



Cornelius J. Gannon  
Vice President  
Brunswick Nuclear Plant  
Progress Energy Carolinas, Inc.

October 11, 2005

SERIAL: BSEP 05-0132  
TSC-2005-05

10 CFR 50.90

U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555-0001

Subject: Brunswick Steam Electric Plant, Unit Nos. 1 and 2  
Docket Nos. 50-325 and 50-324/License Nos. DPR-71 and DPR-62  
Submittal of Supporting Calculations Regarding  
Revised Main Steam Isolation Valve Leakage Limit

Reference: Letter from Cornelius J. Gannon to the U. S. Nuclear Regulatory  
Commission (Serial: BSEP 05-0102), "Request for License Amendment -  
Revised Main Steam Isolation Valve Leakage Limit," dated August 11, 2005  
(ML052310224)

Ladies and Gentlemen:

On August 11, 2005, Carolina Power & Light Company, now doing business as Progress Energy Carolinas, Inc. (PEC), requested a revision to the Technical Specifications (TSs) for the Brunswick Steam Electric Plant (BSEP), Units 1 and 2. The proposed change revises Surveillance Requirement 3.6.1.3.9 with respect to the allowed leakage rate through each Main Steam Isolation Valve (MSIV). To support the MSIV leakage rate change, additional automatic initiation functions for the Control Room Emergency Ventilation (CREV) system were also included in TS 3.3.7.1, "Control Room Emergency Ventilation (CREV) System Instrumentation."

On October 5, 2005, PEC met with the NRC to discuss the pending amendment request. During this meeting, PEC provided electronic versions of three calculations performed in support of the proposed amendment. Enclosure 1 provides a CD-ROM, which contains the electronic versions of these calculations.

The calculations supporting this amendment request contain information prepared by Applied Analysis Corporation (AAC) and AAC considers the information to be proprietary as defined by 10 CFR 2.790. AAC, as the owner of the proprietary information, has executed the affidavit provided in Enclosure 2, which identifies that the enclosed proprietary information has been handled and classified as proprietary, is customarily held in confidence, and has been withheld from public disclosure. AAC requests that the enclosed proprietary information be withheld from public disclosure in accordance with the provisions of 10 CFR 2.390 and 9.17. Each calculation, in its entirety, is considered proprietary. As such, non-proprietary versions are not provided.

APO/

P.O. Box 10429  
Southport, NC 28461

T > 910.457.3698  
F > 910.457.2803

Note: CD Rom was damaged  
and replaced with  
paper copy by Licens  
11/8/05

The following files are provided on the enclosed CD-ROM.

List of Electronic Files		
File Name	File Size	Access
0001_BNP_RAD_006_Amend-A_Rev1A.pdf	12,249,000 bytes	Proprietary
0002_BNP_RAD_007_Amend-A_Rev-1A.pdf	8,848,000 bytes	Proprietary
0003_BNP_RAD_009_Amend-A_Rev-1A.pdf	8,498,000 bytes	Proprietary

There are no regulatory commitments contained in this letter. Please refer any questions regarding this submittal to Mr. Edward T. O'Neil, Manager - Support Services, at (910) 457-3512.

I declare, under penalty of perjury, that the foregoing is true and correct. Executed on October 11, 2005.

Sincerely,



Cornelius J. Gannon

MAT/mat

Enclosures:

1. CD-ROM - "MSIV Leakage Increase Supporting Calcs."
2. Applied Analysis Corp. Affidavit

cc (w/o Enclosure 1):

U. S. Nuclear Regulatory Commission, Region II  
ATTN: Dr. William D. Travers, Regional Administrator  
Sam Nunn Atlanta Federal Center  
61 Forsyth Street, SW, Suite 23T85  
Atlanta, GA 30303-8931

U. S. Nuclear Regulatory Commission  
ATTN: Mr. Eugene M. DiPaolo, NRC Senior Resident Inspector  
8470 River Road  
Southport, NC 28461-8869

U. S. Nuclear Regulatory Commission **(Electronic Copy Only)**  
ATTN: Ms. Brenda L. Mozafari (Mail Stop OWFN 8G9)  
11555 Rockville Pike  
Rockville, MD 20852-2738

Ms. Jo A. Sanford  
Chair - North Carolina Utilities Commission  
P.O. Box 29510  
Raleigh, NC 27626-0510

Ms. Beverly O. Hall, Section Chief  
Radiation Protection Section, Division of Environmental Health  
North Carolina Department of Environment and Natural Resources  
3825 Barrett Drive  
Raleigh, NC 27609-7221

CD-ROM  
MSIV Leakage Increase  
Supporting Calcs.

BSEP 05-0132  
Enclosure 2

# Applied Analysis Corp. Affidavit

# APPLIED ANALYSIS CORP.

## AFFIDAVIT

I, Juan M. Cajigas, being duly sworn, depose and state as follows:

- 1) I am the President of Applied Analysis Corp. ("AAC") and have reviewed the information described in paragraph (2) and sought to be withheld.
- 2) The information sought to be withheld is contained in the AAC proprietary calculations listed in Attachment A.
- 3) In making this application for withholding of proprietary information, AAC relies upon the exemption from disclosure set forth in the Freedom of Information Act ("FOIA"), 5 USC Sec. 552(b)(4), and the Trade Secrets Act, 18 USC Sec. 1905, and NRC regulations 10 CFR 9.17(a)(4) and 2.390(a)(4) for "trade secrets" (Exemption 4). The material for which exemption from disclosure is here sought is all "confidential commercial information", and some portions also qualify under the narrower definition of "trade secret", within the meanings assigned to those terms for purposes of FOIA Exemption 4 in, respectively, Critical Mass Energy Project v. Nuclear Regulatory Commission, 975F2d871 (DC Cir. 1992), and Public Citizen Health Research Group v. FDA, 704F2d1280 (DC Cir. 1983).
- 4) Some examples of categories of information which fit into the definition of proprietary information are:
  - a) Information that discloses a process, method, or apparatus, including supporting data and analyses, where prevention of its use by AAC competitors without license from AAC constitutes a competitive economic advantage over other companies;
  - b) Information which, if used by a competitor, would reduce his expenditure of resources or improve his competitive position in the design, preparation, assurance of quality, or licensing of a similar service;
  - c) Information which reveals cost or price information, production capacities, budget levels, or commercial strategies of AAC, its customers, or its suppliers;
  - d) Information which reveals aspects of past, present, or future AAC customer-funded development plans and programs, of potential commercial value to AAC;
  - e) Information which discloses patentable subject matter for which it may be desirable to obtain patent protection.

The information sought to be withheld is considered to be proprietary for the reasons set forth in both paragraphs (4)a and (4)b, above.

- 5) The information sought to be withheld has, to the best of my knowledge and belief, consistently been held in confidence by AAC, no public disclosure has been made, and it is not available in public sources. All disclosures to third parties including any required transmittals to NRC, have been made, or must be made, pursuant to regulatory provisions or proprietary agreements which provide for maintenance of the information in confidence. Its initial designation as proprietary information, and the subsequent steps taken to prevent its unauthorized disclosure, are as set forth in paragraphs (6) and (7) following.

- 6) Initial approval of proprietary treatment of a document is made by the manager of the originating component, the person most likely to be acquainted with the value and sensitivity of the information in relation to industry knowledge. Access to such documents within AAC is limited on a "need to know" basis.
- 7) The procedure for approval of external release of such a document typically requires review by the staff manager, project manager, principal scientist or other equivalent authority, by the manager of the cognizant marketing function (or his delegate), and by the Legal Operation, for technical content, competitive effect, and determination of the accuracy of the proprietary designation. Disclosures outside AAC are limited to regulatory bodies, customers, and potential customers, and their agents, suppliers, and licensees, and others with a legitimate need for the information, and then only in accordance with appropriate regulatory provisions or proprietary agreements.
- 8) The information identified in paragraph (2), above, is classified as proprietary because it contains detailed methods and processes, which AAC has developed for the preparation of detailed safety analyses in support of the design and licensing of nuclear facilities.

The development of these methods and processes was achieved at a significant cost to AAC and derived from company experience that constitutes a major AAC asset.

- 9) Disclosure of the information sought to be withheld is likely to cause substantial harm to AAC's competitive position and foreclose or reduce the availability of profit-making opportunities. The information is part of AAC's nuclear safety analysis and technology base, and its commercial value includes development of the expertise to determine and apply the appropriate evaluation processes.

The precise value of the expertise to devise an evaluation process and apply the correct analytical methodology is difficult to quantify, but it clearly is substantial.

AAC's competitive advantage will be lost if its competitors are able to use the results of the AAC experience to normalize or verify their own process or if they are able to claim an equivalent understanding by demonstrating that they can arrive at the same or similar results and conclusions.

The value of this information to AAC would be lost if the information were disclosed to the public. Making such information available to competitors without their having been required to undertake a similar expenditure of resources would unfairly provide competitors with a windfall, and deprive AAC of the opportunity to exercise its competitive advantage to seek an adequate return on its investment in developing these analytical processes.

STATE OF PENNSYLVANIA

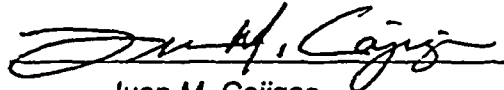
COUNTY OF BERKS

)  
) ss:

Juan M. Cajigas, being duly sworn, deposes and says:

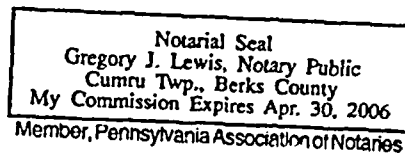
That he has read the foregoing affidavit and the matters stated therein are true and correct to the best of his knowledge, information, and belief.

Executed at Reading, Pennsylvania, this 31<sup>st</sup> day of August 2005.

  
Juan M. Cajigas  
Applied Analysis Corp.

Subscribed and sworn before me this 31<sup>st</sup> day of August 2005.

  
Notary Public, State of Pennsylvania



Sworn Before Me This Date 8/31/05  
Commonwealth of Pennsylvania  
County of Berks



## **ATTACHMENT A**

1. Calculation No. BNP-RAD-007, Rev. 1A, with Amendment A, "DBA LOCA – Radiological Dose with Alternative Source Term"
2. Calculation No. BNP-RAD-006, Rev. 1A, with Amendment A, "NUREG-0737 Item II.B.2 – Mission Dose Assessment for Asset Enhancement Program (AEP) and Alternative Source Term (AST)"
3. Calculation No. BNP-RAD-009, Rev. 1A, with Amendment A, "DBA LOCA – Radionuclide Loading on Charcoal Filters of Engineered Safety Features and Habitability Systems"
4. Calculation No. OMS-0016, Rev. 0, "Post-LOCA Steam Pipe Internal Temperature 30-day Profile for Radiological Dose Analysis"