

NRC FORM 7(07-2019)
10 CFR 110**U. S. NUCLEAR REGULATORY COMMISSION**
**APPLICATION FOR NRC EXPORT OR IMPORT
LICENSE, AMENDMENT, RENEWAL,
OR CONSENT REQUEST(S)**
(See Instructions on Pages 4 and 5)
APPROVED BY OMB: NO. 3150-0027**EXPIRES: 02/28/2022**

Estimated burden per response to comply with this mandatory collection request: 2.4 hours. This submittal is reviewed to ensure that the applicable statutory, regulatory, and policy considerations are satisfied. Send comments regarding burden estimate to the Information Services Branch (T-6 A10M), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by e-mail to Infocollects.Resource@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0027), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

PART A. FOR NRC USE ONLY		<input checked="checked" type="checkbox"/> Public OR <input type="checkbox"/> Non-Public		Date Received <div style="font-size: 1.2em;">01/15/2020 JMS</div>	
License Number <div style="font-size: 1.2em;">XSNM3799/01</div>		Docket Number <div style="font-size: 1.2em;">11006329</div>		Adams Accession Number	
PART B. TO BE COMPLETED FOR <u>ALL</u> LICENSES, AMENDMENTS, RENEWALS, OR CONSENT REQUESTS (If more space is needed to complete any of the items, use Pages 3-4 first, and then attach additional sheets, if necessary.)					
1. Name and Address of Applicant/Licensee		1a. Name of Applicant's Contact		1b. Applicant's Reference Number	
		1c. Office Telephone Number		1d. Office Facsimile Telephone Number	
		1e. Applicant's E-mail Address			
2. Type of Action Requested (Check one)		<input type="checkbox"/> Export (Parts B, C, E)		<input type="checkbox"/> Amendment/Renewal Current License Number:	
		<input type="checkbox"/> Import (Parts B, D, E)		<input type="checkbox"/> Consent Request (Parts B, C) Current License Number:	
3. Contract Number(s)			4. First Shipment Date	5. Last Shipment Date	6. Proposed Expiration Date
PART C. TO BE COMPLETED FOR EXPORT LICENSES, AMENDMENTS, OR RENEWALS (If more space is needed to complete any of the items, use Pages 3-4 first, and then attach additional sheets, if necessary.)					
7. Name(s)/Address(es) of U. S. Suppliers and/or other U. S. Parties to the Export		8. Name(s)/Address(es) of Intermediate Foreign Consignee(s)		9. Name(s)/Address(es) of Ultimate Foreign Consignee(s)	
7a. Function(s) Performed/Service(s) Provided		8a. Intermediate Use(s)		9a. Ultimate End Use(s)	
10. Description of Radioactive Materials, Sealed Sources, Nuclear Facilities, Equipment, or Components; for Nuclear Equipment include Total Dollar Value of Equipment for Export		10a. Maximum Total Volume/Element WGT (KG), or Total Activity (TBq)	10b. Max Enrichment or WGT%	10c. Max Isotope WGT (KG)	
11. Foreign origin (or obligations by country and, if known, by percentage of maximum total volume)					

NRC FORM 7

(07-2019)
10 CFR 110

U. S. NUCLEAR REGULATORY COMMISSION

APPLICATION FOR NRC EXPORT OR IMPORT
LICENSE, AMENDMENT, RENEWAL, OR CONSENT REQUEST(S) (Continued)

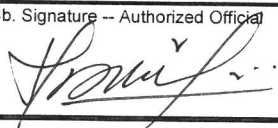
License Number XSNM3799/01	Docket Number 11006329	Adams Accession Number	<input checked="" type="checkbox"/> Public OR <input type="checkbox"/> Non-Public
--------------------------------------	----------------------------------	------------------------	---

PART D. TO BE COMPLETED FOR IMPORT LICENSES, AMENDMENTS, OR RENEWALS
(If more space is needed to complete any of the items, use Pages 3-4 first, and then attach additional sheets, if necessary.)

12. Name(s)/Address(es) of Foreign Suppliers and/or other Foreign Parties to Import	13. Name(s)/Address(es) of Foreign or U. S. Intermediate Consignee(s)	14. Name(s)/Address(es) of Ultimate U. S. Consignee(s)	
12a. NRC Export License Number(s) (if applicable)	13a. License Number(s) / Expiration Date(s)	14a. License Number(s) / Expiration Date(s)	
	13b. Intermediate Use(s)	14b. Ultimate End Use(s)	
15. Description of Radioactive Materials, Sealed Sources, Nuclear Facilities	15a. Maximum Total Volume/ Element WGT (KG), or Total Activity (TBq)	15b. Max Enrichment or WGT%	15c. Max Isotope WGT (KG)

16. Foreign obligations (By country and by Percentage of Maximum Total Volume)

PART E. TO BE COMPLETED FOR ALL LICENSES, AMENDMENTS, RENEWALS OR CONSENT REQUEST(S)
(If more space is needed to complete any of the items, use Pages 3-4 first, and then attach additional sheets, if necessary.)

17. Additional Information provided on pages 3, 4, and/or separate sheets? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	17a. Copies of Recipient's Authorizations Provided? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
18. Certification: I, the applicant's authorized official, hereby certify that this application is prepared in conformity with Title 10, Code of Federal Regulations, and that all information provided is correct to the best of my knowledge.	
18a. Print Name and Title of Authorized Official DWI MURRAY, Sr. Manager - Licensing	18b. Signature -- Authorized Official 
18c. Date 1/3/2020	

NRC FORM 7

(07-2019)
10 CFR 110

U. S. NUCLEAR REGULATORY COMMISSION

APPLICATION FOR NRC EXPORT OR IMPORT
LICENSE, AMENDMENT, RENEWAL, OR CONSENT REQUEST(S) (Continued)

License Number XSNM3799	Docket Number 11006329	Adams Accession Number	<input checked="" type="checkbox"/> Public OR <input type="checkbox"/> Non-Public
-----------------------------------	----------------------------------	------------------------	---

Additional Information (Reference applicable block numbers from page 1 and/or page 2 for each entry)

Exelon will be shipping a limited quantity of spent nuclear fuel for detailed examination and testing at Canadian Nuclear Laboratories (CNL). This quantity of spent nuclear fuel is limited to 9 intact fuel rods selected from irradiated fuel assemblies based on their technical characteristics. These detailed examinations are being conducted in the CNL hot cell to validate scientific understanding and directly support the deployment of fuel with increased operational margins and enhanced accident response.

LaSalle County Station has served as the host plant for lead test assemblies with advanced technical features. Fuel rods from these assemblies, and other conventional assemblies subjected to specific operating histories, are included in the shipment to CNL.

The examinations and testing performed on these rods is done with the intent of achieving the following primary objectives:

- Obtain irradiated fuel performance data, from fuel rods with "additive" fuel pellets, directly supporting the qualification and deployment of advanced fuel products with increased operating margins and accident response.
- Obtain technical data furthering the scientific understanding of hydrogen impact on Zirconium-based alloys, including the effect of variations in cladding heat treatments and operating histories on hydrogen uptake and hydride orientation phenomena. This data will be used to design cores that minimize the impacts of hydrogen on cladding integrity.
- Qualification of a new poolside inspection technology capable of minimizing the uncertainties associated with certain fuel rod corrosion deposits and measuring internal cladding hydrogen non-destructively. Such technology would eliminate the need for future destructive examinations to be performed at separate hot cell facilities.

Each of the 9 intact fuel rods to be examined have been selected based their technical characteristics and value to fulfilling the programmatic objectives. The examinations performed at CNL to fulfill these objectives include:

- Visual and analytical characterization of irradiated fuel rods key attributes,
- Destructive examination including fission gas release, metallography and ceramography of irradiated fuel rods to validate the effect of various attributes and influencing factors on performance margins, and
- Mechanical testing, including validation of cladding structural margins during transient and accident conditions.

No fuel will be reprocessed. Plutonium, or other fissile material, will not be separated as part of any test associated with this program.

Following completion of the inspections and tests, the remaining fuel will be permanently disposed of by CNL.