it had a thorough understanding of the current radiological status of the facilities, including any historic spills or leaks that may need remediation during decommissioning in order for the facilities to be released for unrestricted use. In responses to RAIs, B&W showed an understanding of the current status of non-radiological contamination issues, including several issues currently under NRC review, namely the revised decommissioning cost estimates for both B&W NOG and NFS, and B&W NOG's exemption request to 10 CFR 70.25(f).

The NRC staff finds that the submitted information sufficiently demonstrates B&W's understanding of the current status of the contamination levels at the facilities, consistent with the guidance in NUREG-1556, Volume 15.

### Decommissioning Commitment

The application stated that B&W, B&W NOG and NFS are aware of the current status of the facilities, the regulatory actions under review by the NRC, the potential for additional remedial

actions and assume full responsibility for decommissioning of the facilities. The NRC staff finds that the application sufficiently describes B&W's, B&W NOG's and NFS's commitment to decommissioning of the facilities, in accordance with NUREG-1556, Volume 15.

### Financial Surety

10 CFR Part 70 licensees are subject to financial assurance requirements for decommissioning, decontamination, and reclamation pursuant to 10 CFR 70.25. The indirect change of control does not affect BWXT's, B&W NOG's or NFS's continued compliance with the requirements for financial assurance. BWXT, B&W NOG and NFS, and its parent company B&W, will be responsible for the current status and future decommissioning of the licensed facilities that are subject to the indirect change of control.

B&W NOG and NFS have various financial instruments in place for the purpose of complying with 10 CFR 70.25, including LOCs, surety bonds, and DOE Statements of Intent. These instruments are in each respective licensee's name, and no financial assurance instrument will be impacted or subject to any default which could be triggered by the spinoff and change of control clauses. Therefore, the spinoff and change of control will not affect the level of financial assurance provided.

Per Regulatory Issue Summary 2008-19, B&W provided NRC two years of audited financial statements (balance sheets, income statements, cash flow statements for the fiscal years [FY] ending on December 31, 2007 and 2008) detailing financial results for B&W, and its subsidiaries, before the change of control. Additionally, B&W provided an unaudited balance sheet and income statement for the FY ending on December 31, 2009, detailing financial results for B&W, and its subsidiaries, before the change of control. Neither an audited balance sheet and income statement, nor a cash flow statement is available for this timeframe; however, this did not impede or impact the staff's review. Additionally, B&W provided NRC with five years of *pro forma* financial statements (balance sheets and cash flow statements for FYs 2010, through 2014), detailing projected financial results after the change of control. NRC staff compared the *pro forma* financial data after the change of control to financial data prior to the change of control and finds adequate assurance that B&W will remain a going concern after its separation from MII.

B&W, B&W NOG and NFS provided NRC with corporate organizational charts detailing the corporate lineage as of December 31, 2009, and the anticipated lineage immediately before and immediately after the spinoff. Furthermore, NRC was provided with multiple charts, with a discussion, detailing the anticipated steps and changes in corporate structure that would need to be taken to facilitate the spinoff.

After the spinoff, both B&W NOG and NFS will be subsidiaries of B&W. B&W NOG has also submitted certifications of incorporation for B&W (a Delaware Corporation). The NRC staff utilized this document to verify incorporation of B&W and the state/country of incorporation. Additionally, B&W NOG provided NRC with Certificates of Amendment for Old B&W and MHI, indicating that they are changing their name to BWICO and BHI, respectively.

In Enclosure 1 of B&W NOG's RAI responses, NUREG-1556, Volume 15, Appendix C is cited. B&W NOG argues that "...the three licensees are unaffected by the transactions." The staff disagrees with this view. A key phrase in the citation, cited by B&W NOG, is that "internal changes that have no impact on structure or funding of a licensee do not require notice to NRC...*changes of ownership or control resulting from legal changes...do require prior consent*"

(emphasis added). Control of the license is indirectly changing as a result of the merger of BHI with and into B&W, a new entity. Therefore, B&W NOG's citation from the guidance does not rebut the view that an indirect change of control is occurring.

In Enclosure 1 of B&W NOG's RAI responses, NUREG-1556, Vol. 15, Appendix D, p. D-5 is cited. B&W NOG is arguing that "[t]he internal restructuring steps...does not constitute a change of control." The staff disagrees with this view. A key phrase of the citation, cited by B&W NOG, is that "[a]ll four licensees were affiliated with the same parent...". However, because B&W is a new entity with a new tax identification number, new Federal EIN, B&W and BHI would not be "the same parent," as indicated in the guidance. While the ultimate parent company, MII, remains the same before and after this merger, the intermediate parent company of the licensees is changing. While the Internal Revenue Service (IRS) may view B&W and BHI as the same entity *for tax purposes*, NRC's focus is the change in *authority/control over the license*. The IRS's decision and our decision, in this case, are mutually exclusive. Therefore, B&W NOG's citation from the guidance does not rebut the view that an indirect change of control is occurring.

In Enclosure 1 of B&W NOG's RAI responses, NUREG-1556, Volume 15, Page 5-1 is cited (B&W NOG did not provide the page number in Enclosure 1). B&W NOG argues that "...[a]uthority over B&W NOG's license, held at McDermott International Inc., is not affected by the internal restructuring, no change of control has occurred." The staff disagrees with this view. A key phrase of the citation, cited by B&W NOG, is that "[t]he central issue is whether the authority over the license has changed." As indicated above, authority over the license is changing. BHI is merging with and into B&W, a new entity not previously in the corporate lineage that includes BHI, B&W NOG and NFS. Therefore, B&W NOG's citation from the guidance does not rebut the view that an indirect change of control is occurring.

In B&W NOG's April 1, 2010, submission, B&W NOG's cites NUREG-1556, Vol. 15, Appendix C, Page C-2 (B&W NOG did not provide the page number). In our view, this citation is not relevant to this case. Control of the license is not being eliminated, it is being transferred. B&W is a new entity that was not part of the corporate lineage that includes BHI, B&W NOG and NFS. By merging BHI with and into B&W, a new entity, indirect control over the license is being transferred; BHI's indirect control over the license is not being eliminated, it is being transferred to B&W. Therefore, B&W NOG's citation from the guidance does not rebut the view that an indirect change of control is occurring.

The NRC staff finds that the submitted information sufficiently describes B&W NOG's and NFS's ability to decommission and provide adequate financial surety consistent with the guidance in NUREG-1556, Volume 15, NUREG-1757, Volume 3, and the requirements of 10 CFR 70.25.

### **TRANSFeree'S COMMITMENT TO ABIDE BY THE TRANSFEROR'S COMMITMENTS**

In the application, B&W agreed to abide by all constraints, conditions, requirements, representations, and commitments of the licensees. The application also stated that no unresolved enforcement or inspection issues existed at this time.

The NRC staff finds that the submitted information sufficiently describes B&W's commitment to abide by commitments made by B&W and NFS, consistent with the guidance in NUREG-1556, Volume 15.



**ENVIRONMENTAL REVIEW:**

This NRC action is not subject to further environmental review. This action is categorically excluded from further environmental review pursuant to 10 CFR 51.22 (c)(21).

**CONCLUSIONS:**

The staff has reviewed the various submissions by B&W, B&W NOG and NFS with regard to indirect change of control of SNMs Licenses SNM-42, SNM-124, and SNM-2001, and approves the application pursuant to 10 CFR 70.36.

The submitted information sufficiently described the transaction; documented B&W's understanding of the license and commitments; demonstrated that B&W's, B&W NOG's and NFS's personnel have the experience and training to properly implement and maintain the license and that they will maintain the existing records; and, in the future, will abide by all existing commitments to the license, consistent with the guidance in NUREG-1556, Volume 15.

**RECOMMENDATION:**

Therefore, the staff concludes that the proposed change in control would not alter the previous findings, made pursuant to 10 CFR 70.31(d), that licensed operations will not be inimical to the common defense and security, or to the health and safety of the public.