



**Nebraska Public Power District**

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NLS2009012  
March 5, 2009

U.S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, D.C. 20555-0001

**Subject:** Response to Nuclear Regulatory Commission Request Regarding Withholding Information from Public Disclosure  
Cooper Nuclear Station, Docket No. 50-298, DPR-46

- References:**
1. Letter from Stewart B. Minahan, Nebraska Public Power District, to the U.S. Nuclear Regulatory Commission, dated October 13, 2008, "License Amendment Request for Application of the Alternative Source Term for Calculating Loss-Of-Coolant Accident Dose Consequences"
  2. Letter from Carl F. Lyon, U.S. Nuclear Regulatory Commission, to Stewart B. Minahan, Nebraska Public Power District, dated January 29, 2009, "Cooper Nuclear Station – Request for Withholding Information from Public Disclosure (TAC NO. MD9921)"

Dear Sir or Madam:

The purpose of this letter is for the Nebraska Public Power District (NPPD) to provide the Nuclear Regulatory Commission (NRC) a revised affidavit with additional information addressing the request to withhold specific information from public disclosure pursuant to the provisions of 10 CFR 2.390.

Enclosure 1 of Reference 1 contained information considered to be proprietary to Alion Science and Technology Corporation (ALION). In Reference 2, the NRC determined the request for withholding from public disclosure is not warranted. Reference 2 stated that ALION conducted the Loss-Of-Coolant Accident (LOCA) dose analysis for Cooper Nuclear Station using the RADTRAD computer code and that the code and information regarding the code are publicly available. Reference 2 also stated that the assumptions and methodology that ALION used in the LOCA dose analysis are based on Regulatory Guide 1.183, "Alternative Radiological Source Terms for Evaluating Design Basis Accidents at Nuclear Power Reactors," which is publicly available. Also stated in Reference 2 was that many of the root evaluations used in the calculation of aerosol activity behavior appear simply to be published derivations of the Navier-Stokes non-compressible fluid flow dynamics equations, and the inputs to these equations are

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also publicly available information, of which neither ALION nor the NPPD has specific ownership.

Enclosure 1 of this letter provides the revised affidavit from ALION supporting the original request to withhold from public disclosure. Enclosure 1 describes that ALION is obliged to protect the non-disclosure of General Electric proprietary information for the condenser model, and addresses the treatment of data which was developed by ALION and has intrinsic value.

Should you have any questions concerning this matter, please contact me at (402) 825-2904.

Sincerely,



David Van Der Kamp  
Licensing Manager

/jo

Enclosure

cc: Regional Administrator w/enclosure  
USNRC - Region IV

Cooper Project Manager w/enclosure  
USNRC - NRR Project Directorate IV-1

Senior Resident Inspector w/enclosure  
USNRC - CNS

Nebraska Health and Human Services w/enclosure  
Department of Regulation and Licensure

NPG Distribution w/o enclosure

CNS Records w/enclosure

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Enclosure

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**ENCLOSURE**

**Revised Alion Science and Technology Corporation Affidavit Required by 10 CFR 2.390**

**Alion Science and Technology Corporation Affidavit Required by 10 CFR 2.390**

**Alion Science and Technology**

**AFFIDAVIT**

I, Peter K. Mast, state as follows:

- (1) I am Vice President, Innovative Technology Solutions Operations, Alion Science and Technology Corporation (ALION) and have the responsibility for reviewing the information described in paragraph (2) that is sought to be withheld, and have been authorized to apply for its withholding.
- (2) The information sought to be withheld is contained in the proprietary calculation ALION-CAL-NPPD-3236-002, Revision 1. See attachment 1 for further details related to Alion specific developments and protection of proprietary data.
- (3) In making this application for withholding of proprietary information of which it is the owner, ALION 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 materials 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 that 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 ALION's competitors without license from ALION constitutes a competitive economic advantage over other companies;
  - b. Information that, if used by a competitor, would reduce his expenditure of resources or improve his competitive position in the design, preparation, manufacture, shipment, installation, assurance of quality, or licensing of a similar product or service;
  - c. Information that reveals cost or price information, production capacities, budget levels, or commercial strategies of ALION, its customers, or its suppliers;
  - d. Information that reveals aspects of past, present, or future ALION customer-funded development plans and programs, resulting in potential products to ALION;
  - e. Information that discloses patentable subject matter for which it may be desirable to obtain patent protections. The information sought to be withheld is considered to be proprietary for the reasons set forth in paragraphs (4)a, and (4)b, above.
- (5) To address 10 CFR 2.390 (a)(4), the information sought to be withheld is being submitted to NRC in confidence. The information is of a sort customarily held in confidence by ALION, and is in fact so held. The information sought to be withheld has, to the best of my knowledge and belief, consistently been held in confidence by ALION, 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 division, 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 ALION 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 manager, project manager, principal engineer or other equivalent authority, by the manager of the cognizant marking function (or his delegate), and by Contracts, for technical content, competitive effect, and determination of the accuracy of the proprietary designation. Disclosures outside ALION 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 ALION 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 along with the interpretation and application of the analytical results was derived from extensive company experience that constitutes a major ALION asset (see Attachment 1 for further details).
- (9) Public disclosure of the information sought to be withheld is likely to cause substantial harm to ALION's competitive position and foreclose or reduce the availability of profit-making opportunities. The information is part of ALION's comprehensive nuclear safety and technology base, and its commercial value extends beyond the original development cost. The value of the technology base goes beyond the extensive physical databases used and analytical methodology and 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. ALION's competitive advantage will be lost if its competitors are able to use the results of the ALION 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 conclusions. The value of this information to ALION 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 ALION of the opportunity to exercise its competitive advantage to seek an adequate return on its large investment in developing these very valuable analytical tools.

I declare under penalty of perjury that the foregoing affidavit and the matters stated therein are true and correct to the best of my knowledge, information, and belief.

Executed on this 26<sup>th</sup> day of February, 2009



Peter K. Mast  
Vice President, Alion Science and Technology

## **Attachment I**

Unique to the NPPD LOCA calculation. Alion Science and Technology implemented and developed various models for evaluating the LOCA radiological dose impact. As part of this development, Alion did utilize equations from textbooks, however implementation and development of how those equations were utilized and justified were critical to the application. Also some of the information provided in the calculation is proprietary to GE/BWROG and as such, Alion Science and Technology was protecting the interests of those entities from public disclosure.

### **Determining a maximum possible flowrate from the reactor building**

As a conservatism the LOCA calculation did not allow holdup in the reactor building, however the radionuclides must move thru the building then thru a filter. Thus, Alion developed a no mixing release exponential to remove the radionuclides at a reasonable flowrate (2.3.2)

### **Added homogeneous deposition models in the steam lines**

Implemented the deposition model from AEB98-03 with Alion developed corrections to the model. (2.4.2)

Alion developed transformations for the Cline model from deposition velocity and fixation rates into effective deposition efficiencies. (2.4.2)

### **Deposition in the condenser**

Described the GE/BWROG model for the phenomena in a separate appendix (Appendix A). This utilized a GE/BWROG model which is proprietary both to GE and the BWROG. Thus, in interest of protecting that proprietary model Alion is protecting those interests.

### **Engineered Safety Feature testing**

Examined the method used for testing ESF line leakage versus the scenario in place during an accident (i.e. the difference between testing at standard temperature and pressure and at accident conditions). Developed a model, based upon text book equations, describing the phenomena that showed the relationship between the test and the accident values (2.6)

Correspondence Number: NLS2009012

The following table identifies those actions committed to by Nebraska Public Power District (NPPD) in this document. Any other actions discussed in the submittal represent intended or planned actions by NPPD. They are described for information only and are not regulatory commitments. Please notify the Licensing Manager at Cooper Nuclear Station of any questions regarding this document or any associated regulatory commitments.

COMMITMENT	COMMITMENT NUMBER	COMMITTED DATE OR OUTAGE
None		