



P.O. Box 968 ■ Richland, Washington 99352-0968

January 23, 2002
GO2-02-014

Docket No. 50-397

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

Gentlemen:

Subject: **COLUMBIA GENERATING STATION, OPERATING LICENSE NPF-21
LICENSE AMENDMENT REQUEST -- ALTERNATIVE SOURCE TERM
PROPRIETARY VERSIONS OF PH AND MSLB CALCULATIONS**

Reference: Letter GO2-01-156, dated December 3, 2001, RL Webring (Energy Northwest) to
NRC, "License Amendment Request -- Alternative Source Term"

During a December 17, 2001, meeting the NRC requested that we provide copies of the suppression pool pH and main steam line break calculations in support of staff review of the referenced license amendment request.

The calculations are included as an enclosure. The material in the enclosure has been identified as proprietary. Therefore, pursuant to the requirements of 10 CFR 2.790, an affidavit is enclosed to support the withholding of this information from public disclosure. Non-proprietary versions of the calculations were submitted under separate cover.

Should you have any questions or desire additional information pertaining to this letter, please call Christina Perino at (509) 377-2075.

Respectfully,

DW Coleman, Manager
Performance Assessment and Regulatory Programs
Mail Drop PE20

Enclosure

cc: EW Merschhoff - NRC RIV
JS Cushing - NRC NRR (w/encl)
NRC Senior Resident Inspector - 988C

DL Williams - BPA - 1399
TC Poindexter - Winston & Strawn

AFFIDAVIT

STATE OF WASHINGTON)
)
COUNTY OF BENTON)

Subject: Polestar Applied Technology, Inc.,
Calculations PSAT 206CT.QA.01.05 and
PSAT 206CT.QA.02.03 [Columbia
Generating Station, Operating License NPF-
21, Submittal of Proprietary Versions of
Suppression Pool pH and Main Steam Line
Break Calculations in Support of NRC Review
of Alternative Source Term License
Amendment Request]

I, W.A. Kiel, being duly sworn, subscribe to and say that I am the Acting Manager, Performance Assessment and Regulatory Programs, for Energy Northwest, the applicant herein; that I have the full authority to execute this oath; that I have reviewed the foregoing; and that to the best of my knowledge, information, and belief the statements made in it are true.

The enclosure to this letter contains information which is considered by Polestar Applied Technology, Inc., to be proprietary. Enclosed is an affidavit executed by David E.W. Leaver of Polestar Applied Technology, Inc., dated January 14, 2002, which provides the basis on which it is claimed that the subject document should be withheld from public disclosure under the provisions of 10 CFR 2.790.

Energy Northwest treats the subject document as proprietary information on the basis of statements by the owner. In submitting this information to the NRC, Energy Northwest requests that the subject document be withheld from public disclosure in accordance with 10 CFR 2.790.

DATE January 23, 2002

W.A. Kiel

W.A. Kiel, Acting Manager
Performance Assessment & Regulatory Programs

On this date personally appeared before me W.A. Kiel, to me known to be the individual who executed the foregoing instrument, and acknowledged that he signed the same as his free act and deed for the uses and purposes herein mentioned.

GIVEN under my hand and seal this 23rd day of January, 2002.



Lori A. Walli
Notary Public in and for the
STATE OF WASHINGTON

Residing at
W. Richland, WA
My Commission Expires
3-29-05

Polestar Applied Technology, Inc.

AFFIDAVIT

I, David E.W. Leaver, being duly sworn, depose and state as follows:

- (1) I am a Principal and an Officer of Polestar Applied Technology, Inc. ("Polestar") and am responsible for the function of reviewing the information described in paragraph (2) which is sought to be withheld, and have been authorized to apply for its withholding.
- (2) The information sought to be withheld is contained in portions of Polestar reports PSAT 206CT.QA.01.05 and PSAT 206CT.QA.02.03. These reports were prepared for Energy Northwest in support of an Energy Northwest submittal to NRC on alternate source term (AST). The Polestar reports addressed post-accident sump pH and main steam line break dose in the Columbia Generating Station.
- (3) In making this application for withholding of proprietary information of which it is the owner, Polestar relies upon the exemption from disclosure set forth in the NRC regulations 10 CFR 9.17(a)(4), 2.790(a)(4), and 2.790(d)(1) for "trade secrets and commercial or financial information obtained from a person and privileged or confidential" (Exemption 2.790(a)(4)). The material for which exemption from disclosure is here sought is all "confidential commercial information".
- (4) Some examples of categories of information which fit into the definition of proprietary information are:
 - a. Information that discloses a process or method, including supporting data and analyses, where prevention of its use by Polestar's competitors without license from Polestar constitutes a competitive economic advantage over other companies.
 - b. Information which, if used by a competitor, would significantly reduce his expenditure of resources or improve his competitive position in the analysis, design, assurance of quality, or licensing of a similar product;
 - c. Information which reveals cost or price information, production capacities, budget levels, or commercial strategies of Polestar, its customers, or its suppliers;
 - d. Information which reveals aspects of past, present, or future Polestar customer-funded development plans and programs, of potential commercial value to Polestar;

- 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 is being submitted to Energy Northwest (and, we trust, to NRC) in confidence. The information is of a sort customarily held in confidence by Polestar, 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 Polestar, 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. Distribution of such documents within Polestar is limited to those with a need to know.
- (7) The approval of external release of such a document typically requires review by the project manager, and the Polestar Principal closest to the work, for technical content, competitive effect, and determination of the accuracy of the proprietary designation. Disclosures outside Polestar 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 information on and results from methodologies developed by Polestar and applied under the Polestar 10 CFR 50, Appendix B Quality Assurance Program. The methodologies in PSAT 206CT.QA.01.05 address acid generation due to radiolysis of water and cable in BWRs, buffer effect on pH, and Polestar's STARpH computer code for post-accident sump pH calculations. The methodologies in PSAT 206CT.QA.02.03 address the buoyancy and resulting dilution of the hot steam plume from the steam line break. This more detailed, mechanistic treatment of post-accident pH and the hot steam

plume was not traditionally considered in USNRC licensing design basis calculations prior to AST, and thus new methods development was required.

The methodologies used in this Columbia Generating Station work are several of a number of Polestar developed methods, models, and codes. Development of these methods, models, and codes was achieved at a significant cost to Polestar, well over \$100,000, which is a significant fraction of internal research and development resources available to a company the size of Polestar.

The development of the methods, models and codes, along with the interpretation and application of the results, is derived from the extensive experience database that constitutes a major Polestar asset.

- (9) Public disclosure of the information sought to be withheld is likely to cause substantial harm to Polestar's competitive position and foreclose or reduce the availability of profit-making opportunities. The information is part of Polestar's comprehensive technology base on application of the revised source term to operating plants and advanced light water reactors, and its commercial value extends beyond the original development cost. The value of the technology base goes beyond the extensive physical database and analytical methodology and includes development of the expertise to determine and apply the appropriate evaluation process. In addition, the technology base includes the value derived from providing analyses done with methods which have been developed and are being maintained in accordance with 10 CFR 50, Appendix B requirements.

The research, development, engineering, analytical and review costs comprise a substantial investment of time and money by Polestar.

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.

Polestar's competitive advantage will be lost if its competitors are able to use the results of the Polestar 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 Polestar 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 Polestar of the opportunity to exercise its competitive advantage to seek an adequate return on its relatively large investment in developing these very valuable analytical tools.

STATE OF CALIFORNIA)
)
COUNTY OF SANTA CLARA) ss:

David E.W. Leaver, is 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 Los Altos, California, this 14th day of January 2002.

David E.W. Leaver

David E.W. Leaver
Polestar Applied Technology, Inc.

Subscribed and sworn before me this 14th day of January 2002.



Ruth Tubbs
Notary Public, State of California