



August 3, 2010
NND-10-0298

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

ATTN: Document Control Desk

Subject: Virgil C. Summer Nuclear Station (VCSNS) Units 2 and 3 Combined License Application (COLA) - Docket Numbers 52-027 and 52-028
Response to Advisory Committee on Reactor Safeguards (ACRS)
Request for Calculations to Review.

On July 23, 2010, during the AP1000 ACRS Subcommittee meeting in which the VCSNS Units 2 and 3 COLA Chapter 2 was under review, a request was made by a subcommittee member to review some of the calculations performed to support the external hazards portion of the application (FSAR 2.2). In response to that request, SCE&G is providing to the NRC four calculations performed by Bechtel Power Corporation as an enclosure to this letter.

Bechtel Power Corporation, as owner of the information, requests these calculations be **withheld from public disclosure in accordance with 10 CFR 2.390(a)(4)**. Accordingly, SCE&G is providing the requested calculations along with Bechtel affidavits supporting application to withhold from public disclosure. The affidavits set forth the basis on which the information may be withheld from public disclosure by the Commission and addresses with specificity the considerations listed in paragraph (b)(3) of Section 2.390 of the Commission's regulations.

Accordingly, it is respectfully requested that the information contained as attachments to this letter which is proprietary to Bechtel be **withheld from public disclosure in accordance with 10 CFR 2.390** of the Commission's regulations.

DOB3
HRO

Should you have any questions, please contact Mr. Alfred M. Paglia by telephone at (803) 345-4191, or by email at apaglia@scana.com.



Ronald B. Clary
Vice President
New Nuclear Deployment

AMM/RBC/am

Enclosure – **withhold under 10 CFR 2.390(a)(4)**

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10 CFR 2.390
AFFIDAVIT OF JOHN K. ATWELL
SUPPORTING APPLICATION TO WITHHOLD
FROM PUBLIC DISCLOSURE

**BECHTEL CALCULATION 25242-ENV-002, "NATURAL GAS PIPELINE ACCIDENTAL
RELEASE," REVISION 2, October 11, 2007**

I, John K. Atwell, Manager of Nuclear Operations, of Bechtel Power Corporation (Bechtel), having been duly sworn, do hereby affirm and state:

I have been authorized by Bechtel to (a) review the information owned by Bechtel which is referenced herein relating to supporting analyses for the V. C. Summer 2 and 3 Final Safety Analysis Report (FSAR) which Bechtel seeks to have withheld from public disclosure pursuant to 10 CFR 2.390(a)(4), and (b) apply for the withholding of such information from public disclosure by the Nuclear Regulatory Commission (NRC) on behalf of Bechtel.

1. Pursuant to the provisions of 10 CFR 2.390(b)(3), the following is furnished for consideration by the Commission in determining whether the information sought to be withheld from public disclosure should be withheld.
 - i. The information sought to be withheld from public disclosure is owned and has been held in confidence by Bechtel.
 - ii. The information is of a type customarily held in confidence by Bechtel and not customarily disclosed to the public. Bechtel has a rational basis for determining the types of information customarily held in confidence by it and, in that connection, utilizes a system to determine when and whether to hold certain types of information in confidence. The application of that system and the substance of that system constitute Bechtel policy and provide the rational basis required.

Under that system, information is held in confidence if it falls in one or more of several types, the release of which might result in the loss of an existing or potential competitive advantage, as follows:

- a) The information reveals the distinguishing aspects of a process (or component, structure, tool, method, etc.) where presentation of its use by any of Bechtel's competitors without license from Bechtel constitutes a competitive economic advantage.
- b) It consists of supporting data, including test data, relative to a process (or component, structure, tool, method, etc.), the application of which data secures a competitive economic advantage (e.g., by optimization or improved marketability).
- c) Its use by a competitor would reduce their expenditure of resources or improve their competitive position in the design, manufacture, shipment, installation, assurance of quality, or licensing a similar product.
- d) It reveals cost or price information, production capacities, budget levels, or commercial strategies of Bechtel, its customers, or suppliers.

- e) It reveals aspects of past, present, or future Bechtel or customer funded development plans and programs of potential commercial value to Bechtel.
- f) It contains patentable ideas, for which patent protection may be desirable.

There are sound policy reasons behind the Bechtel system which include the following:

- a) The use of such information by Bechtel gives Bechtel a competitive advantage over its competitors. It is, therefore, withheld from disclosure to protect the Bechtel competitive position.
 - b) It is information, which is marketable in many ways. The extent to which such information is available to competitors diminishes Bechtel's ability to sell products and services involving the use of the information.
 - c) Use by our competitors would put Bechtel at a competitive disadvantage by reducing their expenditure of resources at Bechtel expense.
 - d) Each component of proprietary information pertinent to a particular competitive advantage is potentially as valuable as the total competitive advantage. If competitors acquire components or proprietary information, any one component may be the key to the entire puzzle, thereby depriving Bechtel of a competitive advantage.
 - e) Unrestricted disclosure would jeopardize the position of prominence of Bechtel in the world market, and thereby give a market advantage to the competition.
 - f) The Bechtel capacity to invest corporate assets in research and development depends upon the success in obtaining and maintaining a competitive advantage.
- iii. The information is being transmitted to the Commission in confidence and, under the provisions of 10 CFR 2.390, it is to be received in confidence by the Commission.
 - iv. The information sought to be protected is not available in public sources or available information has not been previously employed in the same original manner or method to the best of our knowledge and belief.
 - v. The proprietary information specifically sought to be withheld is Bechtel Calculation 25242-ENV-002, "Natural Gas Pipeline Accidental Release," Revision 2, 10/11/07, which was prepared to support the evaluation of potential accidents documented in V. C. Summer 2 and 3 FSAR Section 2.2.3, "Evaluation of Potential Accidents."

This calculation was prepared by Bechtel to analyze the potential effects of an accidental release from a natural gas pipeline as a potential accident that might affect safe operation of V.C. Summer Units 2 and 3.

Public disclosure of this proprietary information is likely to cause substantial harm to the competitive position of Bechtel because it would enhance the ability of competitors to perform similar calculations and related services for commercial power reactors without commensurate expenses. Also, public disclosure of the information would enable others

to use the information to meet NRC requirements for licensing documentation without purchasing the right to use the information.

The development of the information described in part is the result of applying the results of many analyst-hours and significant monetary expenditure.

In order for a competitor of Bechtel to duplicate this information, similar analyses would have to be performed and a significant manpower effort, having the requisite talent and experience, would have to be expended.

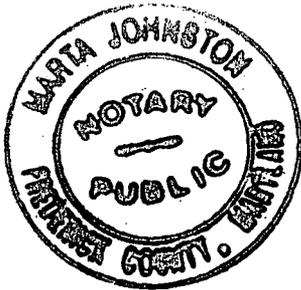
Further affiant sayeth not.

John K. Atwell, having been duly sworn, hereby confirms that I am the Manager of Nuclear Operations, of Bechtel Power Corporation, that I am authorized on behalf of Bechtel to review the information attached hereto and to sign and file with the Nuclear Regulatory Commission this affidavit and the attachments hereto, and that the statements made and matters set forth herein are true and correct to the best of my knowledge, information, and belief.



John K. Atwell

On this 22 day of July 2010, the individual signing above personally appeared before me, is known by me to be the person whose name is subscribed to within the instrument, and acknowledged that he executed the same for the purposes therein contained. In witness hereof I hereunto set my hand and official seal.





Notary Public
State of Maryland, Frederick County
My commission expires 4/1/2011

10 CFR 2.390
AFFIDAVIT OF JOHN K. ATWELL
SUPPORTING APPLICATION TO WITHHOLD
FROM PUBLIC DISCLOSURE

BECHTEL CALCULATION 25242-ENV-006, "ALOHA® ANALYSIS FOR ON-SITE
CHEMICALS STORED AT UNIT 1," REVISION 2, October 28, 2009

I, John K. Atwell, Manager of Nuclear Operations, of Bechtel Power Corporation (Bechtel), having been duly sworn, do hereby affirm and state:

I have been authorized by Bechtel to (a) review the information owned by Bechtel which is referenced herein relating to supporting analyses for the V. C. Summer 2 and 3 Final Safety Analysis Report (FSAR) which Bechtel seeks to have withheld from public disclosure pursuant to 10 CFR 2.390(a)(4), and (b) apply for the withholding of such information from public disclosure by the Nuclear Regulatory Commission (NRC) on behalf of Bechtel.

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 - ii. The information is of a type customarily held in confidence by Bechtel and not customarily disclosed to the public. Bechtel has a rational basis for determining the types of information customarily held in confidence by it and, in that connection, utilizes a system to determine when and whether to hold certain types of information in confidence. The application of that system and the substance of that system constitute Bechtel policy and provide the rational basis required.

Under that system, information is held in confidence if it falls in one or more of several types, the release of which might result in the loss of an existing or potential competitive advantage, as follows:

- a) The information reveals the distinguishing aspects of a process (or component, structure, tool, method, etc.) where presentation of its use by any of Bechtel's competitors without license from Bechtel constitutes a competitive economic advantage.
- b) It consists of supporting data, including test data, relative to a process (or component, structure, tool, method, etc.), the application of which data secures a competitive economic advantage (e.g., by optimization or improved marketability).
- c) Its use by a competitor would reduce their expenditure of resources or improve their competitive position in the design, manufacture, shipment, installation, assurance of quality, or licensing a similar product.
- d) It reveals cost or price information, production capacities, budget levels, or commercial strategies of Bechtel, its customers, or suppliers.

- e) It reveals aspects of past, present, or future Bechtel or customer funded development plans and programs of potential commercial value to Bechtel.
- f) It contains patentable ideas, for which patent protection may be desirable.

There are sound policy reasons behind the Bechtel system which include the following:

- a) The use of such information by Bechtel gives Bechtel a competitive advantage over its competitors. It is, therefore, withheld from disclosure to protect the Bechtel competitive position.
 - b) It is information, which is marketable in many ways. The extent to which such information is available to competitors diminishes Bechtel's ability to sell products and services involving the use of the information.
 - c) Use by our competitors would put Bechtel at a competitive disadvantage by reducing their expenditure of resources at Bechtel expense.
 - d) Each component of proprietary information pertinent to a particular competitive advantage is potentially as valuable as the total competitive advantage. If competitors acquire components or proprietary information, any one component may be the key to the entire puzzle, thereby depriving Bechtel of a competitive advantage.
 - e) Unrestricted disclosure would jeopardize the position of prominence of Bechtel in the world market, and thereby give a market advantage to the competition.
 - f) The Bechtel capacity to invest corporate assets in research and development depends upon the success in obtaining and maintaining a competitive advantage.
- iii. The information is being transmitted to the Commission in confidence and, under the provisions of 10 CFR 2.390, it is to be received in confidence by the Commission.
 - iv. The information sought to be protected is not available in public sources or available information has not been previously employed in the same original manner or method to the best of our knowledge and belief.
 - v. The proprietary information specifically sought to be withheld is Bechtel Calculation 25242-ENV-006, "ALOHA® Analysis for On-Site Chemicals Stored at Unit 1," Revision 2, 10/28/09, which was prepared to support the evaluation of potential accidents documented in V. C. Summer 2 and 3 FSAR Section 2.2.3, "Evaluation of Potential Accidents."

This calculation was prepared by Bechtel to determine the toxic, flammable, and explosive minimum safe distances, control room concentrations, and overpressure values due to explosions, using the Areal Locations of Hazardous Atmospheres (ALOHA®) software, for the proposed V.C. Summer Unit 2 from chemicals associated with V.C. Summer Unit 1.

Public disclosure of this proprietary information is likely to cause substantial harm to the

competitive position of Bechtel because it would enhance the ability of competitors to perform similar calculations and related services for commercial power reactors without commensurate expenses. Also, public disclosure of the information would enable others to use the information to meet NRC requirements for licensing documentation without purchasing the right to use the information.

The development of the information described in part is the result of applying the results of many analyst-hours and significant monetary expenditure.

In order for a competitor of Bechtel to duplicate this information, similar analyses would have to be performed and a significant manpower effort, having the requisite talent and experience, would have to be expended.

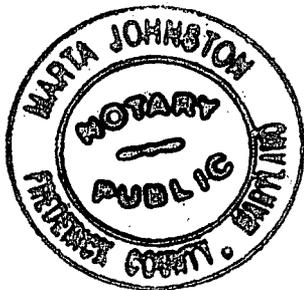
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John K. Atwell, having been duly sworn, hereby confirms that I am the Manager of Nuclear Operations, of Bechtel Power Corporation, that I am authorized on behalf of Bechtel to review the information attached hereto and to sign and file with the Nuclear Regulatory Commission this affidavit and the attachments hereto, and that the statements made and matters set forth herein are true and correct to the best of my knowledge, information, and belief.



John K. Atwell

On this 22 day of July, 2010, the individual signing above personally appeared before me, is known by me to be the person whose name is subscribed to within the instrument, and acknowledged that he executed the same for the purposes therein contained. In witness hereof I hereunto set my hand and official seal.





Notary Public
State of Maryland, Fredrick County
My commission expires 4/1/2011

10 CFR 2.390
AFFIDAVIT OF JOHN K. ATWELL
SUPPORTING APPLICATION TO WITHHOLD
FROM PUBLIC DISCLOSURE

BECHTEL CALCULATION 25242-ENV-011, "ALOHA® RAILROAD CALCULATION,"
REVISION 1, December 29, 2009

I, John K. Atwell, Manager of Nuclear Operations, of Bechtel Power Corporation (Bechtel), having been duly sworn, do hereby affirm and state:

I have been authorized by Bechtel to (a) review the information owned by Bechtel which is referenced herein relating to supporting analyses for the V. C. Summer 2 and 3 Final Safety Analysis Report (FSAR) which Bechtel seeks to have withheld from public disclosure pursuant to 10 CFR 2.390(a)(4), and (b) apply for the withholding of such information from public disclosure by the Nuclear Regulatory Commission (NRC) on behalf of Bechtel.

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- iii. The information is being transmitted to the Commission in confidence and, under the provisions of 10 CFR 2.390, it is to be received in confidence by the Commission.
 - iv. The information sought to be protected is not available in public sources or available information has not been previously employed in the same original manner or method to the best of our knowledge and belief.
 - v. The proprietary information specifically sought to be withheld is Bechtel Calculation 25242-ENV-011, "ALOHA® Railroad Calculation," Revision 1, December 29, 2009, which was prepared to support the evaluation of potential accidents documented in V. C. Summer 2 and 3 FSAR Section 2.2.3, "Evaluation of Potential Accidents."

This calculation was prepared by Bechtel to analyze postulated events involving the release of toxic and/or flammable chemicals transported on the railroad in the vicinity of V.C. Summer Units 2 and 3. The analysis was used to determine whether the potential consequences from each postulated event are serious enough to affect the safety of the plant to the extent that the guidelines in 10 CRF Part 100 could be exceeded.

Public disclosure of this proprietary information is likely to cause substantial harm to the competitive position of Bechtel because it would enhance the ability of competitors to

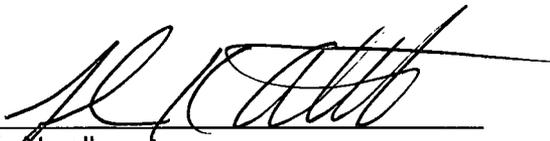
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Further affiant sayeth not.

John K. Atwell, having been duly sworn, hereby confirms that I am the Manager of Nuclear Operations, of Bechtel Power Corporation, that I am authorized on behalf of Bechtel to review the information attached hereto and to sign and file with the Nuclear Regulatory Commission this affidavit and the attachments hereto, and that the statements made and matters set forth herein are true and correct to the best of my knowledge, information, and belief.



John K. Atwell

On this 22 day of July 2010, the individual signing above personally appeared before me, is known by me to be the person whose name is subscribed to within the instrument, and acknowledged that he executed the same for the purposes therein contained. In witness hereof I hereunto set my hand and official seal.





Notary Public
State of Maryland, Frederick County
My commission expires 4/1/2011

10 CFR 2.390
AFFIDAVIT OF JOHN K. ATWELL
SUPPORTING APPLICATION TO WITHHOLD
FROM PUBLIC DISCLOSURE

BECHTEL CALCULATION 25242-ENV-012, "TNT MASS EQUIVALENTS FOR CHEMICALS
TRANSPORTED BY RAIL," REVISION 1, February 24, 2010

I, John K. Atwell, Manager of Nuclear Operations, of Bechtel Power Corporation (Bechtel), having been duly sworn, do hereby affirm and state:

I have been authorized by Bechtel to (a) review the information owned by Bechtel which is referenced herein relating to supporting analyses for the V. C. Summer 2 and 3 Final Safety Analysis Report (FSAR) which Bechtel seeks to have withheld from public disclosure pursuant to 10 CFR 2.390(a)(4), and (b) apply for the withholding of such information from public disclosure by the Nuclear Regulatory Commission (NRC) on behalf of Bechtel.

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 - iv. The information sought to be protected is not available in public sources or available information has not been previously employed in the same original manner or method to the best of our knowledge and belief.
 - v. The proprietary information specifically sought to be withheld is Bechtel Calculation 25242-ENV-012, "TNT Mass Equivalents for Chemicals Transported by Rail," Revision 1, February 24, 2010, which was prepared to support the evaluation of potential accidents documented in V. C. Summer 2 and 3 FSAR Section 2.2.3, "Evaluation of Potential Accidents."

This calculation was prepared by Bechtel to estimate the impact of explosive chemicals transported by rail on the Norfolk Railroad near the proposed V.C. Summer Units 2 and 3. Explosive fluids transported on the Norfolk Railroad were evaluated by calculating their TNT mass equivalents and safe distances analyzed to determine the potential effect of a postulated accident on V.C. Summer Units 2 and 3.

Public disclosure of this proprietary information is likely to cause substantial harm to the

competitive position of Bechtel because it would enhance the ability of competitors to perform similar calculations and related services for commercial power reactors without commensurate expenses. Also, public disclosure of the information would enable others to use the information to meet NRC requirements for licensing documentation without purchasing the right to use the information.

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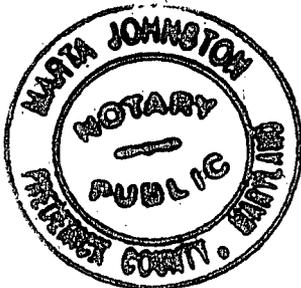
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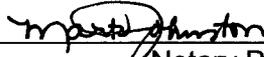
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