



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

January 27, 2020

Ms. Barbara Rudnick, NEPA Program Coordinator  
Office of Communities, Tribes, and  
Environmental Assessment  
Region III  
U.S. Environmental Protection Agency  
1650 Arch Street  
Philadelphia, PA 19103-2029

**SUBJECT: NOTICE OF AVAILABILITY OF THE FINAL PLANT-SPECIFIC  
SUPPLEMENT 10, SECOND RENEWAL, TO THE GENERIC  
ENVIRONMENTAL IMPACT STATEMENT REGARDING SUBSEQUENT  
LICENSE RENEWAL FOR PEACH BOTTOM ATOMIC POWER STATION,  
UNITS 2 AND 3 (EPID NO. L-2018-LNE-0013)**

Dear Ms. Rudnick:

The U.S. Nuclear Regulatory Commission (NRC) has completed the enclosed final NUREG-1437, Supplement 10, Second Renewal, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants: Regarding Subsequent License Renewal for Peach Bottom Atomic Power Plant Units 2 and 3." The final Supplemental Environmental Impact Statement (SEIS) is being issued in accordance with the National Environmental Policy Act (NEPA) of 1969, as part of the NRC's process to decide whether to issue a renewed operating license to Exelon Generation Company, LLC (Exelon) for Peach Bottom Atomic Power Station, Units 2 and 3 (Peach Bottom).

The final Supplement 10, Second Renewal, to NUREG-1437 will be submitted to the U.S. Environmental Protection Agency (EPA) via e-NEPA no later than January 27, 2020. In addition, a copy of the final Supplement 10, Second Renewal, is being mailed or e-mailed to interested Federal and State agencies, industry organizations, interest groups, and members of the public. Two hard copies and two electronic copies of final Supplement 10, Second Renewal, to NUREG-1437 are enclosed with this letter. A copy of this document has also been placed in the NRC Public Document Room, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852, and in the NRC Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible on the NRC's website at <http://www.nrc.gov/reading-rm/adams.html>. The final Supplement 10, Second Renewal, to NUREG-1437 is available in ADAMS under Accession No. [ML20023A937](#).

The NRC's responses to EPA's recommendations provided by its letter dated September 23, 2019 (ADAMS Accession No. ML19269E937), during the public comment period for draft Supplement 10, Second Renewal, to NUREG-1437 are enclosed. These responses can also be found in Appendix A of Supplement 10, Second Renewal.

If further information is required, please contact Ms. Lois M. James, Senior Project Manager for the environmental review of the Peach Bottom license renewal application, by telephone at 301-415-3306 or via e-mail at [Lois.James@nrc.gov](mailto:Lois.James@nrc.gov).

Sincerely,

**/RA/**

Robert B. Elliott, Chief  
Environmental Review License Renewal Branch  
Division of Rulemaking, Environmental,  
and Financial Support  
Office of Nuclear Material Safety  
and Safeguards

Docket Nos. 50-278 and 50-278

Enclosure:  
As stated

SUBJECT: NOTICE OF AVAILABILITY OF THE FINAL PLANT-SPECIFIC SUPPLEMENT 10, SECOND RENEWAL, TO THE GENERIC ENVIRONMENTAL IMPACT STATEMENT REGARDING SUBSEQUENT LICENSE RENEWAL FOR PEACH BOTTOM ATOMIC POWER STATION, UNITS 2 AND 3 (EPID NO. L-2018-LNE-0013)

DATED: January 27, 2020

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ADAMS Accession Nos.

1. Package: ML19311C538

2. Letter: ML19311C545

3. GEIS Supplement 10, Second Renewal: ML20023A937 \*via email

OFFICE	PM: ENRB/REFS	LA:DNRL/NLRP	BC:ELRB/REFS
NAME	LJames	SLent (letter only)	RElliott
DATE	01/15/2020	01/15/2020	1/27/2020

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**Responses to U.S. Environmental Protection Agency Recommendations on  
NUREG-1437, Supplement 10, Second Renewal, to the Generic Environmental Impact  
Statement for License Renewal of Nuclear Plants,  
Peach Bottom Atomic Power Station Units 2 and 3**

**Comment 1:** EPA suggests that the final SEIS include greater detail on the need to evaluate conditions, assess new technologies for the facility (including stormwater management and water withdrawal), potential environmental impacts and cumulative effects related to long-term changes.

**Response:** *The purpose and need for the proposed Federal action (issuance of subsequent renewed licenses for Peach Bottom Units 2 and 3) is to provide an option that allows for power generation capability beyond the term of the current renewed nuclear power plant operating licenses to meet future system generating needs. In its analysis, the NRC considered a range of reasonable replacement power alternatives, including fossil fuel technologies, emerging nuclear technologies, and renewable technologies such as wind and solar. As evaluated in Chapter 4 of the SEIS, some alternatives to license renewal would have substantially smaller land requirements and water demands than would continued operation of Peach Bottom Units 2 and 3. In Section 4.16 of the SEIS, NRC addresses potential long-term cumulative impacts of the proposed action over the 20-year license renewal term, including water use and water quality considerations. In addition, associated changes to long-term natural conditions with respect to climate change are addressed in Section 4.15.3.*

*This comment did not provide specific information related to the environmental effects of the proposed action. The NRC staff did not revise the SEIS based on this comment.*

**Comment 2:** [Assessment of new conditions and technology] can include adaptation and the measures taken to address the increase population surrounding the facility in regard to emergency notification and evacuation planning. The SEIS could also benefit from a discussion of how the facility reviews, predicts and responds to change in natural and social environmental conditions over the next decade.

**Response:** *This comment discusses issues relating to emergency notification and planning for increased population surrounding the facility. Emergency preparedness is part of the facility's current licensing basis and is outside the scope of the environmental analysis for license renewal. Requirements related to emergency planning are in the regulations at 10 CFR 50.47 and Appendix E to 10 CFR Part 50. These requirements apply to all operating licenses and will continue to apply to facilities with renewed licenses.*

*The Federal Emergency Management Agency (FEMA) and the NRC are two Federal agencies responsible for evaluating emergency preparedness at and around nuclear power plants. The NRC is responsible for assessing the adequacy of onsite emergency plans developed by the licensee, and FEMA is responsible for assessing the adequacy of offsite emergency planning. The NRC relies on FEMA's findings in determining that there is reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency.*

*The NRC has regulations (10 CFR 50.47, "Emergency plans") in place to ensure that existing plans are updated throughout the life of all plants and assesses the capabilities of the nuclear power plant operator to protect the public by requiring the performance of a full-scale exercise—that includes the participation of various Federal, State, and local government agencies—at*

*least once every 2 years. These exercises are performed to maintain the skills of the emergency responders and to identify and correct weaknesses.*

*This comment did not provide new and significant information related to the environmental effects of the proposed action. The NRC staff did not revise the SEIS based on this comment.*

**Comment 3:** EPA appreciates the extensive research NRC has presented regarding the Chesapeake logperch and potential impacts to the local population in the Conowingo Pond due to impingement. Chesapeake logperch is listed as endangered in Pennsylvania and Maryland and is a potential candidate for the federal Endangered Species List. It is suggested that any steps to sustain or improve habitat for the species, and any best management approaches to reduce impingement, be considered. Please consider incorporating any steps that would take place if the federal status changes.

**Response:** *This comment suggests consideration of best management approaches to reduce impingement. The NRC does not have authority to require mitigation related to impingement of aquatic organisms into cooling water intake systems. Within Pennsylvania, this authority lies with the Pennsylvania Department of Environmental Protection (PDEP) under the provisions of the Clean Water Act. As explained in Sections 4.7.1.1 and 4.8.1.1 of the SEIS, Exelon has applied to the PDEP for a renewed National Pollutant Discharge Elimination System Permit (NPDES) permit. PDEP is currently reviewing Exelon's application and will evaluate impingement and entrainment study results and use best professional judgment to determine the appropriate technologies, management practices, and operating measures that are considered best technology available to meet Clean Water Act Section 316(b) impingement and entrainment standards. As part of this process, the PDEP may require Exelon to implement additional measures for protection of State-threatened and endangered or otherwise fragile species, including the Chesapeake logperch. If the U.S. Fish and Wildlife Service lists the Chesapeake logperch under the Endangered Species Act during the subsequent license renewal term, the Service could impose additional requirements to minimize or avoid impingement of the species.*

*This comment did not provide specific information related to the environmental effects of the proposed action. The NRC staff did not revise the SEIS based on this comment.*

**Comment 4:** EPA recommends the facility consider incorporating upgraded stormwater management practices into the facility infrastructure over the licensing period. If plans exist to replace or enhance SWM, it would be helpful to include information in the final EIS. Also, NRC may want to consider the use of Green Infrastructure (GI) techniques such as rain gardens, pervious pavement, bio-swales, among others to address stormwater.

**Response:** *This comment recommends consideration of upgraded stormwater management practices such as GI techniques. The NRC staff is unaware of any applicant plans to replace or enhance the stormwater management over the license renewal term. The stormwater management system is licensed by the Commonwealth of Pennsylvania and not by the NRC.*

*This comment did not provide specific information related to the environmental effects of the proposed action. The NRC staff did not revise the SEIS based on this comment.*

**Comment 5:** Tools and resources are available that may help to more clearly define minority and low-income populations, such as EPA's Environmental Justice (EJ) screening tool (<https://www.epa.gov/ejscreen>). Additionally, please consider referring to "Promising Practices for EJ

Methodologies in NEPA Reviews": <https://www.epa.gov/environmentaljustice/ej-iwg-promising-practices-ej-methodologies-nepa-reviews>.

**Response:** *The commenter recommends that the NRC staff consider EPA's Environmental Justice Screening and Mapping Tool to identify minority and low-income populations and consider the approaches discussed in "Promising Practices for EJ Methodologies in NEPA Reviews" report when determining the location of minority and/or low-income populations.*

*The NRC staff conducted its Environmental Justice review in accordance with guidance contained in the Commission's Policy Statement on the Treatment of Environmental Justice Matters in NRC Regulatory and Licensing Actions (69 FR [Federal Register] 52040) and Appendix D to LIC-203 (ADAMS Accession No. ML12234A708). The NRC staff is familiar with the methodologies in the Promising Practices Report to identify minority and/or low-income populations. However, in accordance with NRC's policy statement and guidance, minority and low-income populations are identified when the minority and/or low-income population of an impacted areas exceeds 50 percent, or the minority and/or low-income population is meaningfully greater than the minority and/or low-income population percentage within a 50-mi (80-km) radius of the nuclear power site. As discussed in Section 3.12 of the SEIS, the environmental justice analysis applied the meaningfully greater threshold in identifying higher concentrations of minority populations. Therefore, the NRC staff compared the percentage of minority and/or low-income populations in the 50-mi (80-km) geographic area to the percentage of minority and/or low-income populations in each census block group to determine which block groups exceed the percentage, thereby identifying the location of these populations.*

*This comment did not provide specific information related to the environmental effects of the proposed action. The NRC staff did not revise the SEIS based on this comment.*