

## **NIOWAVE, INC**

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August 27, 2014

Mr. Steven T. Lynch Mailstop: 0-12D20 Office of Nuclear Reactor Regulation Nuclear Regulatory Commission Washington DC 20555

RE: Intent to license a domestic Mo99 production facility

Dear Mr. Lynch,

Niowave hereby notifies the NRC of our intent to file a license application to domestically produce Mo99, and other commercially viable isotopes, from uranium using a superconducting electron accelerator. Accordingly, Niowave requests the assignment of a Project Number for review and licensing purposes.

For the initial licensing phase, Niowave intends to use uranium of increasing enrichment in U235 to 19.9% (depleted, natural and LEU) with a total possession limit of less than critical mass. The initial development phase will irradiate cladded uranium metal targets with the superconducting electron accelerator to demonstrate safe, reliable operations, and to benchmark simulations of Mo99 production rates. No chemical separation or dissolution of the targets will be done in the initial licensing phase. Niowave intends to submit the license application under Parts 30 and/or 70 by the end of 2014.

Upon completion of the initial development phase, a license application for larger quantities of LEU and chemical processing of Mo99 will be submitted to the NRC under Parts 30 and/or 70.

Sincerely,

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