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December 1, 2015

XE-X1-LD-G0-L03-100264

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

Subject: DESIGN AND LICENSING SUBMITTAL INFORMATION
NRC REGULATORY ISSUE SUMMARY 2015-07
PROCESS FOR SCHEDULING AND ALLOCATING RESOURCES IN FY 2017 FOR THE REVIEW OF NEW LICENSING
APPLICATIONS FOR LARGE LIGHT-WATER REACTORS AND SMALL MODULAR REACTORS

The purpose of this letter is to forward responses to Regulatory Issue Summary (RIS) 2015-07 by X Energy, LLC ("X-energy"). X-energy provided its first RIS response on March 28, 2014 (RIS 2013-18). X-energy is a private wholly owned U.S. company that is pursuing the commercialization of an advanced high temperature gas-cooled reactor (HTGR) pebble bed reactor, designated as Xe-100™ (X-Energy 125MW_t), using U.S.-developed coated uranium particle fuel, in conjunction with NRC approval, that will also be able to utilize a thorium based fuel cycle at a later date. Our approach brings to bear over 50 years of research, proven design, and operational experience in HTGR using a pebble bed architecture for our design. The Xe-100™ is well aligned with, and leverages, the Department of Energy's (DOE) Next Generation Nuclear Plant (NGNP) initiative, as well as DOE's investments in the next generation of safer nuclear fuel, which was established as the number 1 priority by the Energy Policy Act of 2005 (EPACT2005).

The Xe-100™ utilizes intrinsically safe features with a simplified plant design to assure enhanced safety and security. Furthermore, the Xe-100™ offers several proliferation resistance features and, utilizing a future thorium-based fuel cycle, has the capacity to recycle spent fuel and reduce current stockpiles of plutonium with the very high burn-ups inherent to the Thorium fuel cycle. X-energy has no affiliation, official or otherwise, with any other company working on the pebble bed approach to HTGRs.

X-energy's responses to RIS 2015-07 contains commercially sensitive proprietary information and, as such, we are requesting that this information be withheld from public disclosure in accordance with 10 CFR 2.390, "Public inspections, exemptions, request for withholding," paragraph (a)(4). Since Commercially Proprietary information constitutes the vast majority of replies herein and, based on the recommendation in RIS 2014-01, a public version is not being submitted. Accordingly, Enclosure 1 is the Non-Public version of X-energy's responses to RIS 2015-07 which contains non-redacted sensitive information. This proprietary information is appropriately marked and an affidavit providing the basis for this request is provided in Enclosure 2.

D104
NR0

Sincerely,



Harlan Bowers
President
X Energy, LLC

Cc: James W. Anderson, NRC, 3WFN 13 C64
Marissa G. Bailey, NRC, 3WFN 13 A12
Anna H. Bradford, NRC, 3WFN 6 E4
Stephanie M. Coffin, NRC, 3WFN 14 C28
Michael E. Mayfield, NRC, 3WFN 6 E4

Enclosures: 1) Response to RIS 2015-07 (Non-Public)
2) Affidavit



Affidavit

Affidavit of Harlan Bowers

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I, Harlan Bowers, President of X Energy, LLC (X-energy) do hereby affirm and state:

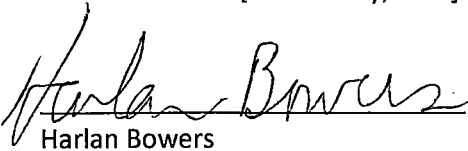
1. I am authorized to execute this affidavit on behalf of X-energy. I am further authorized to review information submitted to or discussed with the Nuclear Regulatory Commission (NRC) and apply for the withholding of information from disclosure. The purpose of this affidavit is to provide the information required by 10 CFR 2.390(b) in support of X-energy's request for proprietary treatment of certain commercial information submitted in Enclosure 1 to X-energy's letter, XE-X1-LD-GO-L03-100264, from myself to the NRC which provides response to Regulatory Issues Summary (RIS) 2015-07.
2. I have knowledge of the criteria used by X-energy in designating information as sensitive, proprietary, or confidential.
3. Pursuant to the provision of paragraph (a)(4) of 10 CFR 2.390, the following is furnished for consideration by the NRC in determining whether the information sought to be withheld from public disclosure should be withheld.
 - a. The information sought to be withheld from public disclosure in Enclosure 1 is owned by X-energy, its affiliates or third parties to whom X-energy has an obligation to maintain its confidentiality. This information was prepared with the explicit understanding that the information itself would be treated as proprietary and confidential and has been held in confidence by X-energy.
 - b. The information sought to be protected in Enclosure 1 is not available to the public to the best of my knowledge and belief.
 - c. The information contained in Enclosure 1 is of the type that is customarily held in confidence by X-energy, and there is a rational basis for doing so. The information X-energy is requesting to be withheld from public disclosure includes commercial information related to on-going and planned activities associated with our Xe-100™ high temperature gas pebble bed reactor design. X-energy limits access to this privileged information to maintain confidentiality.
 - d. Enclosure 1 contains information about the planned activities of X-energy related to the creation and submittal of licensing activities, forecast design development timeframes, and commercial strategy of our Xe-100™ advanced reactor. Public disclosure of the information contained in Enclosure 1 would create substantial harm to X-energy because it would reveal valuable business information regarding X-energy's competitive expectations, assumptions, current position and strategy. Its use by a competitor could substantially improve their competitive position in the design, manufacture, licensing, construction and operation of a similar product.

Affidavit of Harlan Bowers
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- e. The Proprietary Information contained in Enclosure 1 is transmitted to the NRC in confidence and under the provisions of 10 CFR 2.390; it is to be received in confidence by the NRC. The information is properly marked.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on December 1, 2015.
[Month Day, Year]



Harlan Bowers
President
X Energy, LLC

Subscribed and sworn to before me,

Notary Public, this 1st day of December, 2015 : Wanda J. Fuesel

My Commission expires: Sept. 27, 2018

