

Sandia National Laboratories (Sandia) seeks private parties interested in licensing and commercializing Sandia's patent pending technology for a small scale nuclear reactor for the production of medical isotopes, in particular  $^{99}\text{Mo}$ .

**This solicitation is solely a licensing opportunity for Sandia IP and is not funded by the U.S. Department of Energy nor is it part of or in support of any Department of Energy/National Nuclear Security Administration program or project.** Sandia's patent pending technology would allow the production of the valuable medical isotope in large enough quantities to meet projected U.S. demand. The nuclear reactor design is based on low enriched uranium to minimize nuclear proliferation risk. It is passively safe and optimized for low power operation. Additional isotopes beyond  $^{99}\text{Mo}$  can also be produced.

$\text{Mo}^{99}$  is a critical medical isotope. It is the precursor for  $^{99\text{m}}\text{Tc}$  which is used in a variety of medical treatments and for diagnostic imaging. Production is primarily from foreign sources and is at risk due to aging equipment at some of the key suppliers. Should a critical shortage of this isotope occur as happened in 2009, U.S.-based sources would reduce the risk to US patients.

Sandia seeks to license this technology to US industry on an exclusive basis. Sandia will evaluate responses and select prospective parties with which to engage in further discussions based on the following criteria, pursuant to Sandia's technology transfer mission:

- 1) What are the respondent's specific research and development, prototyping and deployment capabilities and resources relative to this technology?
- 2) How will the respondent deploy the technology for the benefit of national security and the US public good?
- 3) How will the respondent's deployment of the technology benefit US economic competitiveness?
- 4) Does the respondent have the necessary experience and capabilities to meet the regulatory and financial commitments required to deploy this nuclear reactor technology.

Respondents should provide a documentation that describes their capabilities in the following areas:

- Technical
  - o Nuclear Reactor Design
  - o Nuclear Reactor Operation
  - o Hazardous Material Handling
- Regulatory
  - o NRC regulatory approval
  - o Environmental approvals
  - o State and Local approvals
- Business
  - o Management of large construction projects

- o Plan for private financing of large scale project \$70 – 100M
- o Business plan for commercialization

Sandia National Laboratories is a multiprogram laboratory managed and operated by Sandia Corporation, a wholly owned subsidiary of Lockheed Martin Corporation, for the U.S. Department of Energy's National Nuclear Security Administration under Contract DE-AC04-94AL85000.

For further information, contact Sandia National Laboratories by email, [ip@sandia.gov](mailto:ip@sandia.gov), by phone at (505) 284-2001 or by fax at 505-844-8616.