



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

November 15, 2016

Mr. Bryan C. Hanson
Senior Vice President
Exelon Generation Company, LLC
President and Chief Nuclear Officer (CNO)
Exelon Nuclear
4300 Winfield Road
Warrenville, IL 60555

**SUBJECT: LASALLE COUNTY STATION, UNITS 1 AND 2 - PUBLIC NOTICE OF
APPLICATION FOR AMENDMENT TO RENEWED FACILITY OPERATING
LICENSES RE: HIGH BURNUP ATRIUM-10 PARTIAL LENGTH FUEL RODS
(CAC NOS. MF8442 AND MF8443)**

Dear Mr. Hanson:

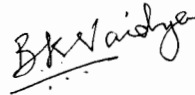
The enclosed announcement was forwarded to the The Ottawa Times for publication. This announcement relates to your application dated September 30, 2016, as supplemented by letter dated November 8, 2016, for amendment to Renewed Facility Operating License Nos. NPF-11 and NPF-18, respectively, for LaSalle County Station (LSCS), Units 1 and 2. The proposed amendment would revise the LSCS licensing basis to allow movement of irradiated Atrium-10 fuel bundles containing part-length rods that have been in operation above 62,000 megawatt days per metric ton unit, which is the current rod average burnup limit specified in Footnote 11 of U.S. Nuclear Regulatory Commission (NRC) Regulatory Guide (RG) 1.183, "Alternative Radiological Source Terms for Evaluating Design Basis Accidents at Nuclear Power Reactors" (i.e., Reference 1, to which LSCS is committed). In addition, the proposed change would allow use of the release fractions listed in Table 1 of RG 1.183 for these Atrium-10 part-length rods that are currently in the Unit 2 Cycle 16 reactor core for the remainder of the current operating cycle.

B. Hanson

-2-

If you have any questions, please contact me at 301-415-3308 or by e-mail at Bhalchandra.Vaidya@nrc.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "B.K. Vaidya", with a horizontal line drawn underneath the signature.

Bhalchandra K. Vaidya, Project Manager
Plant Licensing Branch III-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-373 and 50-374

Enclosure:
Public Notice

cc w/encl: Distribution via Listserv

ENCLOSURE
PUBLIC NOTICE

PUBLIC NOTICE

NRC STAFF PROPOSES TO AMEND OPERATING LICENSES AT THE
LASALLE COUNTY STATION, UNITS 1 AND 2

The U.S. Nuclear Regulatory Commission (NRC) staff has received an application dated September 30, 2016, as supplemented on November 8, 2016, from Exelon Generation Company, LLC (EGC, the licensee), for an exigent amendment to the operating licenses for the LaSalle County Station, Units 1 and 2 (LSCS), located in LaSalle County, Illinois.

The proposed change would revise the LSCS licensing basis related to the reference Alternate Source Term Analysis in the Updated Final Safety Analysis Report to allow operation with and movement of irradiated Atrium-10 fuel bundles containing part-length rods that have been in operation above 62,000 megawatts days per metric ton Unit (MWD/MTU), which is the current rod average burnup limit specified in Footnote 11 of NRC Regulatory Guide (RG) 1.183, "Alternative Radiological Source Terms for Evaluating Design Basis Accidents at Nuclear Power Reactors". In addition, the proposed change would allow use of the release fractions listed in Table 1 of RG 1.183 for these Atrium-10 part-length rods that are currently in the Unit 2 Cycle 16 reactor core for the remainder of the current operating cycle.

EGC has requested NRC approval of the proposed change on an exigent basis in accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) § 50.91, "Notice for public comment; State consultation," paragraph (a)(6) because time does not permit the NRC to publish a *Federal Register* notice allowing 30 days for prior public comment, as discussed below.

EGC's interpretation of the RG1.183 release fractions and associated footnotes was that release fractions for the loss-of-coolant accident (LOCA), listed in Table 1 of RG1.183, could be used if individual fuel rods exceed a peak burnup of 62,000 MWD/MTU. This interpretation was based, in part, on the fact that EGC's LOCA dose consequence analysis applies release

fractions uniformly to the entire core and the core average exposure is not projected to exceed the 62,000 MWD/MTU burnup limit. However, during the conference call, on October 27, 2016, the NRC clarified that this limit is established in RG1.183 as an upper boundary to the applicability of the release fractions provided in Tables 1 and 3, and the limit applied to peak rod exposures regardless of the core average exposure. As a result, EGC determined that the Unit 2 Cycle 16 core design was based on a misinterpretation of Footnote 10, and the core design was nonconforming with the LSCS licensing basis. This nonconforming condition was entered into EGC's Corrective Action Program.

Current projections show that at the end of the current operating cycle for LSCS Unit 2, 12 Atrium-10 part-length rods will exceed the 62,000 MWD/MTU burnup limit. To date, none of the part-length rods have exceeded the burnup limit. However, projections show that the limit will be exceeded on November 22, 2016. Therefore, EGC is requesting NRC approval of the proposed change by November 21, 2016, to support continued plant operation for LSCS Unit 2.

The licensee and the NRC staff have evaluated this proposed change with regard to the determination of whether or not a significant hazards consideration is involved. Operation of LSCS in accordance with the proposed amendments will not involve a significant increase in the probability or consequences of an accident previously evaluated. The proposed change revises the LSCS licensing basis to allow movement of irradiated Atrium-10 fuel bundles containing part-length rods that have been in operation above 62,000 MWD/MTU. In addition, the proposed change allows use of the release fractions listed in Table 1 of NRC RG 1.183 for these Atrium-10 part-length rods that are currently in the Unit 2 Cycle 16 reactor core for the remainder of the current operating cycle. The proposed change does not involve any physical changes to the plant design and is not an initiator of an accident. The proposed change does not adversely affect accident initiators or precursors, and does not alter the design assumptions, conditions, or configuration of the plant or the manner in which the plant is operated or

maintained. Therefore, the proposed change does not affect the probability of a LOCA. In addition, the proposed change does not affect the probability of a fuel handling accident because the method and frequency of fuel movement activities are not changing.

Analyses have been performed that demonstrate that the power and burnup for an Atrium-10 part-length rod is bounded by the power and burnup in the same axial portion of neighboring full-length rods. Therefore, since the full-length rod operating characteristics bound the part-length rod, and since the power and burnup of the full-length rods comply with the limits specified in Footnotes 10 and 11 of NRC RG 1.183, the Atrium-10 part-length rods may operate beyond the 62,000 MWD/MTU burnup limit and meet the intent of NRC RG 1.183. There are no changes in the dose consequences of the analyses of record for the fuel handling accident and LOCA.

Therefore, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

The proposed amendments will not create the possibility of a new or different kind of accident from any previously analyzed. The proposed change revises the LSCS licensing basis to allow movement of irradiated Atrium-10 fuel bundles containing part-length rods that have been in operation above 62,000 MWD/MTU. In addition, the proposed change allows use of the release fractions listed in Table 1 of NRC RG 1.183 for these Atrium-10 part-length rods that are currently in the Unit 2 Cycle 16 reactor core for the remainder of the current operating cycle. The proposed change does not introduce any changes or mechanisms that create the possibility of a new or different kind of accident. The proposed change does not install any new or different type of equipment, and installed equipment is not being operated in a new or different manner. No new effects on existing equipment are created nor are any new malfunctions introduced.

Therefore, the proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

The proposed amendment will not involve a significant reduction in a margin of safety. The proposed change revises the LSCS licensing basis to allow movement of irradiated Atrium-10 fuel bundles containing part-length rods that have been in operation above 62,000 MWD/MTU. In addition, the proposed change allows use of the release fractions listed in Table 1 of NRC RG 1.183 for these Atrium-10 part-length rods that are currently in the Unit 2 Cycle 16 reactor core for the remainder of the current operating cycle. Analyses have been performed that demonstrate that the power and burnup for an Atrium-10 part-length rod is bounded by the power and burnup in the same axial portion of neighboring full-length rods. There is no change in the dose consequences of the fuel handling accident or LOCA analyses of record. The margin of safety, as defined by 10 CFR 50.67 and NRC RG 1.183, has been maintained.

Therefore, the proposed change does not involve a significant reduction in a margin of safety.

Following an initial review of this application, the requested amendments have been evaluated against the standards in 10 CFR 50.92 and the NRC staff has made a proposed (preliminary) determination that the requested amendments involve no significant hazards considerations. The changes do not significantly increase the probability or consequences of any accident previously considered, nor create the possibility of an accident of a different kind, nor significantly decrease any margin of safety.

If the proposed determination that the requested license amendment involves no significant hazards consideration becomes final, the staff will issue the amendments without first offering an opportunity for a public hearing. An opportunity for a hearing will be published in the

Federal Register at a later date and any hearing request will not delay the effective date of the amendment.

If the staff decides in its final determination that the amendment does involve a significant hazards consideration, a notice of opportunity for a prior hearing will be published in the *Federal Register* and, if a hearing is granted, it will be held before the amendment is issued.

Comments on the proposed determination of no significant hazards consideration may be (1) telephoned to Edward G. Miller, Chief, Plant Licensing Branch III-2, by collect call to 301-415-2481, or by facsimile to 301-415-2102, (2) e-mailed to Edward G. Miller at gxm@nrc.gov, or (3) submitted in writing to the Chief, Rules, Announcements and Directives Branch, Division of Administrative Services, Office of Administration, Mail Stop: OWFN-12-H08, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001. All comments received by close of business on November 18, 2016, up to 4:15 p.m. will be considered. Federal workdays will be considered in reaching a final determination. A copy of the application may be examined electronically through the NRC's Agencywide Documents Access and Management System (ADAMS) in the NRC Library at <http://www.nrc.gov/reading-rm/adams.html> and at the Commission's Public Document Room (PDR), located at One White Flint North, Public File Area O1 F21, 11555 Rockville Pike (first floor), Rockville, Maryland. The application for amendment dated September 30, 2016, as supplemented by letter dated November 8, 2016, is available in ADAMS at Accession Nos. ML16274A237 and ML16313A617, respectively. Persons who do not have access to ADAMS or who encounter problems in accessing the documents located in ADAMS should contact the NRC PDR Reference staff by telephone at 1-800-397-4209, or 301-415-4737, or by e-mail to pdr.resource@nrc.gov.

B. Hanson

-2-

If you have any questions, please contact me at 301-415-3308 or by e-mail at Bhalchandra.Vaidya@nrc.gov.

Sincerely,

/RA/

Bhalchandra K. Vaidya, Project Manager
Plant Licensing Branch III-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-373 and 50-374

Enclosure:
Public Notice

cc w/encl: Distribution via Listserv

DISTRIBUTION:

LPL3-2 Reading
RidsACRS_MailCTR Resource
RidsAdmMailCenter Resource
RidsNrrDorLpl3-2 Resource
RidsNrrLASRohrer Resource
RidsNrrPMLaSalle Resource
RidsRgn3MailCenter Resource
CBladey, ADM/DAS/RADB
SBurnell, OPA

ADAMS Accession Nos. Letter: ML16314E510, Public Notice: ML16314E528; *via email

OFFICE	LPL3-2/PM	LPL3-2/LA*	OGC	LPL3-2/BC(A)	LPL3-2/PM
NAME	BVaidya	SRohrer (JBurkhardt for)	DRoth	GEMiller	BVaidya
DATE	11/10/16	11/10/16	11/10/16	11/10/16	11/15/16

OFFICIAL RECORD COPY