



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

June 25, 2024

David P. Rhoades
Senior Vice President
Constellation Energy Generation, LLC
President and Chief Nuclear Officer
Constellation Nuclear
4300 Winfield Road
Warrenville, IL 60555

SUBJECT: BRAIDWOOD STATION, UNITS 1 AND 2 - INDIVIDUAL NOTICE OF CONSIDERATION OF ISSUANCE OF AMENDMENT TO RENEWED FACILITY OPERATING LICENSES, PROPOSED NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION, AND OPPORTUNITY TO REQUEST A HEARING (EPID L-2024-LLA-0075)

Dear David Rhoades:

The U.S. Nuclear Regulatory Commission has forwarded the enclosed notice of consideration of issuance of amendment to renewed facility operating licenses, proposed no significant hazards consideration determination, and opportunity to request a hearing to the Office of the Federal Register for publication.

This notice relates to your application dated June 4, 2024, in which you request to change Technical Specification Surveillance Requirement 3.7.9.2 to allow an ultimate heat sink temperature of less than or equal to 102.8°F through September 30, 2024.

If you have any questions, please contact me at 301-415-6606.

Sincerely,

/RA/

Joel S. Wiebe, Senior Project Manager
Plant Licensing Branch III
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-456 and 50-457

Enclosure:
Notice of Consideration

cc: Listserv

ENCLOSURE

FEDERAL REGISTER NOTICE

NUCLEAR REGULATORY COMMISSION
[Docket Nos. 50-456 and 50-457; NRC-2024-0112]
Constellation Energy Generation, LLC;
Braidwood Station, Units 1 and 2;
License Amendment Request

AGENCY: Nuclear Regulatory Commission.

ACTION: Opportunity to comment, request a hearing, and petition for leave to intervene.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) is considering issuance of an amendment to Renewed Facility Operating License Nos. NPF-72 and NPF-77, issued to Constellation Energy Generation, LLC, for the operation of Braidwood Station, Units 1 and 2 (Docket Nos. 50-456 and 50-457, respectively). The proposed amendment would change Technical Specification (TS) Surveillance Requirement (SR) 3.7.9.2 to allow an Ultimate Heat Sink (UHS) temperature of less than or equal to 102.8°F until September 30, 2024. The change is requested to support operation during the summer months of 2024.

DATES: Submit comments by **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER*]**. Comments received after this date will be considered if it is practical to do so, but the NRC is able to ensure consideration only for comments received on or before this date. Requests for a hearing or petition for leave to intervene must be filed by **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER*]**.

ADDRESSES: You may submit comments by any of the following methods; however, the NRC encourages electronic comment submission through the **Federal rulemaking website**.

- **Federal rulemaking website:** Go to <https://www.regulations.gov> and search for Docket ID **NRC-2024-0112**. Address questions about Docket IDs in Regulations.gov to Stacy Schumann; telephone: 301-415-0624; email: Stacy.Schumann@nrc.gov. For technical questions, contact the individual listed in the “For Further Information Contact” section of this document.

- **Mail comments to:** Office of Administration, Mail Stop: TWFN-7-A60M, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, ATTN: Program Management, Announcements and Editing Staff.

For additional direction on obtaining information and submitting comments, see “Obtaining Information and Submitting Comments” in the SUPPLEMENTARY INFORMATION section of this document.

FOR FURTHER INFORMATION CONTACT: Joel S. Wiebe, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, telephone: 301-415-6606; email: Joel.Wiebe@nrc.gov.

SUPPLEMENTARY INFORMATION:

I. Obtaining Information and Submitting Comments

A. Obtaining Information

Please refer to Docket ID **NRC-2024-0112** when contacting the NRC about the availability of information for this action. You may obtain publicly available information related to this action by any of the following methods:

- **Federal Rulemaking Website:** Go to <https://www.regulations.gov> and search for Docket ID **NRC-2024-0112**.

- **NRC’s Agencywide Documents Access and Management System (ADAMS):** You may obtain publicly available documents online in the ADAMS Public Documents collection at <https://www.nrc.gov/reading-rm/adams.html>. To begin the

search, select “Begin Web-based ADAMS Search.” For problems with ADAMS, please contact the NRC’s Public Document Room (PDR) reference staff at 1-800-397-4209, at 301-415-4737, or by email to PDR.Resource@nrc.gov. The license amendment request is available in ADAMS under Accession No. ML24156A245.

- **NRC’s PDR:** The PDR, where you may examine and order copies of publicly available documents, is open by appointment. To make an appointment to visit the PDR, please send an email to PDR.Resource@nrc.gov or call 1-800-397-4209 or 301-415-4737, between 8 a.m. and 4 p.m. eastern time (ET), Monday through Friday, except Federal holidays.

B. Submitting Comments

The NRC encourages electronic comment submission through the **Federal rulemaking website** (<https://www.regulations.gov>). Please include Docket ID **NRC-2024-0112** in your comment submission.

The NRC cautions you not to include identifying or contact information that you do not want to be publicly disclosed in your comment submission. The NRC will post all comment submissions at <https://www.regulations.gov> as well as enter the comment submissions into ADAMS. The NRC does not routinely edit comment submissions to remove identifying or contact information.

If you are requesting or aggregating comments from other persons for submission to the NRC, then you should inform those persons not to include identifying or contact information that they do not want to be publicly disclosed in their comment submission. Your request should state that the NRC does not routinely edit comment submissions to remove such information before making the comment submissions available to the public or entering the comment into ADAMS.

II. Introduction

The NRC is considering issuance of an amendment to Renewed Facility Operating License Nos. NPF-72 and NPF-77, issued to Constellation Energy Generation, LLC, for the operation of Braidwood Station, Units 1 and 2 (Docket Nos. 50-456 and 50-457, respectively), located in Will County, IL. The proposed amendment would change TS SR 3.7.9.2 to allow a UHS temperature of less than or equal to 102.8°F until September 30, 2024.

Historical meteorological and atmospheric conditions have resulted in the UHS temperature approaching the TS limit. These conditions include elevated air temperatures, high humidity, and low wind speed. Specifically, the summer of 2020 brought hot weather and drought conditions to the northern Illinois area resulting in sustained elevated UHS temperatures. In anticipation of these conditions occurring during the summer months of 2024, this license amendment request would change the UHS temperature TS limit until September 30, 2024.

Before issuance of the proposed license amendment, the NRC will need to make the findings required by the Atomic Energy Act of 1954, as amended (the Act), and NRC's regulations.

The NRC has made a proposed determination that the license amendment request involves no significant hazards consideration. Under the NRC's regulations in section 50.92 of title 10 of the *Code of Federal Regulations* (10 CFR), "Issuance of amendment," this means that operation of the facility in accordance with the proposed amendment would not (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety. As required by 10 CFR 50.91(a), the licensee

has provided its analysis of the issue of no significant hazards consideration, which is presented as follows:

1. Does the proposed amendment involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No.

The likelihood of a malfunction of any systems, structures, or components (SSCs) supported by the UHS is not significantly increased by increasing the allowable UHS temperature from less than or equal to 102°F to less than or equal to 102.8°F. The UHS provides a heat sink for process and operating heat from safety related components during a transient or accident, as well as during normal operation. The proposed change does not make any physical changes to any plant SSCs, nor does it alter any of the assumptions or conditions upon which the UHS is designed. The UHS is not an initiator of any analyzed accident. All equipment supported by the UHS has been evaluated to demonstrate that their performance and operation remains as described in the Updated Final Safety Analysis Report (UFSAR) with no increase in probability of failure or malfunction.

The SSCs credited to mitigate the consequences of postulated design basis accidents remain capable of performing their design basis function. The change in maximum UHS temperature has been evaluated using the UFSAR described methods to demonstrate that the UHS remains capable of removing normal operating and post-accident heat. The change in UHS temperature and resulting containment response following a postulated design basis accident has been demonstrated to not be impacted. Additionally, all the UHS supported equipment, credited in the accident analysis to mitigate an accident, has been shown to continue to perform their design function as described in the UFSAR.

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

2. Does the proposed amendment create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No.

The proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated. The proposed change does not introduce any new modes of plant operation, change the design function of any SSC, or change the mode of operation of any SSC. There are no new equipment failure modes or malfunctions created as affected SSCs continue to operate in the same manner as previously evaluated and have been evaluated to perform as designed at the increased UHS temperature and as assumed in the accident analysis. Additionally, accident initiators remain as described in the UFSAR and no new accident initiators are postulated as a result of the increase in UHS temperature.

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

3. Does the proposed amendment involve a significant reduction in a margin of safety?

Response: No.

The proposed change continues to ensure that the maximum temperature of the cooling water supplied to the plant SSCs during a UHS design basis event remains within the evaluated equipment limits and capabilities assumed in the accident analysis. The proposed change does not result in any changes to plant equipment function, including setpoints and actuations. All equipment will function as designed in the plant safety analysis without any physical modifications. The proposed change does not alter

a limiting condition for operation, limiting safety system setting, or safety limit specified in the Technical Specifications.

The proposed change does not adversely impact the UHS inventory required to be available for the UFSAR described design basis accident involving the worst case 30-day period including losses for evaporation and seepage to support safe shutdown and cooldown of both Braidwood Station units. Additionally, the structural integrity of the UHS is not impacted and remains acceptable following the change, thereby ensuring that the assumptions for both UHS temperature and inventory remain valid.

Therefore, since there is no adverse impact of this proposed change on the Braidwood Station safety analysis, there is no reduction in the margin of safety of the plant.

The NRC staff has reviewed the licensee's analysis and, based on this review, it appears that the three standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the license amendment request involves no significant hazards consideration.

The NRC is seeking public comments on this proposed determination that the license amendment request involves no significant hazards consideration. Any comments received within 30 days after the date of publication of this notice will be considered in making any final determination.

Normally, the Commission will not issue the amendment until the expiration of 60 days after the date of publication of this notice. The Commission may issue the license amendment before expiration of the 60-day notice period if the Commission concludes the amendment involves no significant hazards consideration. In addition, the Commission may issue the amendment prior to the expiration of the 30-day comment period if circumstances change during the 30-day comment period such that failure to

act in a timely way would result, for example, in derating or shutdown of the facility. If the Commission takes action prior to the expiration of either the comment period or the notice period, it will publish in the *Federal Register* a notice of issuance. If the Commission makes a final no significant hazards consideration determination, any hearing will take place after issuance. The Commission expects that the need to take this action will occur very infrequently.

III. Opportunity to Request a Hearing and Petition for Leave to Intervene

Within 60 days after the date of publication of this notice, any person (petitioner) whose interest may be affected by this action may file a request for a hearing and petition for leave to intervene (petition) with respect to the action. Petitions shall be filed in accordance with the Commission's "Agency Rules of Practice and Procedure" in 10 CFR part 2. Interested persons should consult 10 CFR 2.309. If a petition is filed, the presiding officer will rule on the petition and, if appropriate, a notice of a hearing will be issued.

Petitions must be filed no later than 60 days from the date of publication of this notice in accordance with the filing instructions in the "Electronic Submissions (E-Filing)" section of this document. Petitions and motions for leave to file new or amended contentions that are filed after the deadline will not be entertained absent a determination by the presiding officer that the filing demonstrates good cause by satisfying the three factors in 10 CFR 2.309(c)(1)(i) through (iii).

If a hearing is requested and the Commission has not made a final determination on the issue of no significant hazards consideration, the Commission will make a final determination on the issue of no significant hazards consideration, which will serve to establish when the hearing is held. If the final determination is that the amendment request involves no significant hazards consideration, the Commission may issue the

amendment and make it immediately effective, notwithstanding the request for a hearing. Any hearing would take place after issuance of the amendment. If the final determination is that the amendment request involves a significant hazards consideration, then any hearing held would take place before the issuance of the amendment unless the Commission finds an imminent danger to the health or safety of the public, in which case it will issue an appropriate order or rule under 10 CFR part 2.

A State, local governmental body, Federally recognized Indian Tribe, or designated agency thereof, may submit a petition to the Commission to participate as a party under 10 CFR 2.309(h) no later than 60 days from the date of publication of this notice. Alternatively, a State, local governmental body, Federally recognized Indian Tribe, or designated agency thereof may participate as a non-party under 10 CFR 2.315(c).

For information about filing a petition and about participation by a person not a party under 10 CFR 2.315, see ADAMS Accession No. ML20340A053.

(<https://adamswebsearch2.nrc.gov/webSearch2/main.jsp?AccessionNumber=ML20340A053>) and on the NRC's public website at <https://www.nrc.gov/about-nrc/regulatory/adjudicatory/hearing.html#participate>.

IV. Electronic Submissions and E-Filing

All documents filed in NRC adjudicatory proceedings, including documents filed by an interested State, local governmental body, Federally recognized Indian Tribe, or designated agency thereof that requests to participate under 10 CFR 2.315(c), must be filed in accordance with 10 CFR 2.302. The E-Filing process requires participants to submit and serve all adjudicatory documents over the internet, or in some cases, to mail copies on electronic storage media, unless an exemption permitting an alternative filing method, as further discussed, is granted. Detailed guidance on electronic submissions is

located in the “Guidance for Electronic Submissions to the NRC” (ADAMS Accession No. ML13031A056) and on the NRC’s public website at <https://www.nrc.gov/site-help/e-submittals.html>.

To comply with the procedural requirements of E-Filing, at least 10 days prior to the filing deadline, the participant should contact the Office of the Secretary by email at Hearing.Docket@nrc.gov, or by telephone at 301-415-1677, to (1) request a digital identification (ID) certificate, which allows the participant (or its counsel or representative) to digitally sign submissions and access the E-Filing system for any proceeding in which it is participating; and (2) advise the Secretary that the participant will be submitting a petition or other adjudicatory document (even in instances in which the participant, or its counsel or representative, already holds an NRC-issued digital ID certificate). Based upon this information, the Secretary will establish an electronic docket for the proceeding if the Secretary has not already established an electronic docket.

Information about applying for a digital ID certificate is available on the NRC’s public website at <https://www.nrc.gov/site-help/e-submittals/getting-started.html>. After a digital ID certificate is obtained and a docket created, the participant must submit adjudicatory documents in Portable Document Format. Guidance on submissions is available on the NRC’s public website at <https://www.nrc.gov/site-help/electronic-sub-ref-mat.html>. A filing is considered complete at the time the document is submitted through the NRC’s E-Filing system. To be timely, an electronic filing must be submitted to the E-Filing system no later than 11:59 p.m. ET on the due date. Upon receipt of a transmission, the E-Filing system time-stamps the document and sends the submitter an email confirming receipt of the document. The E-Filing system also distributes an email that provides access to the document to the NRC’s Office of the General Counsel and any others who have advised the Office of the Secretary that they wish to participate in

the proceeding, so that the filer need not serve the document on those participants separately. Therefore, applicants and other participants (or their counsel or representative) must apply for and receive a digital ID certificate before adjudicatory documents are filed to obtain access to the documents via the E-Filing system.

A person filing electronically using the NRC's adjudicatory E-Filing system may seek assistance by contacting the NRC's Electronic Filing Help Desk through the "Contact Us" link located on the NRC's public website at <https://www.nrc.gov/site-help/e-submittals.html>, by email to MSHD.Resource@nrc.gov, or by a toll-free call at 1-866-672-7640. The NRC Electronic Filing Help Desk is available between 9 a.m. and 6 p.m., ET, Monday through Friday, except Federal holidays.

Participants who believe that they have good cause for not submitting documents electronically must file an exemption request, in accordance with 10 CFR 2.302(g), with their initial paper filing stating why there is good cause for not filing electronically and requesting authorization to continue to submit documents in paper format. Such filings must be submitted in accordance with 10 CFR 2.302(b)-(d). Participants filing adjudicatory documents in this manner are responsible for serving their documents on all other participants. Participants granted an exemption under 10 CFR 2.302(g)(2) must still meet the electronic formatting requirement in 10 CFR 2.302(g)(1), unless the participant also seeks and is granted an exemption from 10 CFR 2.302(g)(1).

Documents submitted in adjudicatory proceedings will appear in the NRC's electronic hearing docket, which is publicly available at <https://adams.nrc.gov/ehd>, unless excluded pursuant to an order of the presiding officer. If you do not have an NRC-issued digital ID certificate as previously described, click "cancel" when the link requests certificates and you will be automatically directed to the NRC's electronic hearing docket where you will be able to access any publicly available documents in a

particular hearing docket. Participants are requested not to include personal privacy information such as social security numbers, home addresses, or personal phone numbers in their filings unless an NRC regulation or other law requires submission of such information. With respect to copyrighted works, except for limited excerpts that serve the purpose of the adjudicatory filings and would constitute a Fair Use application, participants should not include copyrighted materials in their submission.

For further details with respect to this action, see the application for license amendment dated June 4, 2024 (ADAMS Accession No. ML24156A245).

Attorney for licensee: Jason Zorn, Associate General Counsel, Constellation Energy Generation, LLC, 4300 Linfield Road, Warrenville, IL, 60555.

NRC Branch Chief: Jeff Whited.

Dated: June 25, 2024.

For the Nuclear Regulatory Commission.

/RA/

Joel S. Wiebe, Senior Project Manager,
Licensing Projects Branch III,
Division of Operating Reactor Licensing,
Office of Nuclear Reactor Regulation.

SUBJECT: BRAIDWOOD STATION, UNITS 1 AND 2 - INDIVIDUAL NOTICE OF CONSIDERATION OF ISSUANCE OF AMENDMENT TO RENEWED FACILITY OPERATING LICENSES, PROPOSED NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION, AND OPPORTUNITY TO REQUEST A HEARING (EPID L-2024-LLA-0075) DATED JUNE 25, 2024

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ADAMS Accession Nos.:

PKG: ML24163A394

LTR (NRR-106): ML24163A392

FRN (ADM-012): ML24163A393

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