

UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

December 14, 2023

Travis A. Chapman
Director, Reactor Licensing & Regulatory Affairs
X Energy LLC
801 Thompson Avenue
Rockville, MD 20852

SUBJECT: USE OF ENCRYPTION SOFTWARE FOR ELECTRONIC TRANSMISSION

OF SAFEGUARDS INFORMATION

Travis A. Chapman:

By letter dated October 25, 2023 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML23298A131), X Energy LLC (X-Energy) requested that the U.S. Nuclear Regulatory Commission (NRC) approve the use of Symantec Encryption Desktop version 10.5.1 for the electronic transmission of Safeguards information (SGI). You stated that this version of the encryption product was developed with Symantec PGP Cryptographic Engine SDK Version 4.4 and complies with Federal Information Processing Standard (FIPS) 140-2 as validated by the National Institute of Standards and Technology (NIST) Consolidated Certificate No. 3729.

The NRC approves only those cryptographic algorithms approved by NIST. Based on the NIST validation that the encryption software complies with FIPS 140-2, the NRC staff finds that the use of Symantec Encryption Desktop, Version 10.5.1, is acceptable to use for electronic transmission of SGI in accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 73.22(f)(3). As described in Regulatory Issue Summary 2002-15, newer versions of encryption software may be used without prior NRC approval, if it is documented that the newer version uses the same cryptographic module as the current version. Therefore, in accordance with 10 CFR 73.22(f)(3), the NRC staff approves the use of Symantec Encryption Desktop version 10.5.1. If NIST no longer approves certain cryptographic algorithms, the NRC also does not approve use of that cryptographic algorithm.

If you have any questions, please contact Bern Stapleton at 301-415-2278.

Sincerely,

Signed by Parsons, Darryl on 12/14/23

Darryl H. Parsons, Chief Information Security Branch Division of Security Operations

Project No.: 99902071

cc: X Energy, LLC Anthony Qualantone Jonathan Corwin **Brandon Hartle** U.S. Nuclear Regulatory Commission Michael Wentzel Adrian Muñiz Jorge Hernández Muñoz Ondra Dukes

X Energy Use of Encryption Software DATE December 14, 2023

DISTRIBUTION:

MWentzel, NRR/DANU/UTB2

AMunizGonzalez, NRR/DANU/UARL

ADAMS Accession No.: Ltr ML23345A080

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| NAME | BStapleton DParsons for DP | DParsons <i>DP</i> | |
| DATE | Dec 11, 2023 | Dec 14, 2023 | |

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