

NIOWAVE, INC

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www.niowaveinc.com

APPLICATION FOR WITHHOLDING PROPRIETARY INFORMATION FROM PUBLIC DISCLOSURE

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

July 17, 2014

Subject: Supporting Material for NRC Meeting Regarding Molybdenum-99 Production using a Superconducting Electron Linac (Proprietary)

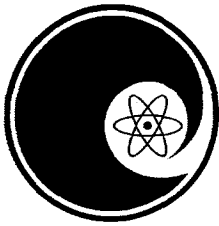
In support of the upcoming meeting to review "Molybdenum-99 Production using a Superconducting Electron Linac," Niowave, Inc. (Niowave), a Michigan corporation, hereby transmits presentation material for use at the meeting with the Nuclear Regulatory Commission (NRC) staff on a date to be determined. Portions of the meeting presentation material contain proprietary information for which withholding from public disclosure is requested.

The material for which withholding is being requested is contained in the proprietary enclosure (Enclosure 1-P). In conformance with 10 CFR Section 2.390, Affidavit AN-01-2014 accompanies this Application for Withholding, setting forth the basis on which the information may be withheld from public disclosure. Accordingly, it is respectfully requested that the subject information, which is proprietary to Niowave, be withheld from public disclosure in accordance with 10 CFR Section 2.390 of the Commission's regulations. A non-proprietary version of the subject material is provided in Enclosure 2.

Correspondence with respect to this application for withholding or the accompanying affidavit should reference AN-01-2014 and should be addressed to the undersigned.

Sincerely,

Dr. Terry L. Grimm
President & Senior Scientist



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AFFIDAVIT

STATE OF MICHIGAN, INGHAM COUNTY:

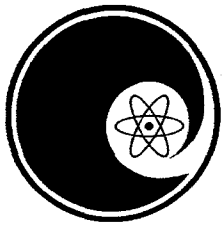
Before me, the undersigned authority, personally appeared Terry L. Grimm, who, being by me duly sworn according to law, deposes-and says that he is authorized to execute this Affidavit on behalf of Niowave, Inc., and that the averments of fact set forth in this Affidavit are true and correct to the best of his knowledge, information, and belief:

Dr. Terry L. Grimm
President & Senior Scientist
Niowave, Inc.

Sworn to and subscribed before me
this 17th day of July, 2014.

Notary Public

Mark P. Sinila
Notary Public Ingham County, MI
My Commission Expires Dec. 17, 2019



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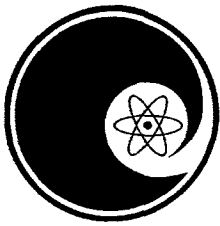
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- (1) I, Dr. Terry L. Grimm, am the President and Senior Scientist for Niowave, Inc. (Niowave), a Michigan corporation and as such, I am responsible for reviewing the proprietary information sought to be withheld from public disclosure in connection with licensing and rulemaking proceedings, and am authorized to apply for its withholding on behalf of Niowave.
- (2) I am making this Affidavit in conformance with the provisions of 10 CFR Section 2.390 of the Commission's regulations and in conjunction with the Niowave application for withholding accompanying this Affidavit.
- (3) I have personal knowledge of the criteria and procedures utilized by Niowave in designating information as a trade secret, privileged or as confidential commercial or financial information.
- (4) Pursuant to the provisions of paragraph (b)(4) of Section 2.390 of the Commission's regulations, 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 Niowave.
 - (ii) The information is of a type customarily held in confidence by Niowave and not customarily disclosed to the public. Niowave 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 Niowave 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 prevention of its use by any of Niowave's competitors without license from Niowave constitutes a competitive economic advantage over other companies.
- (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 his expenditure of resources or improve his 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 Niowave, its customers, or suppliers.
- (e) It reveals aspects of past, present, or future Niowave or customer funded development plans and programs of potential commercial value to Niowave.
- (f) It contains patentable ideas, for which patent protection may be desirable.

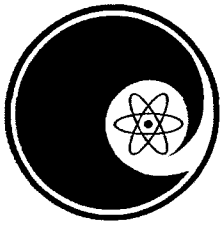


There are sound policy reasons behind the Niowave system which include the following:

- (a) The use of such information by Niowave gives us a competitive advantage over its competitors. It is, therefore, withheld from disclosure to protect the Niowave competitive position.
 - (b) It is information which is marketable in many ways. The extent to which such information is available to competitors diminishes the Niowave ability to sell products and services involving the use of the information.
 - (c) Use by our competitor would put Niowave at a competitive disadvantage by reducing his expenditure of resources at our 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 of proprietary information, any one component may be the key to the entire puzzle, thereby depriving Niowave of a competitive advantage.
 - (e) Unrestricted disclosure would jeopardize the position of prominence of Niowave in the world market, and thereby give a market advantage to the competition of those countries.
 - (f) The Niowave 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 Section 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 sought to be withheld in this submittal is that which is in the Enclosure 1-P whose contents are entitled "Molybdenum-99 Production Using a Superconducting Electron Linac" (July 17, 2014) for submittal to the Commission, being transmitted herewith and Application for Withholding Proprietary Information from Public Disclosure, to the NRC Document Control Desk. The proprietary information as submitted for use by Niowave is expected to be applicable in licensee submittals in response to certain NRC requirements for justification of the enclosed Molybdenum-99 (Mo-99) production methodology.

This information is part of the details which will enable Niowave to describe the application of a superconducting electron linear accelerator in producing Mo-99, including:

- (a) The identification of important converter, moderator, and reflector design schemes relevant to producing Mo-99 with a superconducting electron accelerator.
- (b) Calculations of flux generation, Mo-99 production rates, target burn-up rates and production yields possible from the enclosed design scheme.



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- (c) Assessment of total power produced.
- (d) Outline of licensing plan under applicable NRC regulations.

Further, this information has substantial commercial value as follows:

- (a) Niowave plans to sell the use of similar information to its customers for purposes of meeting NRC requirements for licensing documentation.
- (b) Niowave can sell the enclosed Mo-99 production plan to its customers.
- (c) The information requested to be withheld reveals the distinguishing aspects of a methodology which was developed by Niowave.

Public disclosure of this proprietary information is likely to cause substantial harm to the competitive position of Niowave because it would enhance the ability of competitors to provide similar technical evaluation justifications and licensing for Mo-99 production without commensurate expenses. In addition, 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 technology described in part by the information is the result of applying the results of many years of experience in an intensive Niowave effort and the expenditure of a considerable sum of money.

In order for competitors of Niowave to duplicate this information, similar technical programs would have to be performed, and a significant manpower effort, having the requisite talent and experience, would have to be expended for developing the enclosed Mo-99 production methodology.