



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

April 20, 2022

Mr. Brent Ridge
President and Chief Executive Officer
Dairyland Power Cooperative
3200 East Avenue South
P.O. Box 817
La Crosse, WI 54602-0817

SUBJECT: LA CROSSE BOILING WATER REACTOR - ISSUANCE OF AMENDMENT
NO. 77 APPROVING INDEPENDENT SPENT FUEL STORAGE INSTALLATION
EMERGENCY PLAN, REVISION 40 (EPID L-2021-LLA-0063)

Dear Mr. Ridge:

The U.S. Nuclear Regulatory Commission (NRC) is issuing the enclosed Amendment No. 77 to Possession Only License No. DPR-45 for the La Crosse Boiling Water Reactor (LACBWR), held by the Dairyland Power Cooperative (DPC). This amendment is in response to your application dated March 8, 2021 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML21105A033), as supplemented by letter dated October 13, 2021 (ADAMS Accession No. ML21294A032). This amendment revises the LACBWR license to approve Revision 40 to the Independent Spent Fuel Storage Installation (ISFSI) Emergency Plan.

As discussed in the enclosed safety evaluation, the NRC staff has reviewed the proposed changes to the LACBWR ISFSI Emergency Plan and concluded that the proposed changes meet the standards of Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.47, "Emergency plans," and the requirements of Appendix E, "Emergency Planning and Preparedness for Production and Utilization facilities," to 10 CFR Part 50, as exempted, and continue to provide reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency at the LACBWR site. Therefore, DPC's proposed changes, as outlined in the letters referenced above, are considered acceptable. The basis for the NRC staff's conclusion is contained in the safety evaluation.

The amendment is provided as Enclosure 1. The amendment is effective upon the issuance of Amendment No. 76 to Possession Only License No. DPR-45, which will fully return the license for the remaining ISFSI structures from LaCrosseSolutions, LLC to DPC. The amendment shall be implemented within 90 days of the effective date. A copy of the related safety evaluation is also included as Enclosure 2. A Notice of Issuance of this amendment will be included in the NRC's monthly *Federal Register* notice.

Pursuant to Paragraph (c)(9) and (c)(10) of 10 CFR 51.22, "Criterion for categorical exclusion; identification of licensing and regulatory actions eligible for categorical exclusion or otherwise not requiring environmental review," the Commission has determined that the issuance of this amendment is categorically excluded and pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared. Approval of this amendment request involves no significant hazards consideration; no significant change in the types or

significant increase in the amounts of any effluents that may be released offsite; and no significant increase in individual or cumulative public or occupational radiation exposure. The supplemental letter dated October 13, 2021, provided additional information that clarified the application, but did not expand the scope of the application as originally noticed, or change the NRC's original proposed no significant hazards consideration determination as published in the *Federal Register* (FR) on June 15, 2021 (86 FR 31738).

In accordance with 10 CFR 2.390 of the NRC's "Agency Rules of Practice and Procedure," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records component of the NRC's ADAMS. ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

If you or your staff have any questions regarding the above, please contact me at 301-415-3178 or via email at marlayna.doell@nrc.gov.

Sincerely,



Signed by Doell, Marlayna
on 04/20/22

Marlayna V. Doell, Project Manager
Reactor Decommissioning Branch
Division of Decommissioning, Uranium Recovery
and Waste Programs
Office of Nuclear Material Safety
and Safeguards

Docket Nos.: 50-409 and 72-046
License No.: DPR-45

Enclosures:

1. Amendment No. 77 to
Possession Only License No. DPR-45
2. Safety Evaluation

cc: La Crosse Listserv

SUBJECT: LA CROSSE BOILING WATER REACTOR - ISSUANCE OF AMENDMENT
NO. 77 APPROVING INDEPENDENT SPENT FUEL STORAGE INSTALLATION
EMERGENCY PLAN, REVISION 40 (EPID L-2021-LLA-0063)

Dated: April 20, 2022

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***via email**

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DATE	3/10/2022	10/28/2021	4/20/2022
OFFICE	NMSS/DUWP/RDB/BC	NMSS/DUWP/RDB/PM	
NAME	BWatson	MDoell	
DATE	4/20/2022	4/20/2022	

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

DAIRYLAND POWER COOPERATIVE

DOCKET NOS. 50-409 and 72-046

LA CROSSE BOILING WATER REACTOR

AMENDMENT TO POSSESSION ONLY LICENSE

Amendment No. 77
License No. DPR-45

1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment to the La Crosse Boiling Water Reactor (the facility) Possession Only License No. DPR-45, filed by the Dairyland Power Cooperative (the licensee), dated March 8, 2021, as supplemented by letter dated October 13, 2021, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in Title 10 of the *Code of Federal Regulations* (10 CFR) Chapter I, and all required notifications to other agencies or bodies have been duly made;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's rules and regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51, "Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions," of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, by Amendment No. 77, Possession Only License No. DPR-45 is hereby amended to authorize the revision to the La Crosse Boiling Water Reactor Independent Spent Fuel Storage Installation (ISFSI) Emergency Plan, as set forth in the application dated March 8, 2021, as supplemented by letter dated October 13, 2021, and as evaluated in the NRC staff's safety evaluation issued with this amendment.
3. This license amendment is effective upon the issuance of Amendment No. 76 to Possession Only License No. DPR-45, which will fully return the license for the remaining ISFSI structures from LaCrosseSolutions, LLC to the Dairyland Power Cooperative, and shall be implemented within 90 days of the effective date.

FOR THE NUCLEAR REGULATORY COMMISSION



Signed by Watson, Bruce
on 04/20/22

Bruce A. Watson, CHP, Chief
Reactor Decommissioning Branch
Division of Decommissioning, Uranium Recovery
and Waste Programs
Office of Nuclear Material Safety
and Safeguards

Date of Issuance: April 20, 2022



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

SAFETY EVALUATION BY
THE OFFICE OF NUCLEAR SECURITY AND INCIDENT RESPONSE
RELATED TO AMENDMENT NO. 77 TO
POSSESSION ONLY LICENSE NO. DPR-45
DAIRYLAND POWER COOPERATIVE
LA CROSSE BOILING WATER REACTOR
INDEPENDENT SPENT FUEL STORAGE INSTALLATION
DOCKET NOS. 50-409 and 72-046

1.0 INTRODUCTION

Dairyland Power Cooperative (DPC, the licensee) is the holder of Possession Only License DPR-45 for the La Crosse Boiling Water Reactor (LACBWR) facility. The license, issued pursuant to the Atomic Energy Act of 1954, as amended, and Part 50 of Title 10 of the *Code of Federal Regulations* (10 CFR), allows DPC to possess and store spent nuclear fuel at the permanently shut down and decommissioned facility under the provisions of 10 CFR Part 72, Subpart K, "General License for Storage of Spent Fuel at Power Reactor Sites." By letter dated October 19, 2012 (Reference 1), DPC notified the U.S. Nuclear Regulatory Commission (NRC) that all of the spent nuclear fuel from the LACBWR facility had been transferred to dry cask storage at an onsite Independent Spent Fuel Storage Installation (ISFSI) as of September 19, 2012. Additionally, by letter dated October 24, 2012 (Reference 2), DPC further committed to the NRC that there would be no spent fuel placed in the LACBWR spent fuel pool from that date forward.

In a letter dated March 8, 2021 (Reference 3), as supplemented by letter dated October 13, 2021 (Reference 4), DPC proposed changes to the LACBWR ISFSI Emergency Plan, and provided a copy of proposed Revision 40 to the plan. The major changes to the LACBWR ISFSI Emergency Plan in DPC's request for approval were: (1) removing the requirement in the LACBWR ISFSI Emergency Plan to perform an ISFSI surveillance based on a recently issued license amendment to the NAC-Multi-Purpose Canister (MPC) storage system Certificate of Compliance (CoC); (2) changing the LACBWR ISFSI Emergency Action Levels (EALs) to allow classification of the emergency without entering the ISFSI protected area; (3) eliminating the requirement for the conduct of the annual contaminated medical drill; and (4) various additional changes to the LACBWR ISFSI Emergency Plan.

The supplement dated October 13, 2021, provided additional information that clarified the application, did not expand the scope of the application as originally noticed, and did not change

the NRC staff's original proposed no significant hazards consideration determination as published in the *Federal Register* (FR) on June 15, 2021 (86 FR 31738).

2.0 REGULATORY EVALUATION

This safety evaluation addresses the impact of the proposed changes to the LACBWR ISFSI Emergency Plan on the effectiveness of the licensee's emergency response capabilities.

2.1 Regulations

The regulatory requirements, as exempted, upon which the NRC staff based its evaluation and acceptance of the proposed revised LACBWR ISFSI Emergency Plan are as follows:

- 10 CFR 50.47(b)(1), as exempted, states, in part: "... each principal response organization has staff to respond and to augment its initial response on a continuous basis."
- 10 CFR 50.47(b)(2) states, in part: "... adequate staffing to provide initial facility accident response in key functional areas is maintained at all times, timely augmentation of response capabilities is available"
- 10 CFR 50.47(b)(4), as exempted, states, in part: "A standard emergency classification and action level scheme, the bases of which include facility system and effluent parameters, is in use by the nuclear facility licensee...."
- 10 CFR 50.47(b)(11), states: "Means for controlling radiological exposures, in an emergency, are established for emergency workers. The means for controlling radiological exposures shall include exposure guidelines consistent with EPA [U.S. Environmental Protection Agency] Emergency Worker and Lifesaving Activity Protective Action Guides."
- 10 CFR 50.47(b)(14) states, in part: "...periodic drills are (will be) conducted to develop and maintain key skills, and deficiencies identified as a result of exercises or drills are (will be) corrected."
- 10 CFR Part 50, Appendix E, Section IV.A, as exempted, states, in part: "The organization for coping with radiological emergencies shall be described, including definition of authorities, responsibilities, and duties of individuals assigned to the licensee's emergency organization...."
- 10 CFR Appendix E, Section IV.F.1, "Training" states, in part:

The program to provide for: (a) The training of employees and exercising, by periodic drills, of emergency plans to ensure that employees of the licensee are familiar with their specific emergency response duties, and (b) The participation in the training and drills by other persons whose assistance may be needed in the event of a radiological emergency shall be described. This shall include a description of specialized initial training and periodic retraining

programs to be provided to each of the following categories of emergency personnel:

...

vi. First aid and rescue teams;

vii. Medical support personnel;

....

2.2 Guidance

The associated guidance documents upon which the NRC staff based its evaluation and acceptance of the proposed revised LACBWR ISFSI Emergency Plan include:

- Revision 1 to NUREG-0654/FEMA-REP-1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants" (Reference 5), which provides a common reference and guidance for nuclear facility operators to develop radiological emergency response plans.
- NUREG-2215, "Standard Review Plan for Spent Fuel Dry Storage Systems and Facilities" (Reference 6), which provides emergency plan review guidance applicable to facilities licensed pursuant to the regulatory requirements found in 10 CFR Part 72, "Licensing Requirements for the Independent Storage of Spent Nuclear Fuel, High Level Radioactive Waste, and Reactor-Related Greater Than Class C Waste."
- Nuclear Energy Institute (NEI) document NEI 99-01, Revision 6, "Development of Emergency Action Levels for Non-Passive Reactors" (Reference 7), which was endorsed by the NRC in a letter dated March 28, 2013 (Reference 8), as generic (non-plant-specific) EAL scheme development guidance.
- EPA-400/R-17/001, "PAG Manual: Protective Action Guides (PAGs) and Planning Guidance for Radiological Incidents," dated January 2017 (Reference 9).

3.0 TECHNICAL EVALUATION

The NRC staff has reviewed the licensee's regulatory and technical analyses in support of its proposed emergency plan changes, as described in DPC's application and subsequent supplemental letter. The staff's technical evaluation is detailed below.

3.1 Background

DPC revised the LACBWR Emergency Plan to reflect the permanently shut down and defueled status of the LACBWR facility in Revision 10, dated September 29, 1987 (Reference 10), and submitted the Emergency Plan to the NRC for approval. The revision contained a technical report which provided the radiological consequences for the maximum credible accident scenario associated with the spent fuel pool. Based on this technical evaluation, DPC revised the LACBWR Emergency Plan to eliminate all aspects of offsite emergency preparedness

required under 10 CFR 50.47(b) and Appendix E, "Emergency Planning and Preparedness for Production and Utilization Facilities," to 10 CFR Part 50.

The NRC approved Revision 10 of the LACBWR Emergency Plan in a safety evaluation dated July 8, 1988 (Reference 11). The NRC staff concluded that the licensee's emergency plan was acceptable in view of the reduced offsite radiological consequences associated with the decommissioning plant status. The staff considered the permanently shut down and defueled status of the reactor, and the low likelihood of any credible accident resulting in radiological releases requiring offsite protective measures. In addition, the staff concluded that: (1) the LACBWR Emergency Plan provided an adequate basis for an acceptable state of emergency preparedness, and (2) the Emergency Plan, in conjunction with arrangements made with offsite response agencies, provided reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency at the LACBWR facility.

On June 18, 2012, DPC submitted a letter, "Request for Exemption to Revised Emergency Planning Regulations" (Reference 12), requesting exemption from specific emergency planning (EP) requirements of 10 CFR 50.47, "Emergency plans," and 10 CFR Part 50, Appendix E, for the LACBWR facility, related to a rulemaking that amended the NRC's EP regulations (76 FR 72560; November 23, 2011). These exemptions were granted by the NRC in a letter dated July 31, 2013 (Reference 13). By letter dated September 8, 2014 (Reference 14), the NRC approved a license amendment to transition the emergency plan for LACBWR into an ISFSI-only emergency plan (Revision 34), including updating associated EALs.

3.2 Proposed Changes

By letter dated March 8, 2021, as supplemented by letter dated October 13, 2021, DPC proposed changes to the LACBWR ISFSI Emergency Plan to adopt Amendment No. 7 to the CoC for the NAC-MPC storage system and NAC-MPC Final Safety Analysis Report (FSAR), Revision 12 (Reference 15), and provided a copy of proposed Revision 40 to the plan. The proposed changes to the LACBWR ISFSI Emergency Plan in DPC's request for approval were: (1) removing the requirement to perform an ISFSI surveillance based on the recently issued NAC-MPC CoC license amendment; (2) changing the LACBWR ISFSI EALs to allow classification of the emergency without entering the ISFSI protected area; (3) eliminating the requirement for the conduct of the annual contaminated medical drill; and (4) various additional changes to the LACBWR ISFSI Emergency Plan. As part of its evaluation, the NRC staff reviewed the licensee's regulatory and technical analyses in support of the proposed changes to the LACBWR ISFSI Emergency Plan as described in the application, as supplemented. A summary of the NRC staff's evaluation is provided below.

3.3 Evaluation

Removal of ISFSI 4-Hour Surveillance Requirement

DPC proposes to remove the requirement to conduct post event ISFSI surveillance within 4 hours from the LACBWR ISFSI Emergency Plan, due to it no longer being required per the NAC-MPC ISFSI Technical Specifications. The LACBWR ISFSI adopted Amendment No. 7 to the NAC-MPC CoC and NAC-MPC FSAR, Revision 12, under separate regulatory processes. The previously approved NAC-MPC CoC/FSAR amendment is related to the deletion of heat removal requirements due to the age of the spent fuel stored in the LACBWR ISFSI.

In its October 13, 2021, response to a request for additional information, the licensee confirmed that the LACBWR ISFSI will continue to maintain the capability to adequately augment its Emergency Response Organization (ERO) to perform post event radiological monitoring within 4 hours of an event that potentially affects the ISFSI confinement boundary, and that Section 5.3.8 of the LACBWR ISFSI Emergency Plan was revised to state: "For a classified event involving radiological consequences, personnel trained in radiological monitoring and assessment will report to the ISFSI within 4 hours of the emergency declaration."

The NRC staff evaluated the proposed change and determined that deletion of the requirement to conduct post event ISFSI surveillance within 4 hours from the LACBWR ISFSI Emergency Plan is acceptable because: (1) it is no longer required by the NAC-MPC ISFSI Technical Specifications, and (2) in accordance with the proposed emergency planning requirements, personnel will be trained to perform radiological monitoring and assessment duties during an event involving radiological consequences, and will always be onsite and available. Based on the assessment above, the NRC staff concludes that the proposed LACBWR ISFSI Emergency Plan continues to meet the applicable planning standards of 10 CFR 50.47(b) and the requirements of Appendix E to 10 CFR Part 50, as exempted.

Emergency Action Level Proposed Change

The licensee proposes to eliminate the "Measured dose rate at the Isolation Zone Fence exceeds the tag value in [Emergency Plan Procedure] EPP-20.04 (2xs background)" EAL criteria from the LACBWR ISFSI Emergency Plan.

The current EAL (Alert) contains the following criteria:

≥ 500 µR/hr [micro-Roentgens per hour] before reaching the Isolation Zone Fence

OR

Measured dose rate at the Isolation Zone Fence exceeds the tag value in EPP-20.04 (2xs background)

OR

The 2xs ISFSI Technical Specification values previously approved in Revision 34 of the LACBWR ISFSI Emergency Plan

The proposed EAL (Alert) will contain the remaining criteria:

≥ 500 µR/hr at the Isolation Zone Fence

OR

The 2xs ISFSI Technical Specification values previously approved in Revision 34 of the LACBWR ISFSI Emergency Plan

The licensee stated that Revision 35 to the LACBWR ISFSI Emergency Plan provided enhancements of the Isolation Zone Fence Surveys, which allow for early detection of damage to an ISFSI cask and activation of the emergency organization. Per DPC's associated 10 CFR 50.54(q)(3) evaluation, the Emergency Classification level of Alert is unchanged except for the

fact that the Alert could be declared in a shorter time following an accident or natural phenomena event that results in radiological consequences.

The licensee also stated that a LACBWR calculation (2013-03604) provides the maximum dose rates after postulated tornado missile damage to a single ISFSI cask. The calculation was used to inform the current EAL values. The EAL value prior to the Isolation Zone Fence and the readings at the fence were adopted to facilitate efficiency and effectiveness in emergency classifications. Specifically, providing the fence EAL value allows the Security Shift Supervisor (SSS) to evaluate and declare the emergency prior to the Radiation Protection Technician's arrival on site, without accumulating unnecessary dose and practicing As Low as Reasonably Achievable (ALARA) fundamentals.

The licensee also noted:

The EAL will maintain the "early detection of damage and activation of the emergency organization" and be based upon approved controlled documents (LACBWR calculation 2013-03604 and ISFSI Technical Specification A.3.2.2).

The proposed EAL aligns with the corresponding initiating condition in that the damage is sufficient enough that the ISFSI loaded cask confinement boundary has the potential to be breached; and therefore appropriate.

The NRC staff evaluated the proposed change and determined that deletion of the EAL criteria from the LACBWR ISFSI Emergency Plan is acceptable because it: (1) is accurate as it is based on a technical calculation that demonstrates the adequacy of the retained EAL values; (2) maintains the timeliness of the emergency classification while adding efficiency and effectiveness; and (3) allows the SSS to evaluate and declare the emergency prior to the Radiation Protection Technician's arrival on site, thereby avoiding unnecessary dose and practicing ALARA. Based on the assessment above, the NRC staff concludes that the proposed LACBWR ISFSI Emergency Plan continues to meet the applicable planning standards of 10 CFR 50.47(b) and the requirements of Appendix E to 10 CFR Part 50, as exempted.

Contaminated Medical Emergency Annual Frequency

DPC proposes to eliminate the annual frequency of the LACBWR ISFSI Contaminated Medical Emergency drill and use the local Gundersen Health Systems drill program and schedule to fulfill the requirements for the occurrence of this site medical emergency drill.

The current LACBWR ISFSI Emergency Plan has an annual frequency for the following:

Medical Emergency Drill – demonstrating the capability for transporting an injured worker offsite.

The proposed LACBWR ISFSI Emergency Plan has the following requirement:

Medical Emergency Drill – will be coordinated and conducted at the request of Gundersen Health System/Tristate Ambulance.

The annual frequency for a medical emergency drill is specified in NUREG-0654, which provides the NRC-approved guidance for compliance with the EP regulations. Licensees "may voluntarily use the guidance in the document to demonstrate compliance" with the NRC

regulations or provide “methods or solutions that differ from those described.” DPC stated that the proposed alternate method of basing the LACBWR medical emergency drill frequency on an Offsite Response Organization (ORO) community-based risk assessment is appropriate and continues to meet the intent of the emergency planning standards.

In response to a request for additional information, the licensee described how the LACBWR ISFSI Emergency Plan will continue to meet the intent of the medical drill as specified in NUREG-0654. Specifically, the licensee noted that an onsite Medical Emergency Drill and training will be provided annually for the LACBWR ISFSI ERO, and that the LACBWR training process/program will determine the need for additional onsite drills to be included in the training. The licensee also indicated that any Contaminated Medical Emergency drills conducted with the ORO and/or ERO will be evaluated under the LACBWR Drill and Exercise Program, and any deficiencies will be entered into the LACBWR ISFSI corrective action program. In addition, if Gundersen Health System is unable to assist the licensee in completion of the Contaminated Medical Drill, “...another alternative method (tabletop, etc.) would be evaluated including using industry lessons learned from the 2020 pandemic.” The licensee also stated that it had conducted outreach with the State of Wisconsin regarding the planned changes to the Contaminated Medical Drill to leverage OROs, and the State agreed with the changes.

The NRC staff evaluated the proposed change and determined that the modification to the medical emergency drill frequency in the LACBWR ISFSI Emergency Plan is acceptable because: (1) Section 8.3.3.2, “Medical Emergency Drill Evaluations,” of the LACBWR ISFSI Emergency Plan requires onsite Medical Emergency Drills and training be provided annually to LACBWR ISFSI ERO members; (2) organizations which may be called upon to render assistance onsite will be offered general facility familiarization sessions on an annual basis; and (3) Medical Emergency Drills with the OROs will be conducted in accordance with LACBWR and ORO policies. Based on the assessment above, the NRC staff concludes that the proposed LACBWR ISFSI Emergency Plan continues to meet the applicable planning standards of 10 CFR 50.47(b) and the requirements of Appendix E to 10 CFR Part 50, as exempted.

Additional Changes Requiring Prior NRC Approval

Section 2.4, “Additional NRC Approval Proposed Changes,” of Enclosure 1, “Description and Evaluation of Changes,” to the licensee’s March 8, 2021, letter, includes a table of requested changes to the LACBWR ISFSI Emergency Plan that DPC identified as requiring NRC approval, including those items described above and several additional requests.

The additional requests for changes to the LACBWR ISFSI Emergency Plan include:

Section 5.2, “Notification and Activation”

The licensee proposes to delete “other appropriate Emergency Response Organization personnel” and insert the “Resource Manager” position into the Notification and Activation process in the LACBWR ISFSI Emergency Plan. The “Resource Manager” position will also be inserted into the remaining emergency plan document as necessary.

The licensee stated that establishing the Resource Manager position as the formal ERO position that the Emergency Response Director (ERD) will contact to assist and augment the ERD is an enhancement to the LACBWR ISFSI Emergency Plan. The Resource Manager will also be responsible for obtaining additional resources and any news media communications.

Since this constitutes a change in the ERO as specified in the emergency plan positions, this could be considered a change requiring NRC approval.

The NRC staff evaluated the proposed change and determined that the modification to the LACBWR ISFSI Emergency Plan is acceptable because it will now identify a specific position as having these emergency response responsibilities. The NRC staff considers this change to be administrative in nature. Based on the assessment above, the NRC staff concludes that the proposed LACBWR ISFSI Emergency Plan continues to meet the applicable planning standards of 10 CFR 50.47(b) and the requirements of Appendix E to 10 CFR Part 50, as exempted.

Section 5.4.2, "Radiological Exposure Control"

The licensee proposes to clarify that the ERD is responsible for authorizing emergency response radiological dose limits per the EPA's "Response Worker Guidelines." However, during repair and response actions at the LACBWR ISFSI, the 10 CFR 20.1201, "Occupational dose limits for adults," will not be exceeded. DPC also proposes to add the EPA "Response Worker Guideline" table to the LACBWR ISFSI Emergency Plan.

The licensee stated that the proposed changes correct and add clarification to the LACBWR ISFSI Emergency Plan regarding the use of appropriate radiological dose limits. Specifically, Table 5-1, "Response Worker Guidelines," replaces the 10 CFR 20.1201 annual dose limits in the LACBWR ISFSI Emergency Plan. Since the LACBWR ISFSI Emergency Plan originally specified lower dose limits, this could be considered a change requiring NRC approval.

The NRC staff agrees that the "Response Worker Guidelines" dose limits, as provided in the EPA PAG manual, are more appropriate for the LACBWR ISFSI Emergency Plan as they are used in emergency situations for emergency workers and lifesaving activities. The 10 CFR 20.1201 dose limits are for occupational dose to adult radiation workers and are not typically used for emergencies. In addition, the regulations at 10 CFR 50.47(b)(11) specifically state that "means for controlling radiological exposures, in an emergency, are established for emergency workers. The means for controlling radiological exposures shall include exposure guidelines consistent with EPA Emergency Worker and Lifesaving Activity Protective Action Guides."

The guidance in the EPA PAG manual also states, in part:

...provides guidance on occupational doses of radiation during an emergency response. In many radiological incidents, actual exposure of workers, including emergency responders, may be controlled to low doses when proper precautions are taken. During some emergencies, radiation exposures to responders may be unavoidable and may have the potential to exceed limits used for normal operations.

Additionally, the guidance in NUREG-0654, Evaluation Criteria II.K.1, states, in part;

Each licensee shall establish onsite exposure guidelines consistent with EPA Emergency Worker and Lifesaving Activity Protective Actions Guides....

The NRC staff evaluated the proposed change and determined that the modification to the LACBWR ISFSI Emergency Plan is acceptable because it is consistent with the guidance provided in NUREG-0654 to align the radiological exposure limits with the EPA Emergency Worker and Lifesaving Activity Protective Action Guides and it meets the planning standard at 10 CFR 50.47(b)(11). Based on the assessment above, the NRC staff concludes that the

proposed LACBWR ISFSI Emergency Plan continues to meet the planning standard of 10 CFR 50.47(b)(11).

Section 5.5.2, "Decontamination Capabilities"

The licensee proposes to delete specific information related to the process to decontaminate personnel during a contaminated medical emergency. This section will be replaced with a description of the ability to perform personnel decontamination for any situation.

The licensee stated that the specific decontamination actions will be replaced with radiation protection processes that more appropriately address general conditions during a contaminated person medical emergency or other contaminated emergency situations. Due to the proposed scope change of the decontamination function, NRC approval is required.

The NRC staff evaluated the proposed change and determined that the modification to the LACBWR ISFSI Emergency Plan is acceptable because it eliminates a specific condition requiring personnel decontamination and replaces it with any situation requiring personnel decontamination. The NRC staff considers this change to be administrative in nature. Based on the assessment above, the NRC staff concludes that the proposed LACBWR ISFSI Emergency Plan continues to meet the applicable planning standards of 10 CFR 50.47(b) and the requirements of Appendix E to 10 CFR Part 50, as exempted.

Section 5.6, "First Aid and Medical"

The licensee proposes to change "all ISFSI personnel" to "on-shift ISFSI personnel" as being required to have first aid training, and notes that the on-shift personnel are available at all times. DPC also proposes to specify that the ISFSI SSS will coordinate onsite actions during first aid or a medical emergency, while offsite associated actions (if necessary) will be determined by the applicable processes, and not necessarily be a responsibility of the ISFSI SSS.

The licensee also proposes to delete a helicopter as the specific transportation method for injured personnel, and will instead rely on the ambulance/hospital to make a transportation decision based upon the condition of the injured personnel and availability of various transport methods. DPC notes that the helicopter was included in previous revisions of the emergency plan because it was available, and is not necessary to fulfill the first aid or medical functions of the LACBWR ISFSI Emergency Plan.

The licensee stated that the current LACBWR ISFSI Emergency Plan unnecessarily over commits that "all" ISFSI personnel are first aid trained, and the use of a helicopter for transporting injured personnel. DPC stated that this level of commitment is not required to meet the applicable emergency planning requirements, and has historically been included only because it was established practice at LACBWR. The licensee further stated that designating that the ISFSI SSS will coordinate onsite response actions during first aid or a medical emergency is a clarification of the SSS's overall responsibilities. Due to the scope of the commitments being refined, NRC approval is required.

The NRC staff evaluated the proposed changes and determined that the modifications to the LACBWR ISFSI Emergency Plan are acceptable because they clarify emergency plan requirements and commitments. The NRC staff considers this change to be administrative in nature. Based on the assessment above, the NRC staff concludes that the proposed LACBWR

ISFSI Emergency Plan continues to meet the applicable planning standards of 10 CFR 50.47(b) and the requirements of Appendix E to 10 CFR Part 50, as exempted.

Section 5.7, "Firefighting"

The licensee proposes to specify that (1) "on-shift ISFSI personnel" are available to extinguish incipient fires versus "all ISFSI personnel," and (2) the SSS/ERD will be responsible for coordinating the onsite Genoa Fire Department activities, as necessary.

The licensee stated that the current LACBWR ISFSI Emergency Plan unnecessarily over commits that "all" ISFSI personnel are available to extinguish fires. DPC stated that this level of commitment is not required to meet the applicable emergency planning requirements, and has historically been included only because it was established practice at LACBWR. The licensee further stated that designating that the ISFSI SSS will coordinate the onsite activity of offsite firefighting response organizations is a clarification of the SSS's responsibility. Because the proposed section is refined in scope, NRC approval is required.

The NRC staff evaluated the proposed change and determined that the modification to the LACBWR ISFSI Emergency Plan is acceptable because it is a clarification of emergency plan requirements and commitments. The NRC staff considers this change to be administrative in nature. Based on the assessment above, the NRC staff concludes that the proposed LACBWR ISFSI Emergency Plan continues to meet the applicable planning standards of 10 CFR 50.47(b) and the requirements of Appendix E to 10 CFR Part 50, as exempted.

Section 6.2, "Communications"

The licensee proposes to remove reference to the Local Law Enforcement Agency (LLEA) radio from the LACBWR ISFSI Emergency Plan.

The licensee stated that the specific commitment to the LLEA radio is not necessary, and is not required to meet the applicable emergency planning requirements. Specifically, Appendix E to 10 CFR Part 50 requires primary and back-up emergency communications systems. DPC noted that the commercial phone system, cell phones, and portable frequency modulation radios provide the primary on-site and off-site communications for the LACBWR ISFSI, and back-up each other. The reference to the LLEA radio was an over commitment to the regulations. Due to the scope of the commitment being refined, NRC approval is required.

The NRC staff evaluated the proposed change and determined that the modification to the LACBWR ISFSI Emergency Plan is acceptable because it continues to identify primary and back-up communications systems as required by the applicable regulations. The NRC staff considers this change to be administrative in nature. Based on the assessment above, the NRC staff concludes that the proposed LACBWR ISFSI Emergency Plan continues to meet the applicable planning standards of 10 CFR 50.47(b) and the requirements of Appendix E to 10 CFR Part 50, as exempted.

5.0 STATE CONSULTATION

In accordance with the Commission's regulations at 10 CFR 50.91, "Notice for public comment; State consultation," the Wisconsin State official was notified on March 9, 2022, of the proposed issuance of the amendment. The State official had no comments.

6.0 ENVIRONMENTAL CONSIDERATION

The amendment changes inspection or a surveillance requirement, and changes recordkeeping reporting, administrative procedures or requirements. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on such finding, which was published in the *Federal Register* on June 15, 2021 (86 FR 31738). The supplemental letter dated October 13, 2021, provided additional information that clarified the application, but did not expand the scope of the application as originally noticed, or change the NRC's original proposed no significant hazards consideration determination. Accordingly, the amendment meets the eligibility criteria for categorical exclusions set forth in 10 CFR 51.22(c)(9) and 10 CFR 51.22(c)(10)(ii). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

7.0 CONCLUSION

The NRC staff finds that the proposed changes in Revision 40 to the LACBWR ISFSI Emergency Plan will continue to meet the applicable emergency planning standards in 10 CFR 50.47(b) and the requirements in Appendix E of 10 CFR Part 50, as exempted. The NRC staff finds continued reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency at the LACBWR ISFSI facility. In addition, the NRC staff concludes that the revised LACBWR ISFSI Emergency Plan will be consistent with the emergency planning requirements for a specific license ISFSI under 10 CFR Part 72. Therefore, the NRC staff concludes that the licensee's proposed changes to the LACBWR ISFSI Emergency Plan, described in its application dated March 8, 2021, as supplemented by letter dated October 13, 2021, are acceptable.

The NRC staff has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) there is reasonable assurance that such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

8.0 REFERENCES

1. Letter from Dairyland Power Cooperative to U.S. Nuclear Regulatory Commission, "Dairyland Power Cooperative La Crosse Boiling Water Reactor (LACBWR) Provisional Operating License No. DPR-45 Decommissioning Plan, Request for Rescission of NRC Orders EA-02-077 and EA-03-099," dated September 19, 2012 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML12264A575).
2. Letter from Dairyland Power Cooperative to U.S. Nuclear Regulatory Commission, "Dairyland Power Cooperative La Crosse Boiling Water Reactor (LACBWR) Provisional Operating License No. DPR-45 DPC Commitment to Place No Spent Fuel in the LACBWR Spent Fuel Storage Pool," dated October 24, 2012 (ADAMS Accession No. ML12299A474).

3. Letter from Dairyland Power Cooperative to U.S. Nuclear Regulatory Commission, "License Amendment Request for Proposed Revision to La Crosse Boiling Water Reactor Independent Spent Fuel Storage Installation Emergency Plan," dated March 8, 2021 (ADAMS Accession No. ML21105A031).
4. Letter from Dairyland Power Cooperative to U.S. Nuclear Regulatory Commission, "Response to NRC Request for Additional Information Concerning License Amendment – Request for Changes to the LACBWR ISFSI Emergency Plan," dated October 13, 2021 (ADAMS Accession No. ML21294A038).
5. NUREG-0654/FEMA-REP-1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," Revision 1, dated November 1980 (ADAMS Accession No. ML040420012).
6. NUREG-2215, "Standard Review Plan for Spent Fuel Dry Storage Systems and Facilities," dated April 2020 (ADAMS Accession No. ML20121A190).
7. Nuclear Energy Institute (NEI) 99-01, Revision 6, "Development of Emergency Action Levels for Non-Passive Reactors," dated November 2012 (ADAMS Accession No. ML12326A805).
8. Letter, Mark Thaggard (USNRC) to Susan Perkins-Grew (NEI), "U.S. Nuclear Regulatory Commission Review and Endorsement of NEI 99-01, Revision 6, Dated November 2012 (TAC No. D92368)," dated March 28, 2013 (ADAMS Accession No. ML12346A463).
9. U.S. Environmental Protection Agency (EPA), EPA-400/R-17/001, "PAG Manual: Protective Action Guides and Planning Guidance for Radiological Incidents," dated January 2017 (ADAMS Accession No. ML17044A073).
10. Letter from Dairyland Power Cooperative to U.S. Nuclear Regulatory Commission, "Dairyland Power Cooperative La Crosse Boiling Water Reactor (LACBWR) Provisional Operating License No. DPR-45 Decommissioning Plan, Preliminary DECON Plan, and Supplement to Environmental Report," dated December 21, 1987 (ADAMS Accession No. ML20147A807).
11. Letter from U.S. Nuclear Regulatory Commission to Dairyland Power Cooperative, "Approval of Emergency Plan (TAC 66420)," dated July 8, 1988 (ADAMS Accession No. ML20150D703).
12. Letter from Dairyland Power Cooperative to U.S. Nuclear Regulatory Commission, "Request for Exemption from Emergency Planning Requirements," dated June 18, 2012 (ADAMS Accession No. ML12171A462).
13. Letter from U.S. Nuclear Regulatory Commission to Dairyland Power Cooperative, "La Crosse Boiling Water Reactor – Issuance of Exemption from Certain Emergency Planning Requirements (TAC No. J00438)," dated July 31, 2013 (ADAMS Accession No. ML13008A560).
14. Letter from U.S. Nuclear Regulatory Commission to Dairyland Power Cooperative, "Issuance of Amendment Relating to the Dairyland Power Cooperative La Crosse Boiling

Water Reactor Request for Changes to the Emergency Planning Requirements (TAC No. J52956),” dated September 8, 2014 (ADAMS Accession No. ML14155A112).

15. Letter from U.S. Nuclear Regulatory Commission to NAC International, “Amendment Nos. 7 and 8 to Certificate of Compliance No. 1025 for the NAC-Multi Purpose Canister Storage System,” dated February 5, 2019 (ADAMS Accession No. ML19038A249).

Principal Contributors: Amanda Marshall, NSIR
Michael Norris, NSIR