



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**  
WASHINGTON, D.C. 20555-0001

February 28, 2022

MEMORANDUM TO: William Kennedy, Acting Chief  
Advanced Reactor Licensing Branch  
Division of Advanced Reactors and Non-Power  
Production and Utilization Facilities  
Office of Nuclear Reactor Regulation

FROM: Lucieann Vechioli, Project Manager  
Advanced Reactor Licensing Branch  
Division of Advanced Reactors and Non-Power  
Production and Utilization Facilities  
Office of Nuclear Reactor Regulation

*Lucieann Vechioli Feliciano*

Signed by Vechioli, Lucieann  
on 02/28/22

SUBJECT: SUMMARY OF THE DECEMBER 14, 2021, PUBLIC MEETING  
BETWEEN THE U.S. NUCLEAR REGULATORY COMMISSION  
STAFF AND X ENERGY LLC REGARDING XE-100 WHITE PAPER:  
USE OF BOUNDING VALUES

On December 14, 2021, the U.S. Nuclear Regulatory Commission (NRC) staff held a virtual observation public meeting with representatives from X Energy LLC (X-energy) and Energy Northwest (ENW). The purpose of the meeting was to discuss NRC staff observations regarding X-energy's white paper "Use of Bounding Values" (Agencywide Documents Access and Management System (ADAMS) Accession No. ML21323A159). X-energy submitted this white paper on October 22, 2021, in which it provided a description of X-energy's proposal on how to develop an environmental report to meet Title 10 of the *Code of Federal Regulations* (10 CFR) Part 51 requirements that analyzed the potential environmental impacts associated with constructing and operating up to 12 Xe-100 reactors at a single site (ADAMS Accession No. ML21295A296). The meeting notice can be located at ADAMS Accession No. ML21336A670. The enclosure to this document provides the list of meeting attendees.

During the meeting, the NRC staff discussed its observations on the white paper with X-energy and provided clarifying details. One point discussed was the sequence for issuing operating licenses for the individual Xe-100 reactors over a period of several years, which is important because it could affect compliance with the National Environmental Policy Act. At the operating license stage, the NRC staff established the need to evaluate each additional reactor for any new and significant information to supplement the environmental impact statement developed during the construction permit stage with new findings, if applicable. This evaluation is consistent with requirements for issuing the subsequent operating licenses as per 10 CFR Parts 50.34 (b) and 10 CFR 51.95 (b).

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The NRC staff and X-energy also discussed the sensitivity of the bounding values to the proposed reactor site. The NRC staff explained that its feedback on the white paper is conditioned on the assumption that ENW would construct the Xe-100 reactors at the WNP-1 site as described in the white paper. X-energy and ENW mentioned that they are actively involved with the Department of Energy on matters related to the WNP-1 site.

The NRC staff observations on the white paper were issued in their final form to X-energy on December 16, 2021.

Enclosure:  
List of Attendees

SUBJECT: SUMMARY OF THE DECEMBER 14, 2021, PUBLIC MEETING BETWEEN THE  
U.S. NUCLEAR REGULATORY COMMISSION STAFF AND X ENERGY LLC  
REGARDING XE-100 WHITE PAPER: USE OF BOUNDING VALUES  
DATED: FEBRUARY 28, 2022

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**ADAMS Accession No.:ML22021B648****NRC-001**

OFFICE	NRR/DANU/UARL/PM	NRR/DORL/LPL3/LA	NRR/DANU/UARL/BC (A)	NRR/DANU/UARL/PM
NAME	LVechioli	SLent	WKennedy	LVechioli
DATE	1/24/2022	2/15/2022	2/25/2022	2/28/2022

**OFFICIAL RECORD COPY**

Public Meeting between the U.S. Nuclear Regulatory Commission staff and X Energy LLC

List of Attendees

December 14, 2021

<b>Name</b>	<b>Organization</b>
Patricia Vokoun	U.S. Nuclear Regulatory Commission (NRC)
William Kennedy	NRC
Joseph Giacinto	NRC
Kenneth Erwin	NRC
Lucieann Vechioli	NRC
Donald Palmrose	NRC
Travis Chapman	X Energy LLC (X-energy)
Ingrid Nordby	X-energy
Milton Gorden	X-energy
William Elzinga	contractor
David Lanier	Energy Northwest
Donald Gregoire	Energy Northwest
Jay Jones	Department of Energy (DOE)
William Ostrum	DOE
Roger Presentin	DOE
Tim Beville	DOE
Russel Light	Sargent & Lundy
Maury Pressburger	Sargent & Lundy
Bryan Evers	Terrapower

Enclosure