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REPLY TO THE ATTENTION OF:

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81FR7378

Cindy Bladey  
Chief, Rules, Announcements, and Directives Branch  
Division of Administrative Services  
Office of Administration  
U.S. Nuclear Regulatory Commission  
Mail Stop 16 3WFN-06-A44MP  
Washington, D.C. 20555-0001

**Re: Draft Plant-Specific Supplement 55 to the Generic Environmental Impact Statement for License Renewal of Nuclear Plants Regarding LaSalle County Station, Units 1 and 2, LaSalle County, Illinois – CEQ #20160033**

Dear Ms. Bladey:

The U.S. Environmental Protection Agency has reviewed the Draft Supplemental Environmental Impact Statement (EIS) for the above-mentioned project prepared by the U.S. Nuclear Regulatory Commission (NRC). Our comments are provided pursuant to the National Environmental Policy Act (NEPA), the Council on Environmental Quality's NEPA Implementing Regulations (40 CFR 1500-1508), and Section 309 of the Clean Air Act.

LaSalle County Station (LSCS) is a two-unit, nuclear powered steam-electric generating facility operated by Exelon Generation Company, LLC (the applicant). LSCS began commercial operation in January 1984 (Unit 1) and October 1984 (Unit 2). The nuclear reactors at both units are General Electric boiling water reactors, and together they product an annual average net output of 2,327 megawatts electric (MWe). LSCS is approximately 82 miles southwest of Chicago, Illinois and 26 miles west of Exelon's Braidwood Generating Stations. The surrounding area is primarily rural and agricultural, but also includes many wind turbines. The applicant applied to the NRC to extend LSCS's operating license for an additional 20 years. No refurbishment activities associated with the license renewal are proposed. NRC's preferred alternative is to grant the license renewal.

NRC developed a Generic EIS to streamline the license renewal process based on the premise that environmental impacts of most nuclear power plant license renewals are similar. NRC develops facility-specific Supplemental EIS documents as facilities apply for license renewal. EPA acknowledges that mitigation measures that are not related to nuclear safety and security cannot be included in the NRC license. However, because we find these measures further reduce environmental impacts, we continue to recommend that NRC share and promote such recommendations and measures with the applicant. We encourage the applicant to incorporate mitigation measures into the project, wherever possible.

*D. Drucker (dmd3)*

*W. Ford (whf)*

SUNSI Review Complete  
Template = ADM - 013  
E-RIDS = ADM-03  
Add = W. Ford (whf)

Based on our review of the Draft Supplemental EIS, EPA recommends a rating of **Environmental Concerns – Adequate Information (EC-1)**. This is based, primarily, on clarifications to potential impacts to surface water and climate change as a result of continued operation. We have enclosed our Summary of Ratings Definitions for reference.

### Surface Water

The Draft SEIS states that the river intake pipeline has experienced “a number of breaks” resulting in flooding and erosion of areas around the breaks. We note these breaks are not safety-related and were reported to both U.S. EPA and Illinois EPA, per provisions of the National Pollution Discharge Elimination System permit. The document states that several structural and procedural measures have been taken to address the issue. The Draft SEIS does not state whether the measures have successfully repaired the breaks and eliminated recurrence of this problem, including whether flooding and erosion have been successfully addressed.

**Recommendation:** The Final SEIS should clarify whether the mentioned structural and procedural improvements to reduce incidences of leaks and improve response have been successful and whether the resulting flooding and erosion has been successfully addressed. We recommend any further work on the intake system be considered refurbishment activities and be included as part of the analysis in the Final SEIS.

### Greenhouse Gases/Climate Change

The Draft SEIS includes estimated greenhouse gas (GHG) emissions as result of the preferred alternative (beginning on page 4-104), including emissions from stationary combustion sources, fugitive emissions, purchased electricity, and refrigerant-related sources. Per table 4-21, totals range from 34,228 to 39,997 metric tons of carbon dioxide equivalents per year (MT/yr of CO<sub>2</sub>e). Table 4-22 lists the direct GHG emissions from operation of the proposed action and alternatives, which lists an estimated 1,022 MT/yr of CO<sub>2</sub>e as a result of continued operation of LSCS. As stated in the footnote, direct impacts for the LSCS continued operation and new nuclear alternatives only include emissions from stationary combustion sources. EPA assumes that the emissions from other sources (e.g., fugitive emissions, purchased electricity, and refrigerant-related sources) are a result of necessary actions to ensure the continued safe operation of LSCS. Therefore, it is unclear why the analysis and table 4-22 only include emissions from stationary combustion sources and not the other listed sources of GHG emissions.

**Recommendation:** The Final SEIS should clarify why the alternatives analysis related to GHG does not include sources other than stationary combustion sources. We recommend the Final SEIS either explain in the narrative why the other sources of GHG (e.g., fugitive emissions, purchased electricity, and refrigerant-related sources) are not pertinent to the analysis and conclusion, or amend Table 4-22 to reflect an accurate accounting of GHG emissions from the two nuclear alternatives (LSCS continued operation and new nuclear).

**Editorial**

EPA commends NRC for continued improvements to the quality of their NEPA documents. We find the LSCS Draft SEIS to be written in plainer language than previous NEPA documents received by our office.

Finally, EPA continues to recommend that significance threshold be clearly explained, particularly when there is a range identified such as MODERATE to LARGE<sup>1</sup>.

Thank you in advance for consideration of our comments. We look forward to reviewing the Final SEIS. If you have any questions, please feel free to contact me or Elizabeth Poole of my staff at 312-353-2087 or poole.elizabeth@epa.gov.

Sincerely,



Kenneth A. Westlake  
Chief, NEPA Implementation Section  
Office of Enforcement and Compliance Assurance

Enclosure: Summary of Ratings Definitions

cc: David Drucker, U.S. Nuclear Regulatory Commission

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<sup>1</sup> NRC assigns impact categories either SMALL, MODERATE, or LARGE.

## **\*SUMMARY OF RATING DEFINITIONS AND FOLLOW UP ACTION\***

### **Environmental Impact of the Action**

#### LO-Lack of Objections

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

#### EC-Environmental Concerns

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impacts. EPA would like to work with the lead agency to reduce these impacts.

#### EO-Environmental Objections

The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

#### EU-Environmentally Unsatisfactory

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS site, this proposal will be recommended for referral to the CEQ.

### **Adequacy of the Impact Statement**

#### Category 1-Adequate

The EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collecting is necessary, but the reviewer may suggest the addition of clarifying language or information.

#### Category 2-Insufficient Information

The draft EIS does not contain sufficient information for the EPA to fully assess the environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS; which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

#### Category 3-Inadequate

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

\*From EPA Manual 1640 Policy and Procedures for the Review of the Federal Actions Impacting the Environment