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June 28, 2013

MPWR-LTR-13-00026

U.S. Nuclear Regulatory Commission (NRC) ATTN: Document Control Desk 11555 Rockville Pike Rockville, MD 20852-2738

Babcock & Wilcox mPower, Inc. Docket Number-PROJ0776 Project Number-776

Subject: Submittal of Topical Report, "Implementation of Random Vibration Theory for Seismic Soil-Structure Interaction", Report No. 11111-000-30R-K01G-00002, Revision 000

Enclosed for NRC acceptance and review is the subject Topical Report (TR). This TR was prepared by Bechtel Corporation under contract to Generation mPower (GmP), as part of the B&W mPower Design Certification effort and will be incorporated by reference in the Design Certification Application in appropriate sections.

The report demonstrates the suitability of Random Vibration Theory (RVT) for application to soilstructure interaction (SSI) analysis. The development of RVT for SSI provides an efficient and straightforward method to obtain stable mean SSI responses for design.

On June 25, 2013, representatives from Generation mPower, B&W mPower and Bechtel Power Corporation met with NRC staff representatives to discuss a wide range of seismic design topics. As a part of that meeting, the application of Random Vibration Theory for the mPower standard plant design was described in considerable detail. We believe that the NRC staff found this presentation informative, and should enable the staff reviewers to conduct their acceptance review of the report in a timely fashion. We remain prepared to respond to any emergent questions that may arise during the staff review.

The report contains information that is Confidential Commercial Information (CCI). We request therefore that the TR be withheld from public disclosure in accordance with the requirements of 10 CFR 2.390. Enclosure 1 is a signed affidavit that provides the justification for withholding the Topical Report. Enclosure 2 is the Topical Report that contains CCI marked in brackets. Enclosure 3 is a redacted version of the Topical Report that can be released to the public.

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Any questions concerning this submittal may be directed to Jeff Halfinger at 434-316-7507 (jahalfinger@babcock.com) or Peter Hastings at 980-365-2071 (pshastings@generationmpower.com)

A. Halfinger,

VP, NSSS Technology B&W mPower

JAH/Ims

- Enclosures: 1. Affidavit
  - 2. Topical Report (CCI)
  - 3. Topical Report (Redacted)
- cc: Joelle L. Starefos, NRC, TWFN 9-F-27 Stewart L. Magruder, Jr., NRC, TWFN 9-F-27 Peter Hastings, GmP

# Enclosure 1 AFFIDAVIT of Jeffrey A. Halfinger

#### Enclosure 1

### AFFIDAVIT OF Jeffrey A. Halfinger

#### STATE OF VIRGINIA

## CITY OF LYNCHBURG

I, Jeffrey A. Halfinger, being duly sworn, do hereby depose and say:

I am a citizen of the United States of America. I am a resident of Lynchburg, Virginia.
My birth date is November 4<sup>th</sup>, 1961.

2. I am the Vice President, Babcock & Wilcox mPower (B&W mPower) NSSS Technology, located in Lynchburg, Virginia.

I have held this position since June 1, 2010. I have personal knowledge of the facts set forth in this affidavit, and if called and sworn as a witness in a deposition or before any court, I could and would testify competently under oath to these facts.

3. B&W mPower requests that the NRC withhold from public disclosure the information marked as "B&W Confidential Commercial Information" regarding certain design and analysis information being submitted to the NRC by the B&W mPower letter number MPWR-LTR-13-00026. This information is included in enclosures to that letter: Topical Report, "Implementation of Random Vibration Theory for Seismic Soil-Structure Interaction", Report No. 11111-000-30R-K01G-00002, Revision 000.

4. I have personal knowledge of the criteria and procedures used by B&W mPower in designating confidential commercial or financial information as proprietary and have been delegated the function to review the information to identify proprietary information and authorized to apply for its withholding. The need for confidentiality is driven by the following:

a) The information requested to be withheld reveals the distinguishing aspects of a process (or component, structure, tool, method, etc.) whose use by any of B&W mPower's competitors, without a license from the submitter, would constitute a competitive economic disadvantage to B&W mPower.

b) Use by a competitor of the information requested to be withheld would reduce a competitor's expenditure of resources, or improve its competitive position, in the design, manufacture, shipment, installation, assurance of quality, or licensing of a similar product.

c) The information requested to be withheld is currently supported by the Department of Energy under award Number DE-NE0000583. All or parts of the information requested to be withheld reveal aspects of privately funded development plans or programs of commercial value to B&W mPower that were developed prior to Department of Energy support.

d) The information requested to be withheld consists of patentable ideas.

5. Specifically, the information identified in paragraph 3 above, is classified as proprietary because B&W mPower has developed the conceptual and technical approaches regarding details of the design of the B&W mPower™ Reactor systems, structures, and components and specifically for this report, associated analysis, disclosure of which could adversely affect B&W mPower's competitive position by informing competitors of the degree of maturity and viability of the design, thereby motivating them to increase efforts to develop competing technologies. These features of the reactor design were privately funded in part by B&W mPower and are of commercial value to B&W mPower because of their nature in providing key elements of the B&W mPower™ reactor design analysis. All or parts of the approach described in the withheld material is patentable. I declare under penalty of perjury under the laws of the United States of America that the foregoing is a true and correct statement of facts.

Halfinder Subscribed and sworn to before me this day of June. 2013

My commission expires: 12-31-20

LIZA MALADA-VOREL SPRUILL Notary Public Commonwealth of Virginia 324419

babcock & wilcox mPower, Inc., a Babcock & Wilco Compission Expires Dec 31, 2013

Enclosure 2 Topical Report (CCI)

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Enclosure 3 Topical Report (Redacted)

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