

**NUCLEAR REGULATORY COMMISSION
ISSUANCES**

**OPINIONS AND DECISIONS OF THE
NUCLEAR REGULATORY COMMISSION
WITH SELECTED ORDERS**

January 1, 2022 – June 30, 2022

Volume 95
Pages 1 - 123



Prepared by the
Office of Administration
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001
(301-415-0955)

COMMISSIONERS

Christopher T. Hanson, Chairman
Jeff Baran
David A. Wright

Daniel H. Dorman, Executive Director for Operations

Marian L. Zabler, General Counsel

E. Roy Hawken, Chief Administrative Judge,
Atomic Safety & Licensing Board Panel

ATOMIC SAFETY AND LICENSING BOARD PANEL

E. Roy Hawkens,* *Chief Administrative Judge*
Paul S. Ryerson,* *Associate Chief Administrative Judge (Legal)*
Dr. Sue H. Abreu,* *Associate Chief Administrative Judge (Technical)*

Members

Dr. Gary S. Arnold*	Dr Yassin A. Hassan	Dr. Sekazi K. Mtingwa
Dr. Anthony J. Baratta	Dr. William E. Kastenberg	Dr. William W. Sager
G. Paul Bollwerk, III*	Dr. Michael F. Kennedy	Ronald M. Spritzer*
Michael C. Farrar	Lawrence G. McDade	Nicholas G. Trikouros*
William J. Froehlich*	Dr. Alice C. Mignerey	Dr. Craig M. White
Michael M. Gibson*		

* *Full-time panel members*

PREFACE

This is the ninety-fifth volume of issuances (1–123) of the Nuclear Regulatory Commission and its Atomic Safety and Licensing Boards, Administrative Law Judges, and Office Directors. It covers the period from January 1, 2022, to June 30, 2022.

Atomic Safety and Licensing Boards are authorized by Section 191 of the Atomic Energy Act of 1954. These Boards, comprised of three members, conduct adjudicatory hearings on applications to construct and operate nuclear power plants and related facilities and issue initial decisions which, subject to internal review and appellate procedures, become the final Commission action with respect to those applications. Boards are drawn from the Atomic Safety and Licensing Board Panel, comprised of lawyers, nuclear physicists and engineers, environmentalists, chemists, and economists. The Atomic Energy Commission (AEC) first established Licensing Boards in 1962 and the Panel in 1967.

Between 1969 and 1990, the AEC authorized Atomic Safety and Licensing Appeal Boards to exercise the authority and perform the review functions which would otherwise have been exercised and performed by the Commission in facility licensing proceedings. In 1972, that Commission created an Appeal Panel, from which were drawn the Appeal Boards assigned to each licensing proceeding. The functions performed by both Appeal Boards and Licensing Boards were transferred from the AEC to the Nuclear Regulatory Commission by the Energy Reorganization Act of 1974. Appeal Boards represented the final level in the administrative adjudicatory process to which parties could appeal. Parties, however, were permitted to seek discretionary Commission review of certain board rulings. The Commission also could decide to review, on its own motion, various decisions or actions of Appeal Boards.

On June 29, 1990, however, the Commission voted to abolish the Atomic Safety and Licensing Appeal Panel, and the Panel ceased to exist as of June 30, 1991. Since then, the Commission itself reviews Licensing Board and other adjudicatory decisions, as a matter of discretion. *See* 56 FR 29403 (1991).

The Commission also may appoint Administrative Law Judges pursuant to the Administrative Procedure Act, who preside over proceedings as directed by the Commission.

The hardbound edition of the Nuclear Regulatory Commission Issuances is a final compilation of the monthly issuances. It includes all of the legal precedents for the agency within a six-month period. Any opinions, decisions, denials, memoranda and orders of the Commission inadvertently omitted from the monthly softbounds and any corrections submitted by the NRC legal staff to the printed softbound issuances are contained in the hardbound edition. Cross references in the text and indexes are to the NRCI page numbers which are the same as the page numbers in this publication.

Issuances are referred to as follows: Commission (CLI), Atomic Safety and Licensing Boards (LBP), Administrative Law Judges (ALJ), Directors' Decisions (DD), and Decisions on Petitions for Rulemaking (DPRM).

The summaries and headnotes preceding the opinions reported herein are not to be deemed a part of those opinions or to have any independent legal significance.

Available from

U.S. Government Publishing Office
PO Box 979050
St. Louis, MO 63197-9000
<https://bookstore.gpo.gov/customer-service/order-methods>

A year's subscription consists of 12 softbound issues,
4 indexes, and 2-4 hardbound editions for this publication.

Single copies of this publication
are available from
National Technical Information Service
5301 Shawnee Rd
Alexandria, VA 22312

Errors in this publication may be reported to the
Office of Administration
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001
(301-415-0955)

CONTENTS

Issuances of the Nuclear Regulatory Commission

CALVERT CLIFFS NUCLEAR POWER PLANT, LLC (Calvert Cliffs Nuclear Power Plant, Units 1 and 2 and Associated Independent Spent Fuel Storage Installation) Dockets 50-317-LT, 50-318-LT, 72-8-LT Memorandum and Order, CLI-22-1, February 14, 2022	1
CONSTELLATION ENERGY GENERATION, LLC (F/K/A EXELON GENERATION COMPANY, LLC) (Peach Bottom Atomic Power Station, Units 2 and 3) Dockets 50-277-SLR, 50-278-SLR Memorandum and Order, CLI-22-7, June 3, 2022	116
DUKE ENERGY CAROLINAS, LLC (Oconee Nuclear Station, Units 1, 2, and 3) Dockets 50-269-SLR, 50-270-SLR, 50-287-SLR Memorandum and Order, CLI-22-3, February 24, 2022	40
EXELON CORPORATION (Clinton Power Station, Unit 1 and Associated Independent Spent Fuel Storage Installation) Dockets 50-461-LT, 72-1046-LT (LaSalle County Station, Units 1 and 2 and Associated Independent Spent Fuel Storage Installation) Dockets 50-373-LT, 50-374-LT, 72-70-LT Memorandum and Order, CLI-22-1, February 14, 2022	1
EXELON FITZPATRICK, LLC (James A. FitzPatrick Nuclear Power Plant and Associated Independent Spent Fuel Storage Installation) Dockets 50-333-LT, 72-12-LT Memorandum and Order, CLI-22-1, February 14, 2022	1
EXELON GENERATION COMPANY, LLC (Braidwood Station, Units 1 and 2 and Associated Independent Spent Fuel Storage Installation) Dockets STN 50-456-LT, STN 50-457-LT, 72-73-LT (Byron Station, Units 1 and 2 and Associated Independent Spent Fuel Storage Installation) Dockets STN 50-454-LT, STN 50-455-LT, 72-68-LT (Dresden Nuclear Power Station, Units 1, 2, and 3 and Associated Independent Spent Fuel Storage Installation) Dockets 50-10-LT, 50-237-LT, 50-249, 72-37	

(Limerick Generating Station, Units 1 and 2 and Associated Independent Spent Fuel Storage Installation) Dockets 50-352-LT, 50-353-LT, 72-65-LT	
(Peach Bottom Atomic Power Station, Units 1, 2, and 3 and Associated Independent Spent Fuel Storage Installation) Dockets 50-171-LT, 50-277-LT, 50-278-LT, 72-29-LT	
(Quad Cities Nuclear Power Station, Units 1 and 2 and Associated Independent Spent Fuel Storage Installation) Dockets 50-254-LT, 50-265-LT, 72-53-LT	
(Salem Nuclear Generating Station, Units 1 and 2 and Associated Independent Spent Fuel Storage Installation) Dockets 50-272-LT, 50-311-LT, 72-48-LT	
(Three Mile Island Nuclear Station, Unit 1 and Associated Independent Spent Fuel Storage Installation) Dockets 50-289-LT, 72-77-LT	
Memorandum and Order, CLI-22-1, February 14, 2022	1
EXELON GENERATION COMPANY, LLC	
(Peach Bottom Atomic Power Station, Units 2 and 3) Dockets 50-277-SLR, 50-278-SLR	
Memorandum and Order, CLI-22-3, February 24, 2022	40
Memorandum and Order, CLI-22-4, February 24, 2022	44
FLORIDA POWER & LIGHT COMPANY	
(Turkey Point Nuclear Generating Units 3 and 4) Dockets 50-250-SLR, 50-251-SLR	
Memorandum and Order, CLI-22-2, February 24, 2022	26
Memorandum and Order, CLI-22-3, February 24, 2022	40
Memorandum and Order, CLI-22-6, June 3, 2022	111
NEXTERA ENERGY POINT BEACH, LLC	
(Point Beach Nuclear Plant, Units 1 and 2) Dockets 50-266-SLR, 50-301-SLR	
Memorandum and Order, CLI-22-3, February 24, 2022	40
Memorandum and Order, CLI-22-5, March 23, 2022	97
NINE MILE POINT NUCLEAR STATION, LLC	
(Nine Mile Point Nuclear Station, Units 1 and 2 and Associated Independent Spent Fuel Storage Installation) Dockets 50-220-LT, 50-410-LT, 72-1036-LT	
Memorandum and Order, CLI-22-1, February 14, 2022	1
R.E. GINNA NUCLEAR POWER PLANT, LLC	
(R.E. Ginna Nuclear Power Plant and Associated Independent Spent Fuel Storage Installation) Dockets 50-244-LT, 72-67-LT	
Memorandum and Order, CLI-22-1, February 14, 2022	1

VIRGINIA ELECTRIC AND POWER COMPANY	
(North Anna Power Station, Units 1 and 2)	
Dockets 50-338-SLR, 50-339-SLR	
Memorandum and Order, CLI-22-3, February 24, 2022	40

Issuance of the Atomic Safety and Licensing Board

DUKE ENERGY CAROLINAS, LLC	
(Oconee Nuclear Station, Units 1, 2, and 3)	
Dockets 50-269-SLR, 50-270-SLR, 50-287-SLR	
Memorandum and Order, LBP-22-1, February 11, 2022	49

Indexes

Case Name Index	I-1
Legal Citations Index	I-3
Cases	I-3
Regulations	I-13
Statutes	I-19
Others	I-21
Subject Index	I-23
Facility Index	I-43

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Christopher T. Hanson, Chairman
Jeff Baran
David A. Wright

In the Matter of

**EXELON GENERATION COMPANY, LLC;
EXELON CORPORATION;
EXELON FITZPATRICK, LLC;
NINE MILE POINT NUCLEAR STATION, LLC;
R.E. GINNA NUCLEAR POWER PLANT, LLC; and
CALVERT CLIFFS NUCLEAR POWER PLANT, LLC**

(Braidwood Station, Units 1 and 2;	Docket Nos. STN 50-456-LT, STN 50-457-LT, 72-73-LT,
Byron Station, Units 1 and 2;	Docket Nos. STN 50-454-LT, STN 50-455-LT, 72-68-LT,
Calvert Cliffs Nuclear Power Plant, Units 1 and 2;	Docket Nos. 50-317-LT, 50-318-LT, 72-8-LT,
Clinton Power Station, Unit 1;	Docket Nos. 50-461-LT, 72-1046-LT,
Dresden Nuclear Power Station, Units 1, 2, and 3;	Docket Nos. 50-10-LT, 50-237-LT, 50-249-LT, 72-37-LT,
James A. FitzPatrick Nuclear Power Plant;	Docket Nos. 50-333-LT, 72-12-LT,
LaSalle County Station, Units 1 and 2;	Docket Nos. 50-373-LT, 50-374-LT, 72-70-LT,
Limerick Generating Station, Units 1 and 2;	Docket Nos. 50-352-LT, 50-353-LT, 72-65-LT,
Nine Mile Point Nuclear Station, Units 1 and 2;	Docket Nos. 50-220-LT, 50-410-LT, 72-1036-LT,
Peach Bottom Atomic Power Station, Units 1, 2, and 3;	Docket Nos. 50-171-LT, 50-277-LT, 50-278-LT, 72-29-LT,

Quad Cities Nuclear Power Station, Units 1 and 2;	Docket Nos. 50-254-LT, 50-265-LT, 72-53-LT,
R.E. Ginna Nuclear Power Plant;	Docket Nos. 50-244-LT, 72-67-LT,
Salem Nuclear Generating Station, Units 1 and 2;	Docket Nos. 50-272-LT, 50-311-LT, 72-48-LT,
Three Mile Island Nuclear Station, Unit 1;	Docket Nos. 50-289-LT, 72-77-LT,
and the Associated Independent Spent Fuel Storage Installations)	February 14, 2022

LICENSE TRANSFER: FINANCIAL QUALIFICATIONS

Although NRC regulations require an applicant for a nuclear power plant operating license to submit five-year financial projections (estimated costs and source of funds to meet costs) as part of its financial qualification demonstration, financial projections are not necessarily enough to establish financial qualifications. *North Atlantic Energy Service Corp.* (Seabrook Station, Unit 1), CLI-99-6, 49 NRC 201, 220 (1999).

LICENSE TRANSFER: STANDING

Petitioners in a nuclear power plant license transfer proceeding must show more than mere proximity to the facility in question; they must demonstrate that there is a way that the transfer could plausibly harm them. But almost any theory of traditional standing in our proceedings would require that petitioners show that they live, frequent, or own property near the facility; therefore, statements indicating that a petitioner lives near the facility is not indicative of impermissible “proximity standing.”

LICENSE TRANSFER: STANDING

The NRC has traditionally recognized that concerns regarding funding shortfalls can, in some circumstances, provide the showing of potential harm necessary to demonstrate standing. NRC regulations “recognize that underfunding can affect plant safety.” *See Gulf States Utilities Co.* (River Bend Station, Unit 1), CLI-94-10, 40 NRC 43, 48 (1994).

LICENSE TRANSFER: STANDING

The NRC does not recognize “taxpayer standing” or “ratepayer standing” in

our proceedings because the claimed injury or harm is not within the zone of interests protected by the Atomic Energy Act of 1954. *See Portland General Electric Co.* (Pebble Springs Nuclear Plant, Units 1 and 2), CLI-76-27, 4 NRC 610, 614 (1976) (ratepayer standing); *Kansas Gas and Electric Co. and Kansas City Power and Light Co.* (Wolf Creek Generating Station, Unit 1), ALAB-424, 6 NRC 122, 128 n.7 (1977) (ratepayer standing); *Tennessee Valley Authority* (Watts Bar Nuclear Plant, Units 1 and 2), ALAB-413, 5 NRC 1418, 1421 (1977) (taxpayer standing).

LICENSE TRANSFER: FINANCIAL QUALIFICATIONS

Petitioners may challenge a license applicant's five-year financial projections with plausible and factually supported claims that the projections are inaccurate. *GPU Nuclear, Inc.* (Oyster Creek Nuclear Generating Station), CLI-00-6, 51 NRC 193, 202-03 (2000). But to raise an admissible contention, Petitioners must do more than set forth a plausible scenario where the projections prove to be wrong; they must support the claim with facts showing that the plausible scenario is in fact likely.

MEMORANDUM AND ORDER

In this proceeding, Exelon Corporation; Exelon Generation Company, LLC (Exelon Generation); Exelon Fitzpatrick, LLC (Fitzpatrick LLC); Nine Mile Point Nuclear Station, LLC (NMP LLC); R.E. Ginna Nuclear Power Plant, LLC (Ginna LLC); and Calvert Cliffs Nuclear Power Plant, LLC (Calvert LLC) (together, "Exelon" or "applicants") seek approval to transfer the ultimate ownership of the above-captioned facilities to a newly created holding company, as described below.¹ Two petitioners, the Environmental Law and Policy Center ("ELPC"), and Eric Joseph Epstein and Three Mile Island Alert, Inc. (together, "TMIA") have sought to intervene and requested a hearing.² The People of the

¹ See Letter from J. Bradley Fewell, Exelon Generation, to NRC Document Control Desk, "Application for Order Approving License Transfers and Proposed Conforming License Amendments" (Feb. 25, 2021) (ADAMS Accession No. ML21057A271 (package)) (Application); Letter from David P. Helker, Exelon Generation, to Document Control Desk, "Supplemental Information Regarding Application for Order Approving Transfers and Proposed Conforming License Amendments" (Mar. 25, 2021) (ML21084A165) (March 2021 Supplemental Application); Letter from Glen T. Kaegi, Exelon Generation, to NRC Document Control Desk, "Update to Application for Order Approving License Transfers and Proposed Conforming License Amendments" (Sept. 29, 2021) (ML21272A276 (package)) (September 2021 Update to Application).

² See Environmental Law & Policy Center's Petition to Intervene and Hearing Request (June 23, 2021) (Continued)

State of Illinois and EDF Inc. also initially filed petitions to intervene, which they have since withdrawn.³

I. BACKGROUND

Exelon Generation is the licensed operator and a full or partial direct or indirect owner of twenty-one active nuclear units and three decommissioning reactors.⁴ According to the application, Exelon Generation owns approximately 31,300 megawatts of generation, with 18,800 megawatts from nuclear and the remainder from natural gas, oil and renewable generation.⁵ Four other entities listed as applicants, Ginna LLC, Calvert LLC, NMP LLC, and Fitzpatrick LLC, are subsidiaries of Exelon Generation and are, respectively, the owner licensees for Ginna, Calvert Cliffs, Nine Mile Point and Fitzpatrick nuclear plants.⁶ Exelon Corporation is the ultimate parent company of the other applicants.⁷

A. Corporate Restructuring

According to the application, Exelon Corporation is “currently comprised

2021) (ELPC Petition); Petition of Eric Joseph Epstein and Three Mile Island Alert, Inc. for Leave to Intervene and for a Hearing (June 14, 2021) (TMIA Petition).

³ Notice of Withdrawal of the People of the State of Illinois’s Hearing Request and Petition for Leave to Intervene (Nov. 24, 2021); EDF Inc.’s Notice of Withdrawal of EDF Inc.’s Petition for Leave to Intervene and Hearing Request (Aug. 9, 2021).

⁴ Application, Encl. 1 at 2-3, 8. The Exelon Generation operated facilities are Braidwood Station, Units 1 and 2; Byron Station, Units 1 and 2; Calvert Cliffs Nuclear Power Plant, Units 1 and 2; Clinton Power Station, Unit 1; Dresden Nuclear Power Station, Units 2 and 3; James A. Fitzpatrick Nuclear Power Plant; LaSalle County Station, Units 1 and 2; Limerick Generating Station, Units 1 and 2; Nine Mile Point Nuclear Station, Units 1 and 2; Peach Bottom Atomic Power Station, Units 2 and 3; Quad Cities Nuclear Power Station, Units 1 and 2; and R.E. Ginna Nuclear Power Plant. Exelon Generation is also the decommissioning operator and a full or partial direct owner of 3 shut down units: Three Mile Island Unit 1, Dresden Unit 1, and Peach Bottom Unit 1. The application explains that Exelon Generation is expected to become the licensee for the Zion ISFSI-only site. *Id.* at 8. The application also explains that Exelon Generation owns Fitzpatrick, Calvert Cliffs, Nine Mile Point and Ginna indirectly through subsidiaries. *Id.* at 6-7.

⁵ *Id.* at 5.

⁶ *Id.* at 6. NMP LLC owns 100% of Nine Mile Point Unit 1 and 82% of NMP Unit 2.

⁷ The NRC Staff completed its review and approved the transfer on November 16, 2021. *See* Exelon Generation Company, LLC — Approval of Indirect Transfer of Licenses and Draft Conforming License Amendments (Nov. 16, 2021) (ML21277A245 (package)). The order approving the transfer specifies that the Staff’s approval of the transfer “is subject to the Commission’s authority to rescind, modify, or condition the approved transfer based on the outcome of any post-effectiveness hearing on the license transfer application.” *Id.*, Encl. 1, Order Approving Indirect Transfer of Licenses and Draft Conforming License Amendments, at 9.

of two distinct businesses: a rate-regulated, traditional utility business and a competitive business composed of merchant nuclear and non-nuclear generation facilities.”⁸ Exelon Corporation intends to sever these two businesses and seeks NRC approval to transfer the ownership of its subsidiary Exelon Generation to a new entity that will have no affiliation with Exelon Corporation. Exelon Corporation will retain ownership of its rate-regulated utilities.

The proposed transaction would involve an indirect license transfer.⁹ Exelon Corporation proposes to transfer its 100% ownership of Exelon Generation to a newly created entity referred to in the application by the placeholder name “HoldCo.” HoldCo would then be spun off from Exelon Corporation by distributing its shares pro rata to Exelon Corporation’s existing shareholders. According to the application, Exelon Generation would remain the same Pennsylvania limited liability company as today, but it would be renamed (referred to in the application by the placeholder name “SpinCo”) and would become the wholly owned subsidiary of HoldCo.¹⁰ Neither HoldCo nor SpinCo would be affiliated with Exelon Corporation any longer. The proposed transaction became effective on February 1, 2022.¹¹

In its application as originally filed, Exelon stated that four plants (consisting of eight units), all located in Illinois, would shut down in the near term. The original application provided financial projections for the years 2022 through 2026 which “conservatively assume[d]” that all four plants would shut down as anticipated and would therefore neither generate revenue nor incur operating expenses after the projected dates of closure.¹² That information changed after the State of Illinois enacted legislation to subsidize three of the plants — Byron,

⁸ Application, Encl. 1 at 4.

⁹ “Indirect transfers involve corporate restructuring or reorganizations that leave the licensee itself intact as a corporate entity and therefore involve no application for a new operating license.” *Kansas Gas and Electric Co.* (Wolf Creek Generating Station, Unit 1), CLI-99-19, 49 NRC 441, 459-60 n.14 (1999). A direct license transfer occurs when there will be a change in either possession or operating authority. *See, e.g., Vermont Yankee Nuclear Power Corp. and AmerGen Vermont, LLC* (Vermont Yankee Nuclear Power Station), CLI-00-20, 52 NRC 151, 161 (2000) (direct license transfer where application sought to transfer both ownership and operation of the facility). *See also AmerGen Energy Co., LLC* (Three Mile Island Nuclear Station, Unit 1), CLI-05-25, 62 NRC 572, 574 (2005) (“Because the Applicant did not propose to change either operating or possession authority, there [was] no direct license transfer.”).

¹⁰ Application, Encl. 1 at 2-3.

¹¹ *See* Notification (Feb. 1, 2022). On February 1, 2022, Exelon Corporation transferred its 100 percent ownership of Exelon Generation Company, LLC (EGC) to a newly created subsidiary (Constellation Energy Corporation) that was spun off to Exelon Corporation shareholders and became EGC’s new ultimate parent company. The Staff issued conforming license amendments the same day. Constellation Energy Corporation, EGC (reorganized and renamed as Constellation Energy Generation, LLC), and its subsidiaries are no longer affiliated with Exelon Corporation.

¹² Application, Encl. 1 at 9-10.

Dresden, and Braidwood — to keep them open.¹³ A fourth plant — LaSalle Station — will not receive subsidies, but Exelon Generation has committed to operate it through May 31, 2027.¹⁴ Exelon therefore updated its application and financial projections in September, 2021, to reflect that all four plants will continue to operate during the next five years.¹⁵

B. Financial Assurance for Operating Expenses

Under the Atomic Energy Act of 1954, as amended, and our associated regulations, no power reactor or ISFSI license can be transferred without the NRC's prior written consent.¹⁶ A license transfer application must include the same information concerning the applicant's financial qualifications to operate the plant as required for an initial application.¹⁷ The NRC will approve the license transfer if it finds both the proposed transferee qualified to hold the license and the transfer otherwise consistent with applicable law, regulations, and Commission orders.¹⁸ NRC regulations require that, except where the applicant is an electric utility, license applicants must demonstrate their financial qualifications to safely operate the plant.¹⁹ To establish this, an applicant must submit estimates for its total annual operating costs for each of the first five years of operation, as well as the source of funds to cover these costs.²⁰ Although five-year projections are required, they are not necessarily sufficient to provide reasonable assurance of an applicant's financial qualifications.²¹

¹³ See September 2021 Update to Application, at 4-5; see also Letter from J. Bradley Fewell, Exelon Generation, to NRC Document Control Desk, "Withdrawal of Certification of Permanent Cessation of Power Operations for Byron Station, Units 1 and 2, and Previously Submitted Licensing Actions in Support of Decommissioning" (Sept. 15, 2021) (ML21258A276); Letter from J. Bradley Fewell, Exelon Generation, to NRC Document Control Desk, "Withdrawal of Certification of Permanent Cessation of Power Operations for Dresden Nuclear Station, Units 2 and 3, and Previously Submitted Licensing Actions in Support of Decommissioning" (Sept. 15, 2021) (ML21258A281).

¹⁴ September 2021 Update to Application at 5.

¹⁵ *Id.*

¹⁶ See Atomic Energy Act § 184, 42 U.S.C. § 2234 (providing that "[n]o license granted [under the Atomic Energy Act] shall be transferred . . . directly or indirectly, through transfer of control of any license to any person, unless the Commission shall . . . give its consent in writing"); see also 10 C.F.R. §§ 50.80(a), 72.50(a) (implementing this provision with respect to power reactor and ISFSI licenses).

¹⁷ 10 C.F.R. § 50.80(b)(1)(i).

¹⁸ *Id.* § 50.80(c).

¹⁹ See *id.* § 50.33(f).

²⁰ *Id.* § 50.33(f)(2).

²¹ See *North Atlantic Energy Service Corp.* (Seabrook Station, Unit 1), CLI-99-6, 49 NRC 201, 220 (1999).

In such cases we accept financial assurances “based on plausible assumptions and forecasts, even though the possibility is not insignificant that things will turn out less favorably than expected.”²² That is, the level of financial assurance required for license transferees is not equivalent to the “extremely high assurance” required for the safety of reactor design, construction and operation.²³ Moreover, an applicant is not required to provide “absolutely certain predictions of future economic conditions.”²⁴ The application and the September 2021 update to the application include financial projections for the first five years after the spin transaction (2022 through 2026) for SpinCo as a whole and for each of the subsidiary owner LLCs.²⁵

C. Decommissioning Funding Assurance

Exelon Generation currently maintains external decommissioning trust funds for all units it directly owns through its direct wholly owned subsidiary, Exelon Generation Consolidation, LLC.²⁶ Exelon Generation Consolidation, LLC will be renamed following the spin transaction.²⁷

Separately from its license transfer application, Exelon submitted a decommissioning funding status report in February 2021 for all units.²⁸ In its decommissioning funding status report, Exelon provided cost estimates based on the NRC formula cost amount calculated in accordance with 10 C.F.R. § 50.75(c) or using a site-specific estimate based on a period of safe storage.²⁹ Exelon stated that the financial assurance that had been provided — that is, the amount of money in the trust fund, plus the 2% annual real rate of return allowed by 10 C.F.R. § 50.75(e)(1)(i) — would meet the estimated decommissioning costs for all units except Byron.³⁰ But in its updated application, Exelon explains that because Byron will no longer retire early, Exelon does not project a decommis-

²² *FirstEnergy Companies and TMI-2 Solutions, LLC* (Three Mile Island Nuclear Station, Unit 2), CLI-21-2, 93 NRC 70, 76 (2021) (citing *Seabrook*, CLI-99-6, 49 NRC at 222).

²³ *Id.* at 75-76.

²⁴ *Seabrook*, 49 NRC at 221.

²⁵ See September 2021 Update to Application, Encl. 1A (non-public); Application, Encl. 8.

²⁶ Application, Encl. 1 at 12. The decommissioning funds for Fitzpatrick are held separately. See *id.* at 13. None of the proposed contentions at issue in this decision directly relates to Fitzpatrick.

²⁷ *Id.* at 13.

²⁸ See Letter from Patrick R. Simpson to NRC Document Control Desk, “Report on Status of Decommissioning Funding for Reactors and Independent Spent Fuel Storage Installations” (Feb. 24, 2021) (ML21055A776).

²⁹ *Id.* at 2-3.

³⁰ *Id.* at 3, Attach. 4. Exelon explained that because of its decision to retire Byron early, it had not completed a site-specific decommissioning cost estimate and the amount in the trust fund did not meet the NRC formula. *Id.* at 3.

sioning funding shortfall for any units.³¹ Exelon provided updated reports on the status of decommissioning funding for Byron and Dresden on September 28, 2021.³²

II. DISCUSSION

A. Requirements for Hearing and Intervention

1. *Standing*

To intervene in an NRC licensing proceeding, a petitioner must demonstrate standing.³³ To show standing, a petitioner must show an actual or threatened “concrete and particularized injury” to an interest within the “zone of interests” protected by the Atomic Energy Act.³⁴ The petitioner must show that the threatened injury would be caused by the proposed licensing action and is capable of being redressed by a favorable decision.³⁵ In the case of organizational petitioners such as ELPC and TMIA, the organization can demonstrate standing as a representative of its members.³⁶ To do so, the organization must show that one of its members has standing, must identify that member by name and address, and must show, preferably by affidavit, that the organization is authorized to request a hearing on behalf of that member.³⁷ The organization must show its members’ standing by demonstrating that they may suffer an actual or threatened “concrete and particularized injury” to an interest within the “zone of interests” protected by the Atomic Energy Act, which would be caused by the proposed licensing action, and which is capable of being redressed by a favorable decision.³⁸

In some proceedings, such as those involving issuance of a construction permit or an operating license, we use a “proximity presumption” which grants that persons living in proximity to a reactor could be harmed by changes to

³¹ September 2021 Update to Application at 7-8.

³² Letter from Patrick R. Simpson to NRC Document Control Desk, “Updated Report on Status of Decommissioning Funding for Reactors and Independent Spent Fuel Storage Installations for Byron Station and Dresden Nuclear Power Station” (Sept. 28, 2021) (ML21271A113).

³³ 10 C.F.R. § 2.309(d).

³⁴ See, e.g., *Entergy Nuclear Operations, Inc.* (Indian Point Nuclear Generating Station, Units 1, 2, and 3 and ISFSI), CLI-21-1, 93 NRC 1, 10 (2021).

³⁵ *Id.*

³⁶ See *GPU Nuclear, Inc.* (Oyster Creek Nuclear Generating Station), CLI-00-6, 51 NRC 193, 202 (2000) (and authority cited therein).

³⁷ *Id.* at 202.

³⁸ See *id.* at 202-03; 10 C.F.R. § 2.309(d).

the owners, operators, or physical plant.³⁹ But in an indirect license transfer proceeding, which involves no direct changes to the licensed owner or operator or to the operation or physical plant, we do not employ this presumption.⁴⁰ Instead, we require that the petitioner explain how the licensing action will harm its members or its interests.⁴¹

2. Contention Admissibility

To obtain a hearing, a petitioner must raise an admissible contention. NRC regulations specify that for each contention, the petitioner must explain the issue it seeks to litigate, provide supporting facts or expert opinion on which the petitioner intends to rely in litigating the contention, and refer to the specific sources or documents on which it intends to rely.⁴² To be admissible, a contention must fall within the scope of the proceeding and be material to the findings that the NRC must make for the proposed licensing action.⁴³ The petitioner must identify the specific portions of the application that the petitioner disputes, or, if the petitioner asserts that an application omits information required by law, the petitioner must identify each failure and provide supporting reasons for the petitioner's belief.⁴⁴ These contention admissibility requirements are intended to ensure that adjudicatory hearings are triggered only by substantive safety or environmental issues that raise a supported dispute with the application on a matter material to the NRC's decision on the challenged action.⁴⁵

B. Environmental Law and Policy Center

1. ELPC's Standing

ELPC bases its standing on the interests of its member, Robert L. Vogl, who lives within ten miles of Byron Generating Station in Oregon, Illinois.⁴⁶

³⁹ See, e.g., *PPL Bell Bend, LLC* (Bell Bend Nuclear Power Plant), CLI-10-7, 71 NRC 133, 138-39 (2010).

⁴⁰ *El Paso Electric Co.* (Palo Verde Nuclear Generating Station, Units 1, 2, and 3), CLI-20-7, 92 NRC 225, 233 (2020); *Entergy Nuclear Operations, Inc., and Entergy Nuclear Palisades, LLC* (Palisades Nuclear Plant), CLI-08-19, 68 NRC 251, 260 (2008).

⁴¹ See *Palo Verde*, 92 NRC at 233.

⁴² 10 C.F.R. § 2.309(f)(1)(ii), (v).

⁴³ *Id.* § 2.309(f)(1)(iii), (iv).

⁴⁴ *Id.* § 2.309(f)(1)(vi).

⁴⁵ See, e.g., *Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 334 (1999) (explaining why the NRC tightened its contention admissibility standards in 1989).

⁴⁶ See ELPC Petition, Attach., Standing Declaration of Robert L. Vogl (May 24, 2021) (Vogl) (Continued)

His declaration states that he is concerned that the transfer of ownership will remove the “backstop” for decommissioning funding that Exelon Corporation’s parent guarantees provide. He also expresses concern that there will not be sufficient funds for decommissioning, which could prolong the process or lead to inadequate cleanup, which in turn could contaminate surrounding property.⁴⁷

Exelon disputes ELPC’s standing.⁴⁸ It argues that ELPC cannot demonstrate proximity-based standing through its member, Mr. Vogl, because the proposed action involves “no change in the operator, no change in the direct owner, and no change in the physical plant.”⁴⁹ Exelon further argues that Mr. Vogl has not demonstrated traditional standing because his argument that he “somehow could be harmed if the decommissioning trust fund become underfunded” is too speculative to establish a concrete harm.⁵⁰

We do not agree that Mr. Vogl has impermissibly relied on simple “proximity” standing, however. Almost any theory of traditional standing in one of our proceedings would require that the petitioner show that he lives, frequents, or owns property near the facility. Mr. Vogl has set forth a theory by which he could be harmed should the proposed license transfer cause decommissioning funds to run short.⁵¹ We have long held that concerns regarding funding shortfalls can in some circumstances provide the basis for a showing of harm because NRC regulations “recognize that underfunding can affect plant safety.”⁵²

Exelon explains in the updated application that it no longer expects a decommissioning funding shortfall because Byron will not shut down in the short term.⁵³ And ELPC did not update its pleadings to account for these changed circumstances. But because, as described below, we find that ELPC’s contentions are not admissible, we decline to rule on ELPC’s standing.

2. ELPC Contentions

a. ELPC Contention 1: Failure to Meet Financial Qualification Requirements

ELPC claims that the application does not show that SpinCo can meet the

Decl.); The Environmental Law & Policy Center’s Reply to Applicants’ Answer (Aug. 6, 2021), at 14-16 (ELPC Reply).

⁴⁷ See Vogl Decl. at 2-3 (unnumbered).

⁴⁸ Exelon’s Answer Opposing the Petition of the Environmental Law & Policy Center for Leave to Intervene and for a Hearing (July 30, 2021), at 37-40 (Exelon Answer to ELPC).

⁴⁹ *Id.* at 36 (quoting *Palo Verde*, CLI-20-7, 92 NRC at 233).

⁵⁰ *Id.* at 38-39.

⁵¹ See, e.g., *Oyster Creek*, CLI-00-6, 51 NRC at 202-03.

⁵² See *Gulf States Utilities Co.* (River Bend Station, Unit 1), CLI-94-10, 40 NRC 43, 48 (1994).

⁵³ September 2021 Update to Application at 7.

financial qualification requirements of 10 C.F.R. § 50.33(f)(2) (reasonable assurance of adequate funds to operate the facilities) and (f)(5) (reasonable assurance of adequate funds to decommission the facilities). ELPC argues generally that the application is not based on “plausible assumptions” regarding SpinCo’s financial forecasts and that ELPC need only present plausible scenarios undermining Exelon’s forecasts to raise a contention. ELPC then provides several reasons why the spun-off companies would be underfunded, and it offers the declaration of Peter Bradford, a former NRC Commissioner, as expert support.⁵⁴ ELPC first argues that the application groundlessly assumes that HoldCo and SpinCo will achieve and maintain an investment grade credit rating after the transaction has taken place, and it questions the reliability of the application’s financial projections for SpinCo.⁵⁵ Next, ELPC claims that the application fails to account for “key future liabilities” including (1) the cumulative impact of early retirement of the majority of the nuclear plants in their fleet, (2) the obligation to refund pre-1983 funds collected from ratepayers for spent fuel storage, (3) the potential for “tier-two” payments to Nuclear Electric Insurance Limited, and (4) the impact of non-radiological decommissioning costs on SpinCo’s financial viability.⁵⁶ It also argues that Exelon Corporation’s regulated utilities currently provide financial support for Exelon Generation’s nuclear fleet, which will be lost following the spin transaction.⁵⁷

(1) Plausible Assumptions

ELPC argues that the application does not include “plausible assumptions or forecasts” and that to raise a genuine dispute with the application it should only need to raise a plausible scenario which would undermine Exelon’s financial projections. Quoting our decision in the *Oyster Creek* license transfer proceeding, ELPC argues that “[a]n applicant’s mere proffering of 5-year cost and revenue projections will not be sufficient in the face of plausible and adequately supported claims that those projections are inaccurate or otherwise do not provide adequate assurance of financial qualifications.”⁵⁸ ELPC therefore reasons that it needs only to supply a “plausible” argument undermining Exelon’s cost and revenue projections to raise an admissible contention.⁵⁹

In *Oyster Creek*, however, we did not hold that a petitioner merely needs to posit a plausible scenario to raise an admissible contention — we found that

⁵⁴ See ELPC Petition, Attach., Declaration of Peter A. Bradford (June 23, 2021) (Bradford Decl.).

⁵⁵ See ELPC Petition at 14-15.

⁵⁶ *Id.* at 13.

⁵⁷ *Id.* at 15-16.

⁵⁸ ELPC Reply at 9 (citing *Oyster Creek*, CLI-00-6, 51 NRC at 207).

⁵⁹ *Id.* at 9.

the petitioner would need to support that scenario factually. In *Oyster Creek* we found that the petitioners had not adequately supported their claims because they offered no expert or documentary evidence.⁶⁰ We also explicitly rejected the *Oyster Creek* petitioners' arguments suggesting that a license transferee should not be able to rely solely on operating revenue to meet costs — a theory that ELPC urges in support of its own contention.⁶¹ We will therefore examine each of ELPC's individual arguments to determine whether they are not only plausible but adequately supported in law and fact.⁶²

(2) Investment-Grade Rating

ELPC challenges the application's assumption that SpinCo will maintain an "investment-grade rating," noting that S&P Global ratings downgraded Exelon Generation to BBB– following the spin-off announcement.⁶³ ELPC notes that Nuclear Electric Insurance Limited requires members to maintain investment grade ratings or provide some other means of financial assurance that each member is able to pay retrospective premiums.⁶⁴

Exelon responds that SpinCo is the same entity as Exelon Generation, only with a new name.⁶⁵ Exelon points out that the new entity, HoldCo, is not an applicant, and the application makes no representations about HoldCo's credit rating.⁶⁶ In addition, Exelon observes that a "BBB–" rating is still considered investment-grade.⁶⁷

We find that this portion of the contention is unsupported and does not raise a genuine dispute with the application. ELPC does not provide a basis to undermine Exelon's premise that SpinCo will remain investment grade, show that the application inaccurately represented SpinCo's financial situation, or demonstrate that SpinCo must maintain a grade higher than "BBB–" to be considered financially sound.

⁶⁰ *Oyster Creek*, CLI-00-6, 51 NRC at 207.

⁶¹ *Id.*

⁶² See 10 C.F.R. § 2.309(f)(1)(vi).

⁶³ ELPC Petition at 15 (citing *S&P Downgrades Exelon Generation to BBB– Following Spinoff Announcement*, S&P Global (Feb. 25, 2021), <https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/s-p-downgrades-exelon-generation-to-bbb-following-spinoff-announcement-62859923>).

⁶⁴ *Id.* at 20.

⁶⁵ Exelon Answer to ELPC at 14.

⁶⁶ *Id.* at 15-16.

⁶⁷ *Id.* at 16 n.66.

(3) Early Retirement

ELPC argues that the application does not adequately address the possibility that early reactor retirement could adversely affect SpinCo's financial stability.⁶⁸ ELPC argues that the loss of revenues from reactors that are shut down prematurely will weaken SpinCo's strength overall.

Exelon's updated application and decision to continue operations at the four Illinois plants largely render ELPC's claim moot. But to the extent that this claim has not been mooted, ELPC does not provide sufficient support for this argument. ELPC states that Exelon has failed to account for the "cumulative impact [that] early retirement of the majority of the nuclear plants in their fleet" will have on its ability to meet operating costs. However, Exelon accounted for these retirements in its financial projections, and those eight units did not represent a "majority" of the twenty-one operating nuclear units Exelon has in its fleet. In addition, ELPC has not provided support for its argument that other plants in Exelon's fleet are likely to shut down in the next five years. ELPC's expert, Mr. Bradford, does not discuss early shutdown of any reactors other than those acknowledged by Exelon itself in its now-superseded application.⁶⁹ We therefore dismiss this portion of the contention as unsupported.

(4) Pre-1983 Spent Fuel Storage Fees

ELPC argues that the application does not account for pre-1983 spent nuclear fuel (SNF) disposal fees that Exelon's predecessor collected from Illinois ratepayers and never transferred to the U.S. Department of Energy (DOE).⁷⁰ ELPC states that before the Nuclear Waste Policy Act of 1982 made spent fuel disposal a federal responsibility, Exelon's predecessor in interest in Illinois (Commonwealth Edison, or ComEd) collected spent fuel fees from ratepayers.⁷¹ The money collected, plus interest, must be turned over to the DOE when a permanent repository becomes available. ELPC argues that the application fails to account for how SpinCo will meet this obligation or "what may happen if [it is] not met."⁷²

⁶⁸ ELPC Petition at 17-18.

⁶⁹ In support of its proposed Contention 2, ELPC cites an article that states generally that some nuclear plants may face early retirement depending on the price of energy and the availability of subsidies designed to keep zero carbon emitting energy sources open. *US Nuclear Power Plant Retirement Risk Fluctuates with Policy, Power Prices*, S&P Global (May 3, 2021), <https://www.spglobal.com/platts/en/market-insights/latest-news/electric-power/050321-feature-us-nuclear-powerplant-retirement-risk-fluctuates-with-policy-power-prices>. We do not find that this article provides substantive support for the claim that the subject nuclear facilities will prematurely shut down.

⁷⁰ ELPC Petition at 18-19; Bradford Decl. at 14-15.

⁷¹ ELPC Petition at 18-19.

⁷² *Id.* at 19.

According to Exelon's 2020 annual report to the U.S. Securities and Exchange Commission (SEC), ComEd was to pay DOE a \$277 million one-time fee for the pre-1983 nuclear generation, which ComEd chose to defer until "just prior to the first delivery of SNF to the DOE."⁷³ Similarly, the prior owner of Exelon's FitzPatrick plant deferred payment in the amount of \$34 million until DOE is ready to take the fuel.⁷⁴ Exelon's annual report acknowledges that with interest, this liability amounts to \$1.208 billion.⁷⁵

Exelon states that the liability for spent fuel fees, plus interest, is reflected in enclosure 6A submitted as part of the license transfer application, included in the figure listed as "other non-current liabilities."⁷⁶ Although the total for non-current liabilities listed in Enclosure 6A is considered proprietary information, we observe that is greater than the \$1.208 billion that Exelon acknowledges is due to DOE in its 10-K. Exelon also points out that the application explicitly states that there will be no change to the standard contracts for disposal of SNF with DOE except for the new names of the parties.⁷⁷ Therefore, Exelon argues, there is no need for a hearing to determine "who will be responsible for this payment," because that information is clearly stated in the application.⁷⁸

We agree with Exelon that this part of the contention fails to dispute information in the application because the application discloses the liability and discusses who will pay it. In addition, ELPC has not provided support for its assertion that SpinCo will be unable to pay this liability when it comes due.⁷⁹ We therefore dismiss this portion of the contention.

⁷³ Exelon Corporation, Annual Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934, Form 10-K, (2020), at 187, 342 (Exelon 10-K), <https://www.sec.gov/ix?doc=/Archives/edgar/data/1109357/000110935721000022/exc-20201231.htm>.

⁷⁴ *Id.* at 342.

⁷⁵ *Id.*

⁷⁶ Exelon Answer to ELPC at 23; *see* Application, Encl. 6A at 2.

⁷⁷ Exelon Answer to ELPC at 23-24; Application, Encl. 1 at 14.

⁷⁸ Exelon Answer to ELPC at 23-24.

⁷⁹ Mr. Bradford asserts that if spent fuel disposal fees are not turned over to DOE, the affected licensees may not be able to remove spent fuel from the sites of their closed plants and thereby not be able to fully decommission them. *See* Bradford Decl. at 15. For support, Mr. Bradford discusses a 1990 DOE Inspector General Report, which indicated that eleven out of seventeen utilities that had deferred payment were of "uncertain financial condition," thereby jeopardizing \$2 billion in unpaid fees and a 1991 General Accounting Office report on the same subject. *Id.* (citing General Accounting Office, "Nuclear Waste: Changes Needed in DOE User-Fee Assessments" (May 8, 1991), at 9, <https://www.gao.gov/assets/t-rced-91-52.pdf>). Mr. Bradford's statement and the GAO report do not indicate that Exelon or its predecessors, specifically, were or would be unable to pay this liability.

(5) Potential Liability for Nuclear Accident Under Price-Anderson Act

ELPC also claims that the application should account for the possibility of a major nuclear accident in the United States.⁸⁰ ELPC explains that under the Price-Anderson Act, each nuclear reactor must carry insurance to cover damages in an accident, currently in the amount of \$450 million.⁸¹ Mr. Bradford asserts that should the damages exceed \$450 million, every reactor over 100 MW could be assessed up to \$137 million in “retrospective” insurance premiums to cover the excess damages in case of a nuclear accident anywhere in the United States.⁸² According to Mr. Bradford, Exelon’s eighteen reactors could potentially be assessed “about \$2.5 billion” over a period of six or seven years.⁸³ ELPC claims that the application does not account for this potential liability and does not specify whether SpinCo or HoldCo will assume this obligation.⁸⁴

Exelon argues that a hearing is unnecessary because it is clear in the application — as well as under NRC regulations — that the licensee is responsible for the premiums.⁸⁵ Exelon additionally points out that its annual report discloses a maximum liability of \$252 million — the same amount claimed by Mr. Bradford, for retrospective premiums.⁸⁶ Moreover, it argues that Exelon Generation now provides an annual proof of guarantee of payment, such as a surety bond or letter of credit, as our regulations require, and will continue to do so after the name change to SpinCo.⁸⁷ Exelon argues that ELPC has shown no reason why the applicants need to provide more.

We find no litigable issue in this claim. The application has accounted for the potential liability in its financial disclosures. Further, our regulations provide that SpinCo is responsible for paying the premiums and that it must provide proof of its ability to do so annually. ELPC does not point to a requirement for the application to do more.

(6) Non-Radiological Decommissioning Costs

ELPC argues that although the NRC does not require financial assurances for non-radiological decommissioning costs, the potential existence of non-radiological cleanup obligations does affect SpinCo’s and HoldCo’s financial qualifica-

⁸⁰ See ELPC Petition at 20-21.

⁸¹ *Id.* at 20.

⁸² *Id.*; Bradford Decl. at 15-16.

⁸³ Bradford Decl. at 16.

⁸⁴ ELPC Petition at 20-21.

⁸⁵ Exelon Answer to ELPC at 25; Application, Encl. 1 at 15; 10 C.F.R. § 140.11.

⁸⁶ Exelon Answer to ELPC at 25; Exelon 10-K at 340.

⁸⁷ Exelon Answer to ELPC at 25-26; 10 C.F.R. § 140.21.

tions to hold the operating licenses.⁸⁸ Mr. Bradford asserts that the owner of the shutdown Vermont Yankee plant is required to maintain a \$60 million site restoration fund in addition to the decommissioning trust fund.⁸⁹ According to Mr. Bradford, if “Illinois, New York, Pennsylvania, Maryland, and New Jersey nonradiological restoration funds are similar the total obligation on the SpinCo reactors could approach \$1 billion.”⁹⁰

Exelon responds that this argument is “counterintuitive” because a theoretical non-radiological decommissioning cost would necessarily be incurred after a reactor ceases operation, and therefore would have no impact on that reactor’s ability to meet operating costs.⁹¹ But here Exelon’s application provides fleet-wide operating costs and revenue projections, not reactor-specific projections. That is, we agree with ELPC it is possible that in the future, one of its reactors could incur non-radiological decommissioning costs, which would in turn impact SpinCo’s ability to meet the expenses of the reactors still operating.

However, we find ELPC’s claim to be unsupported and too speculative to form the basis of a contention. ELPC has not offered a basis to conclude that any of Exelon’s reactors are currently required by their host state to maintain a fund to cover non-radiological decommissioning costs. Nor has ELPC offered specific information to demonstrate that any of the reactors would be required to set aside funds to cover this type of cost. The mere possibility that such costs will be incurred in the future somewhere across Exelon’s nuclear fleet is not sufficient to raise an admissible contention in this proceeding.

(7) Loss of Parental Support from Exelon Corporation

ELPC claims that Exelon Corporation’s “regulated utility divisions provide reliable financial support to the nuclear fleet,” which will be withdrawn as a result of the spin transaction.⁹² ELPC’s expert, Mr. Bradford, argues that the spin transaction represents a step in a “decades-long” transition from the “full protection afforded by the vertically integrated monopoly structure to a lesser degree of protection.”⁹³ According to Mr. Bradford, the spin transaction would lead to “the elimination of any credible financial guarantee or assurance at all through an ownership structure (HoldCo and SpinCo) that provides insufficient

⁸⁸ ELPC Petition at 21.

⁸⁹ Bradford Decl. at 12.

⁹⁰ *Id.*

⁹¹ Exelon Answer to ELPC at 26.

⁹² ELPC Petition at 15-16.

⁹³ Bradford Decl. at 6.

diversity of assets or financial backing to meet significant and growing liabilities.”⁹⁴

Exelon responds that this argument misstates Exelon Corporation’s corporate structure. It states that its rate-regulated utility subsidiaries are separate legal entities, whose rates charged to customers do not include any costs related to operating the nuclear generating assets.⁹⁵ Therefore, the utility subsidiaries currently do not provide financial support to the nuclear fleet. In addition, Federal Energy Regulatory Commission and state law rules prohibit regulated utilities from subsidizing affiliates in the manner ELPC claims.⁹⁶

In reply, ELPC argues that it does not claim that Exelon Corporation’s utilities directly subsidize the nuclear facilities, but they strengthen Exelon Corporation’s financial position by providing a diversity of assets.⁹⁷ ELPC asserts that Exelon Corporation “could provide parental guarantees and other financial support that a new holding company simply cannot.”⁹⁸

ELPC does not question the financial projections in the application, which show that SpinCo expects that operating revenues will meet operating costs within its nuclear fleet, without any reliance on parental support.⁹⁹ Moreover, ELPC does not claim that Exelon Generation has ever relied on financial support from Exelon Corporation, directly or indirectly. Further, there is no regulatory requirement that a licensee have diversified assets, and we recently rejected a contention that argued that a limited liability corporation is inherently financially unsound.¹⁰⁰ Therefore, ELPC has not raised a material issue with the application and we dismiss this claim.

Because we find that none of the portions of Contention 1 are admissible, we dismiss ELPC Contention 1.

b. ELPC Contention 2: Failure to Provide Reasonable Assurance of Adequate Decommissioning Funds

ELPC argues in Contention 2 that the application does not provide reasonable assurance of sufficient funds for decommissioning “in light of significant projected early retirements.”¹⁰¹ ELPC asserts that a hearing should determine “which

⁹⁴ *Id.* at 7.

⁹⁵ Exelon Answer to ELPC at 18.

⁹⁶ *See id.* at 18-19 (citing 18 C.F.R. § 35.44; 83 Ill. Admin. Code 452.125(b)).

⁹⁷ ELPC Reply at 8.

⁹⁸ *Id.*

⁹⁹ *See generally*, Application, Encl. 6A; September 2021 Update to Application, Encl. 1A; 10 C.F.R. § 50.33(f)(2).

¹⁰⁰ *Three Mile Island*, CLI-21-2, 93 NRC at 86-87.

¹⁰¹ ELPC Petition at 23.

and how many of Exelon's nuclear plants are slated for early retirement, and require a full financial analysis of the impact of those early retirements on decommissioning trust fund balances," before the license transfer can be approved.¹⁰² It argues that although Exelon has acknowledged that early retirements could lead to decommissioning funding shortfalls, the Application does not explain how those shortfalls will be made up.¹⁰³ ELPC argues that unless Exelon "compellingly demonstrates" that SpinCo will be able to meet the decommissioning financial qualification, then the Commission should require Exelon Generation to provide additional financial assurances now, before the license transfer is approved.¹⁰⁴

ELPC did not amend this contention following Exelon's announcement that the four plants previously slated for early retirement would remain in operation, and therefore its claims are largely moot. We will, however, consider the remainder of its claims.

First, ELPC argues generally that the application does not explain how SpinCo or HoldCo could provide the necessary financial guarantees to comply with 10 C.F.R. § 50.75 if the decommissioning trust fund is not adequate to cover costs.¹⁰⁵ It claims that the application is "devoid of any reasoned explanation" of how SpinCo or HoldCo could make up a potential deficiency.¹⁰⁶

Exelon argues that this claim is "patently incorrect" because it ignores the application section titled "Decommissioning Funding Assurance," which incorporates by reference Exelon's recent decommissioning funding report.¹⁰⁷ Specifically, the application explains that SpinCo will provide surety bonds for the full amount if there is any shortfall.¹⁰⁸

ELPC additionally argues, supported by Mr. Bradford's Declaration, that decommissioning costs are increasing faster than the growth rate allowed for in NRC regulations.¹⁰⁹ Citing a study by the Callan Institute, Mr. Bradford states that decommissioning costs increased at a compound annual rate of "about 6%"

¹⁰² *Id.* at 26.

¹⁰³ *Id.* at 17 (citing Exelon Corp. et al., SEC Quarterly Report, Form 10-Q (Mar. 31, 2021), at 154, <https://www.sec.gov/ix?doc=/Archives/edgar/data/1109357/000110935721000050/exc-20210331.htm> (10-Q)). The 10-Q provides an estimate that Exelon Generation could be required to provide up to \$55 million in financial assurances. 10-Q at 154.

¹⁰⁴ ELPC Petition at 25-26.

¹⁰⁵ *Id.* at 24.

¹⁰⁶ *Id.* at 25.

¹⁰⁷ Exelon Answer to ELPC at 29.

¹⁰⁸ *Id.* at 32 (citing Application, Encl. 1 at 12). In its reply brief, ELPC questions whether Exelon provides anything beyond "their own optimistic projections" that SpinCo will have the means to provide surety bonds to cover shortfalls for Byron Units 1 and 2. ELPC Reply at 13. Byron's continued operation renders this argument moot.

¹⁰⁹ ELPC Petition at 18; Bradford Decl. at 12.

between 2008 and 2018.¹¹⁰ Mr. Bradford states that this rate of escalation is higher than that assumed in NRC regulations. He also states that credible independent entities indicate that “there may be decommissioning-related costs beyond those” contemplated by NRC regulations and that the regulations “may omit some significant cost elements.”¹¹¹

Exelon argues that ELPC’s claim concerning rising costs is both unsupported and essentially amounts to an impermissible challenge to the regulations that set the minimum formula for decommissioning funding.¹¹²

We find ELPC’s claim that the NRC’s decommissioning funding formula is set too low is a challenge to NRC regulations and may not form the basis of an admissible contention, absent a waiver. Moreover, many of Mr. Bradford’s statements concerning decommissioning costs appear to be founded on the presumption that the four facilities previously slated for early retirement will close early, which is no longer accurate given Exelon’s update to its application. Therefore, ELPC Contention 2 is inadmissible because it does not raise a material dispute with the application.

C. Eric Joseph Epstein and Three Mile Island Alert

1. Standing

Eric Joseph Epstein asserts standing as an individual living and working near Three Mile Island, as a business owner and taxpayer, as the spokesperson for Three Mile Island Alert, Inc. and the coordinator of EFMR Monitoring Group, and as a member of the local school board.¹¹³ He additionally asserts standing as a signatory of a negotiated settlement agreement — filed before the Pennsylvania Public Utility Commission in 2000 — over the merger and corporate restructuring that led to the creation of Exelon.¹¹⁴ Three Mile Island

¹¹⁰ Bradford Decl. at 12 (citing Callan Institute, 2019 Nuclear Decommissioning Study 9, <https://decommissioningcollaborative.org/wp-content/uploads/2020/07/Callan-2019-NDT-Study.pdf>).

¹¹¹ *Id.*

¹¹² Exelon Answer to ELPC at 21; *see* 10 C.F.R. § 2.335 (prohibiting attacks on Commission regulations unless a waiver is granted upon a showing that “special circumstances” exist such that application of the rule would not serve the purpose for which the rule was enacted).

¹¹³ *See* Petition of Eric Joseph Epstein and Three Mile Island Alert, Inc. for Leave to Intervene and for a Hearing (June 14, 2021), at 19, 23-25 (TMIA Petition). Among other things, EFMR Monitoring Group “monitors radiation levels at Three Mile Island.” *Id.* at 25.

¹¹⁴ *Id.* at 21, 23, 31-32. *See* Letter from Paul R. Bonney, PECO Energy, to James J. McNulty, Pennsylvania Public Utility Commission (Mar. 24, 2000), <https://www.puc.pa.gov/pcdocs/1241558.pdf> (regarding the application of PECO Company for approval of a plan of corporate restructuring and enclosing Joint Petition for Settlement, docket number A-110550F0147) (Negotiated Settlement).

Alert asserts standing through its member, Mr. Epstein.¹¹⁵ The applicants dispute Mr. Epstein's and Three Mile Island Alert's claims of standing.¹¹⁶

Mr. Epstein lives and works in Harrisburg, Pennsylvania, which he states is within "close proximity" to Three Mile Island, Unit 1 (TMI-1).¹¹⁷ TMI-1 permanently shut down in 2019. Mr. Epstein has also participated in litigation related to Peach Bottom Atomic Power Station.¹¹⁸ He argues that his residence within a fifty-mile radius of TMI-1 is sufficient to confer standing under the "proximity presumption."¹¹⁹ But as we describe above, we do not presume standing on the basis of proximity in indirect license transfer cases that involve no change in ownership, operator, or the physical plant.¹²⁰

Many of Mr. Epstein's additional statements in support of his standing — such as his interest as a school board member and as spokesperson for EFMR Monitoring Group — do not explain how these interests will or could be harmed by the proposed licensing action. Mr. Epstein describes his interest in the safe operation and decommissioning of Three Mile Island and Peach Bottom as a resident and active member of the community near the plants. But these interests do not give rise to standing unless Mr. Epstein shows that this licensing action could jeopardize those interests.¹²¹ And although the petition refers to harm from "converting the Peach Bottom Atomic Power Stations and Three Mile Island into high-level radioactive waste sites on the Susquehanna River" or underfunding their decommissioning, it does not explain how the proposed license transfer would lead to such harm.¹²² Without connecting the licensing action at issue in this proceeding with these purported harms, Mr. Epstein does not satisfy our standing requirements.

We further reject Mr. Epstein's claims of standing as a taxpayer and ratepayer. Commission caselaw has long held that such claims do not confer standing because the injury is not within the zone of interests of the Atomic Energy Act of

¹¹⁵ See TMIA Petition at 33-34.

¹¹⁶ Exelon's Answer Opposing the Petition of Eric Joseph Epstein and Three Mile Island Alert, Inc. for Leave to Intervene and for a Hearing (July 12, 2021), at 26-32 (Exelon Answer to TMIA).

¹¹⁷ TMIA Petition at 23.

¹¹⁸ See *id.* at 30.

¹¹⁹ *Id.* at 28.

¹²⁰ See *Palo Verde*, CLI-20-7, 92 NRC at 233; *Palisades*, CLI-08-19, 68 NRC at 260.

¹²¹ See *Commonwealth Edison Co.* (Zion Nuclear Power Station, Units 1 and 2), CLI-99-4, 49 NRC 185, 188, 190-91 (1999) (denying standing where petitioner failed to show how license amendments could lead to radiological harm); see also *Exelon Generation Co., LLC* (Three Mile Island Nuclear Station, Units 1 and 2), LBP-20-2, 91 NRC 10, 31 (2020), *aff'd*, CLI-20-10, 92 NRC 327 (2020) (denying standing where Mr. Epstein did not show injury in fact stemming from a proposed license amendment altering emergency planning requirements in light of facility having permanently ceased operations).

¹²² TMIA Petition at 24; see also *id.* at 36-37.

1954.¹²³ Courts have also rejected such claims as a basis for standing because the injury is not “concrete and particularized.”¹²⁴

We find that Mr. Epstein has not established standing by virtue of his rights under the 2000 negotiated settlement. Mr. Epstein asserts that the license transfer will “unilaterally abrogate” the terms of that settlement.¹²⁵ TMIA reasserts its claims relating to the settlement in Contention 1 and expands on them in Contention 2. However, Mr. Epstein has not shown that the proposed license transfer could affect his rights under that settlement — as explained below, the settlement is not connected with this proceeding. Therefore, we find that he has not shown standing by virtue of being a party to that settlement.

Finally, we deny Mr. Epstein’s request for discretionary intervention to assist in the development of a sound record.¹²⁶ Mr. Epstein argues that he can help develop the record due to his experience in proceedings involving Three Mile Island Nuclear Generating Station, Peach Bottom Atomic Power Station, and Susquehanna Steam Electric Station.¹²⁷ Discretionary intervention is allowed only where at least one petitioner has established standing and offered an admissible contention, such that a hearing will be held.¹²⁸ In this case, we have found that ELPC has not offered an admissible contention, and, as explained below, neither has TMIA.

TMIA asserts standing through one of its members, specifically Mr. Epstein.¹²⁹ Because Mr. Epstein has not established standing, we find that TMIA has likewise failed to establish standing in this proceeding.

2. *TMIA Contentions*

We also find that Mr. Epstein and TMIA have not offered an admissible contention in this proceeding.

¹²³ See *Portland General Electric Co.* (Pebble Springs Nuclear Plant, Units 1 and 2), CLI-76-27, 4 NRC 610, 614 (1976) (ratepayer standing); *Kansas Gas and Electric Co. and Kansas City Power and Light Co.* (Wolf Creek Generating Station, Unit 1), ALAB-424, 6 NRC 122, 128 n.7 (1977) (ratepayer standing); *Tennessee Valley Authority* (Watts Bar Nuclear Plant, Units 1 and 2), ALAB-413, 5 NRC 1418, 1421 (1977) (taxpayer standing).

¹²⁴ See *Hein v. Freedom from Religion Foundation, Inc.*, 551 U.S. 587, 599 (2007) (“We have consistently held that [taxpayer] interest is too generalized and attenuated to support Article III standing.” (emphasis added)).

¹²⁵ TMIA Petition at 45, 48-49.

¹²⁶ *Id.* at 30; see also 10 C.F.R. § 2.309 (discretionary intervention).

¹²⁷ TMIA Petition at 30.

¹²⁸ 10 C.F.R. § 2.309(e); see also *Palisades*, CLI-08-19, 68 NRC at 267.

¹²⁹ TMIA Petition at 34.

a. *TMIA Contention 1: Transfer Would Allow Non-Regulated Entity to Collect a Tariff from Pennsylvania Ratepayers*

In Contention 1, TMIA argues that the proposed license transfer would violate Pennsylvania law by allowing an entity that is not a rate-regulated utility to collect a tariff to support decommissioning of the Limerick, Peach Bottom, and Salem plants.¹³⁰ TMIA argues that the transfer would violate Pennsylvania's Electric Competition Act of 1996.¹³¹ According to TMIA, the transaction would violate the Nuclear Decommissioning Cost Adjustment (NDCA) clause of the Pennsylvania public utility code, which allows PECO Energy to collect tariffs for the costs of decommissioning nuclear generation that PECO Energy owned as of December 31, 1999 (which includes Peach Bottom, Limerick, and Salem).¹³² PECO is a regulated utility company owned by Exelon Corporation, which will remain a regulated utility and subsidiary of Exelon Corporation following the spin transaction.

TMIA's concern is that the license transfer would allow SpinCo to collect tariffs directly from ratepayers to support the nuclear decommissioning of Salem, Peach Bottom, and Limerick.¹³³ We find the contention inadmissible because it is factually unsupported and does not demonstrate a genuine dispute with the license application.

The provision of Pennsylvania law that TMIA claims would be violated by the transaction (the NDCA) provides an exception to statutory caps on electric utility rates where an increase is needed to cover PECO's historic decommissioning liability:

[An exception to electric rate caps may be approved where t]he electric distribution utility seeks to increase its allowance for nuclear decommissioning costs to reflect new information not available at the time the utility's existing rates were determined, and such costs are not recoverable in the competitive generation market and are not covered in the competitive transition charge or intangible transition charge, and such costs would not allow the utility to earn a fair rate of return.¹³⁴

As an initial matter, the NRC is not the forum in which to challenge a claimed

¹³⁰ *Id.* at 43-44.

¹³¹ *See id.* at 44.

¹³² *See id.* at 45; *see also* Electricity Generation Customer Choice and Competition Act, 66 Pa. Cons. Stat. § 2804(4)(iii)(F) (2019). As of December 31, 1999, PECO owned 100% interest in Limerick Units 1 and 2 and Peach Bottom Unit 1, 42.49% interest in Peach Bottom Units 2 and 3, and 42.59% interest in Salem Units 1 and 2.

¹³³ TMIA Petition at 43-44.

¹³⁴ Electricity Generation Customer Choice and Competition Act, 66 Pa. Cons. Stat. § 2804(4)(iii)(F) (2019).

violation of Pennsylvania law.¹³⁵ But even so, TMIA does not explain how the proposed license transfer violates the laws surrounding the utility's collection of tariffs from Pennsylvania ratepayers. TMIA states that the "proposed license transfer application is silent on rate payer collections for non-regulated licensees"¹³⁶ and that the application creates "a vehicle for a non-regulated entity to collect tariffs from hostage rate-payers."¹³⁷ But these statements do not provide a basis for TMIA's concerns, and TMIA does not point to anything in the license transfer application that would alter the decommissioning funding mechanism for the former PECO Energy nuclear facilities.¹³⁸

According to Exelon Generation, for the past twenty years PECO Energy Company has collected funds from ratepayers to cover its legacy decommissioning obligations, and PECO Energy has transferred those funds to Exelon Generation (a non-utility) for deposit into the appropriate nuclear decommissioning trusts.¹³⁹ This arrangement would not be changed by the license transfer (aside from the change in Exelon Generation's name).

TMIA also claims that the proposed license transfer would violate a recent update to the PECO's electric service tariff known as supplement 48.¹⁴⁰ TMIA fails to explain and support this claim, however, and the adjustment does not appear to relate to PECO Energy's legacy nuclear decommissioning obligations.¹⁴¹ Rather, Supplement 48 revises a "distribution system improvement charge" meant to "recover the reasonable and prudent costs incurred to repair, improve, or replace" various electric distribution fixtures.¹⁴² TMIA does not explain how this regulatory update relates to the license transfer application.

¹³⁵ See, e.g., *PPL Susquehanna LLC* (Susquehanna Steam Electric Station, Units 1 and 2), CLI-07-25, 66 NRC 101, 104-05 (2007) (affirming Board's rejection of contention related to water use limits within the jurisdiction of other regulatory bodies); *Consolidated Edison Co. of New York* (Indian Point, Units 1 and 2), CLI-01-19, 54 NRC 109, 140 (2001) (rejecting contention whether indemnity agreement is legal under New York law); *Hydro Resources, Inc.* (2929 Coors Road, Suite 101, Albuquerque, NM 87120), CLI-98-16, 48 NRC 119, 120-21 (1998) (finding inadmissible the issue whether a license complies with local permitting requirements).

¹³⁶ TMIA Petition at 43.

¹³⁷ *Id.* at 47.

¹³⁸ TMIA also alludes to the Negotiated Settlement in Contention 1, but it does not explain how the license transfer would violate its terms. See *id.* at 45.

¹³⁹ Exelon Answer to TMIA at 18. PECO Energy is a subsidiary of Exelon Corporation and is a rate-regulated utility. Therefore, it will not be part of the businesses that will be spun off to create SpinCo.

¹⁴⁰ See TMIA Petition at 46-47; see also PECO Energy Company, Electric Service Tariff, Supplement No. 48 to ELECTRIC PA P.U.C. NO. 6 (Mar. 15, 2021) (Tariff Supp. 48), <https://www.peco.com/SiteCollectionDocuments/ElectricDSICEffApril12021.pdf>.

¹⁴¹ See TMIA Petition at 46-47.

¹⁴² See Tariff Supp. 48, page 4 of pdf.

TMIA Contention 1 therefore does not raise a genuine, material dispute with the application and is not admissible.

b. TMIA Contention 2: License Transfer Would Violate the Negotiated Settlement

In Contention 2, TMIA argues that the license transfer would violate the terms of the negotiated settlement relating to PECO Energy's 2000 corporate restructuring which resulted in the creation of Exelon Corporation.¹⁴³ TMIA claims that the negotiated settlement "contractually stipulates PECO's payment for: [(1) \$50 million of the [net] after-tax amount; and (2) Five percent of the net after-tax amount of released funds for nuclear decommissioning costs."¹⁴⁴

However, TMIA does not explain how the negotiated settlement is relevant to this proceeding.¹⁴⁵ PECO Energy is not a license applicant or a licensee, and it is therefore not clear how the terms of its agreement with Mr. Epstein would be enforceable here.

The negotiated settlement provided, among other things, that PECO Energy would not try to recover through Pennsylvania retail electric distribution rates the costs associated with the ownership and operation of any nuclear generating plants that it did not hold as of December 31, 1999.¹⁴⁶ But under the settlement, PECO Energy can recover funds to cover its share of decommissioning costs for generation owned prior to that date.¹⁴⁷

TMIA's claim does not establish a link to the sufficiency of decommissioning trust funds. Although TMIA does not cite the page or paragraph in the negotiated settlement, the \$50 million and five percent figures are mentioned twice in the settlement. At one point, the negotiated settlement provides that:

if the actual expenditures necessary to accomplish the full decommissioning of PECO's Pre-Existing Nuclear Interests are less than the full balance of PECO's Pre-Existing Nuclear Interest Funds, PECO is entitled to obtain release of such funds for the purpose of sharing the amount between customers and shareholders. In the event of such release, PECO will be permitted to retain for its own benefit: (1) the first \$50.0 million of the net after tax released amount and (2) 5.0% of the remaining net after-tax released amount.¹⁴⁸

¹⁴³ See Negotiated Settlement at 4 n.4.

¹⁴⁴ TMIA Petition at 49.

¹⁴⁵ See Exelon Answer to TMIA at 19.

¹⁴⁶ Negotiated Settlement at 10-11.

¹⁴⁷ *Id.*

¹⁴⁸ *Id.* at 12, *see also id.*, app. A at 2 (unnumbered).

But elsewhere the settlement provides that if PECO ever seeks to increase its annual nuclear decommissioning expense allowance above \$29.162 million annual accrual level, it agrees, under certain circumstances, to “voluntarily forgo recovery” of \$50 million and five percent of any additional increase above the \$29.162 million annual accrual.¹⁴⁹ TMIA’s precise claim is not clear, but TMIA does not show how the terms of the negotiated settlement are material to any issue the Commission must decide in approving this transfer.

TMIA argues that the “the applicant must demonstrate compliance” with the provisions of the negotiated settlement in order to demonstrate the ability to fund the decommissioning of Limerick, Peach Bottom, and Salem.¹⁵⁰ We do not agree. The provisions in the negotiated settlement mentioning the \$50 million and five percent figures do not appear to relate to whether the proposed license transferees will have sufficient funds to decommission the plants. Rather, they contemplate how money would be refunded to ratepayers and shareholders if the actual cost of decommissioning turns out to be less than the amount collected. That is not relevant to whether decommissioning funds will be sufficient, which is the NRC’s concern.

Therefore, TMIA does not show how the cited provision is material to any issue we need to decide in this proceeding, and it does not demonstrate a genuine dispute with the application. We find that TMIA Contention 2 is not admissible.

Having found that TMIA has not established standing in this proceeding and has not proposed an admissible contention, we dismiss its petition to intervene.

III. CONCLUSION

For the reasons described above, we *deny* ELPC’s and TMIA’s hearing requests and petitions to intervene.

IT IS SO ORDERED.

For the Commission

Annette L. Vietti-Cook
Secretary of the Commission

Dated at Rockville, Maryland,
this 14th day of February 2022.

¹⁴⁹ *Id.* at 11.

¹⁵⁰ TMIA Petition at 49.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Christopher T. Hanson, Chairman
Jeff Baran
David A. Wright

In the Matter of

**Docket Nos. 50-250-SLR
50-251-SLR**

**FLORIDA POWER & LIGHT
COMPANY
(Turkey Point Nuclear Generating
Units 3 and 4)**

February 24, 2022

NATIONAL ENVIRONMENTAL POLICY ACT; PUBLIC COMMENTS

To provide a meaningful opportunity for public comment, the agency must adequately describe its intentions to the public.

RECONSIDERATION

The Commission's authority to reconsider its actions is inherent in its authority to make them in the first instance.

REGULATIONS, INTERPRETATION

When the rule language is clear on its face, it is unnecessary to resort to other sources to discern its meaning.

REGULATIONS, INTERPRETATION

The regulatory analysis is not the regulation and cannot be used to change the plain meaning of the regulation.

SUBSEQUENT LICENSE RENEWAL; GENERIC ENVIRONMENTAL IMPACT STATEMENT

The Generic Environmental Impact Statement for License Renewal (2013) does not cover the subsequent license renewal period, and 10 C.F.R. § 51.53(c)(3) does not apply to subsequent license renewal applicants.

MEMORANDUM AND ORDER

In considering the appeals of Natural Resources Defense Council, Friends of the Earth, and Miami Waterkeeper (collectively, the Intervenor), we have the opportunity to reconsider the Commission's decision in CLI-20-3. Today we reverse CLI-20-3, which addressed the referred ruling from the Atomic Safety and Licensing Board (Board) and held that 10 C.F.R. § 51.53(c)(3) applied to a subsequent license renewal applicant's preparation of an environmental report.¹ In CLI-20-3, the Commission held that, when considering the environmental impacts of a subsequent license renewal, the NRC staff (Staff) may rely on the Generic Environmental Impact Statement for License Renewal of Nuclear Plants² and 10 C.F.R. Part 51, Subpart A, Appendix B, Table B-1 (Table B-1) to evaluate environmental impacts of Category 1 issues. For the reasons described below, we reverse that decision and hold that section 51.53(c)(3) only applies to an initial license renewal applicant's preparation of an environmental report and that the 2013 GEIS did not address subsequent license renewal. As a result, the environmental review of the subsequent license renewal application at issue in this case is incomplete.

I. BACKGROUND

Our regulations provide that we will prepare an EIS to comply with the National Environmental Policy Act (NEPA) when renewing a nuclear power plant operating license.³ The environmental impact statement (EIS) includes the Staff's analysis that considers and weighs the environmental impacts of the proposed action. To support the preparation of EISs for license renewal, the Staff issued the Generic Environmental Impact Statement for License Renewal

¹ CLI-20-3, 91 NRC 133 (2020).

² "Generic Environmental Impact Statement for License Renewal of Nuclear Plants" (Final Report), NUREG-1437, rev. 1, vols. 1-3 (June 2013), (ADAMS accession nos. ML13106A241, ML13106A242, ML13106A244) (2013 GEIS).

³ See, e.g., 10 C.F.R. § 51.20(b)(2).

of Nuclear Plants in 1996.⁴ The NRC also codified in Table B-1 the findings of the 1996 GEIS.⁵ The NRC issued a revision to the 1996 GEIS and updated the corresponding regulations in 2013.⁶ The 2013 GEIS classified environmental impacts into two categories — Category 1 issues, where impacts apply to all plants (or plants that share a specific characteristic), a single significance level has been assigned to the impacts, and additional plant-specific mitigation measures are not warranted; and Category 2 issues, where all of the Category 1 criteria could not be met.⁷ The Staff prepares plant-specific supplements to the license renewal GEIS to address Category 2 issues.⁸

In this case, FPL applied for licenses to operate Turkey Point Units 3 and 4 for an additional twenty years beyond their initial renewal terms, which were otherwise scheduled to expire in 2032 and 2033, respectively.⁹ Initially, the Intervenor challenged the environmental report (ER) that FPL submitted with its application. The Board ruled on multiple petitions to intervene and requests for hearing in LBP-19-3 and granted the Intervenor's petition to intervene.¹⁰ The Intervenor submitted five contentions challenging the ER, and the Board admitted two in part as contentions of omission.¹¹ The Board also referred its ruling on the scope of 10 C.F.R. § 51.53(c)(3) to the Commission under 10 C.F.R. § 2.323(f)(1).¹² In CLI-20-3, the Commission accepted the referral and held that the Staff may rely on the 2013 GEIS and Table B-1 when evaluating the environmental impacts of Category 1 issues, absent new and significant information that would change conclusions in the 2013 GEIS.¹³ Therefore, the

⁴ “Generic Environmental Impact Statement for License Renewal of Nuclear Plants” (Final Report), NUREG-1437, vols. 1-2 (May 1996) (ML040690705, ML040690738) (1996 GEIS).

⁵ See Environmental Review for Renewal of Nuclear Power Plant Operating Licenses; Final Rule, 61 Fed. Reg. 28,467 (June 5, 1996) (1996 Final Rule).

⁶ See Revisions to Environmental Review for Renewal of Nuclear Power Plant Operating Licenses; Final Rule, 78 Fed. Reg. 37,282 (June 20, 2013) (2013 Final Rule).

⁷ See 2013 GEIS at S-1, S-6 to S-7. The single significance criterion does not apply to collective offsite radiological impacts from the fuel cycle. See 10 C.F.R. pt. 51, subpt. A, app. B, tbl.B-1.

⁸ 2013 GEIS at S-1, S-7.

⁹ See Letter from William D. Maher, FPL, to NRC Document Control Desk (Apr. 10, 2018) (ML18113A132 (package) and ML18102A521 (supplemental ER information) (transmitting a revised subsequent license renewal application)).

¹⁰ LBP-19-3, 89 NRC 245 (2019).

¹¹ *Id.* at 285-95. The Board also admitted similar contentions filed by Southern Alliance for Clean Energy (SACE), but SACE withdrew from the proceeding. *Id.* at 301 & n.81; Southern Alliance for Clean Energy's Notice of Withdrawal (Apr. 9, 2019). We therefore only address the contentions submitted by the Intervenor in this decision.

¹² LBP-19-3, 89 NRC at 273 n.46. Judge Abreu filed a separate opinion, in which she outlined her bases for disagreeing with the majority's conclusion that section 51.53(c)(3) applies to subsequent license renewal.

¹³ CLI-20-3, 91 NRC at 155.

Commission held, any challenge to Category 1 issues in a subsequent license renewal proceeding would need to be accompanied by a rule waiver petition.¹⁴

In CLI-20-3, the Commission affirmed the Board's determination that the regulatory language is ambiguous because it does not direct or prohibit the application of section 51.53(c)(3) to subsequent license renewal applicants.¹⁵ The decision in CLI-20-3 also rested, in part, on a concern that the application of section 51.53(c)(3) to only initial license renewal applicants would render that provision incompatible with the other license renewal provisions.¹⁶ Further, the Commission decided that the regulatory history supported the conclusion that subsequent license renewal applicants can rely on the GEIS and Table B-1 when analyzing Category 1 issues. The Commission relied on the fact that the glossary in the 2013 GEIS defines "license renewal term" as "[t]hat period of time past *the original or current license term* for which the renewed license is in force" to find that the 2013 GEIS covers environmental impacts during any license renewal term — either initial or subsequent.¹⁷ The Commission also cited to the regulatory analysis that accompanied the 2013 GEIS and the associated Part 51 revisions and opined that the cost-justification recommendation in the regulatory analysis was based on an understanding that the 2013 GEIS covered both initial and subsequent license renewal applications.¹⁸ In addition, the Commission reasoned that "[b]ecause the regulations at issue codify the 2013 GEIS, the prior regulatory history [related to the 1991 proposed rule and 1996 final rule] is a less reliable guide than that accompanying the 2013 rulemaking, which is the 'latest expression of the rulemakers' intent.'"¹⁹

After the Board admitted the two environmental contentions, the Staff issued the Draft Supplemental Environmental Impact Statement (Draft SEIS) for Turkey Point Units 3 and 4. Pursuant to the migration tenet, the Intervenor's admitted contentions became challenges to the Draft SEIS.²⁰ In LBP-19-6, the Board granted FPL's motion to dismiss the admitted contentions as moot based on new information in the Draft SEIS.²¹ The Intervenor next sought a rule

¹⁴ *Id.*

¹⁵ *Id.* at 141.

¹⁶ *Id.*; see also *id.* at 142-44 (discussing section 51.95, which applies to postconstruction EISs, and section 51.71, which applies to draft EISs).

¹⁷ *Id.* at 146 (citing 2013 GEIS at 7-27) (emphasis added).

¹⁸ *Id.* at 146-47. The Commission also noted that Regulatory Guide 4.2 does not distinguish between initial and subsequent license renewal applicants, and the Staff sought public comments on this guidance as part of the revisions to Part 51 in 2013. *Id.* at 150-51 (citing "Preparation of Environmental Reports for Nuclear Power Plant License Renewal Applications," Regulatory Guide 4.2, supp. 1, rev. 1 (June 2013), at 25 (ML13067A354) (Regulatory Guide 4.2)).

¹⁹ *Id.* at 148-49 (citation omitted).

²⁰ LBP-19-6, 90 NRC 17, 20 (2019).

²¹ *Id.* at 20-21, 26.

waiver and admission of six newly proffered environmental contentions, two amended and four new contentions, based on the Draft SEIS.²² In LBP-19-8, the Board rejected the Intervenor’s requests and terminated the proceeding at the Board level. The Intervenor’s appealed all three of the Board decisions dismissing or finding inadmissible their contentions.²³

II. DISCUSSION

A. Reconsideration of CLI-20-3

As we considered the Intervenor’s appeals, we also had occasion to reconsider the Commission’s decision in CLI-20-3. The authority to reconsider our actions is inherent in our authority to make them in the first instance.²⁴ Because the proceeding is still open, we can modify, suspend, or revoke FPL’s license, as appropriate.²⁵ Agencies may change positions and interpretations, so long as they explain their reasoning for doing so.²⁶

Commissioner Baran dissented in CLI-20-3, and Commissioner Baran and Commissioner Hanson also dissented in part in the *Peach Bottom* proceeding, where the majority adhered to the decision in CLI-20-3 on the interpretation of

²² Natural Resources Defense Council’s, Friends of the Earth’s, and Miami Waterkeeper’s Amended Motion to Migrate Contentions & Admit New Contentions in Response to NRC Staff’s Supplemental Draft Environmental Impact Statement (revised June 28, 2019), at 1-2 & n.3 (Motion to Migrate and Admit Amended and New Contentions). The Board found that its decision in LBP-19-6 rendered moot that portion of the motion that sought to migrate Contentions 1-E and 5-E as originally admitted. LBP-19-8, 90 NRC 139, 148 n.9 (2019).

²³ Friends of the Earth’s, Natural Resources Defense Council’s, and Miami Waterkeeper’s Petition for Review of the Atomic Safety and Licensing Board’s Rulings in LBP-19-3 and LBP-19-06 (Aug. 9, 2019); Friends of the Earth’s, Natural Resources Defense Council’s, and Miami Waterkeeper’s Petition for Review of the Atomic Safety and Licensing Board’s Ruling in LBP-19-08 (Nov. 18, 2019).

²⁴ See *Entergy Nuclear Vermont Yankee, LLC, and Entergy Nuclear Operations, Inc.* (Vermont Yankee Nuclear Power Station), CLI-16-12, 83 NRC 542, 558 (2016) (reconsideration of direction to the Staff provided in a staff requirements memorandum).

²⁵ *AmerGen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-08-13, 67 NRC 396, 400 (2008) (“A license renewal may be set aside (or appropriately conditioned) even after it has been issued, upon subsequent administrative or judicial review.”).

²⁶ See e.g., *South Shore Hosp., Inc. v. Thompson*, 308 F.3d 91, 102 (1st Cir. 2002); cf. *Pepper v. United States*, 562 U.S. 476, 506-07 (2011) (citing *Arizona v. California*, 460 U.S. 605, 618 (1983); *Agostini v. Felton*, 521 U.S. 203, 236 (1997)) (holding that a court need not apply the “law of the case” doctrine if it is “convinced that [its prior decision] is clearly erroneous and would work a manifest injustice.”).

section 51.53(c)(3).²⁷ Based on the legal analysis described in these dissents and summarized below, we reverse the Commission’s holding in CLI-20-3. We hold that the 2013 GEIS does not cover the subsequent license renewal period and that section 51.53(c)(3) does not apply to subsequent license renewal applicants. Therefore, the Staff may not exclusively rely on the 2013 GEIS and Table B-1 for the evaluation of environmental impacts of Category 1 issues. As we noted when we accepted the referred ruling from the Board, this issue is significant and affects other proceedings.

Upon further consideration of the issue, we find that reversal of CLI-20-3 aligns our interpretation with the plain language of the regulation and with the requirements of the Administrative Procedure Act (APA) and NEPA. Because the rule language is clear on its face, it is unnecessary to resort to other sources to discern its meaning.²⁸ Further, we find that CLI-20-3 relied too heavily on individual statements in the 2013 updates to Part 51 and the GEIS and other agency documents from that timeframe and read them out of context with the remainder of the rule’s history.²⁹ The 2013 updates built on the 1996 rule and 1996 GEIS and must be interpreted in that context.³⁰ Section 51.53 was pro-

²⁷ CLI-20-3, 91 NRC at 159-66 (Baran, C., dissenting); *Exelon Generation Co., LLC* (Peach Bottom Atomic Power Station, Units 2 and 3), CLI-20-11, 92 NRC 335, 348-50 (2020) (Baran, C. and Hanson, C., dissenting in part). Judge Abreu dissented from the majority position in LBP-19-3 that section 51.53(c)(3) applies to subsequent license renewal. LBP-19-3, 89 NRC at 303-15 (Abreu, J., concurring in part and dissenting in part).

²⁸ See *Perez v. Mortg. Bankers Ass’n*, 575 U.S. 92, 104-05 (2015) (quoting *Christensen v. Harris Cty.*, 529 U.S. 576, 588 (2000)).

²⁹ For example, CLI-20-3 references Commission Paper SECY-14-0016, in which the Staff advised us that it “believes the license renewal process and regulations are sound and can support subsequent license renewal; however, the staff has identified several areas that should be modified in the existing rule to allow for a more predictable review process.” “Ongoing Staff Activities to Assess Regulatory Considerations for Power Reactor Subsequent License Renewal,” Commission Paper SECY-14-0016 (Jan. 31, 2014), at 1 (ML14050A306). But none of the Staff’s proposed rule modifications related to the environmental review. The Staff did not recommend updates to Part 51 “because environmental issues can be adequately addressed by the existing GEIS and through future GEIS revisions.” *Id.* at 5. The Commission did not approve the Staff’s recommendation to initiate rulemaking for power reactor subsequent license renewal on non-environmental issues and did not offer any comment on the adequacy of environmental regulations. Staff Requirements — SECY-14-0016 — Ongoing Staff Activities to Assess Regulatory Considerations for Power Reactor Subsequent License Renewal (Aug. 29, 2014) (ML14241A578).

³⁰ CLI-20-3 examined how different Part 51 provisions interacted with one another. CLI-20-3, 91 NRC at 142-44. Section 51.71(d) directs the Staff, when preparing any draft SEIS under section 51.95(c), to “rely on conclusions as amplified by the supporting information in the GEIS or issues designated as Category 1 in appendix B to subpart A of this part.” 10 C.F.R. § 51.71(d). And section 51.95(c)(4) directs the Staff, adjudicatory officers, and the Commission to “integrate the conclusions in the generic environmental impact statement for issues designated as Category 1 with

(Continued)

mulgated through notice-and-comment rulemaking and any amendments to that rule must also occur through notice-and-comment rulemaking.³¹

B. Basis for Our Interpretation of Section 51.53 and the GEIS

Section 51.53(c)(1) applies to “[e]ach applicant for renewal of a license to operate a nuclear power plant under part 54,” and section 51.53(c)(2) includes requirements for the ER that must be submitted by any such applicant.³² Under section 51.53(a), this ER may incorporate by reference information contained in an NRC staff-prepared final GEIS. By contrast, section 51.53(c)(3) narrows the scope of license renewal applicants to which it applies and speaks only to “those applicants seeking an *initial* renewed license and holding an operating license, construction permit, or combined license as of June 30, 1995.”³³ Contrary to the Board’s assertion (and the Commission’s previous determination in CLI-20-3), the regulation is not silent as to whether subsequent license renewal applicants can take advantage of the provisions of section 51.53(c)(3).³⁴ The structure and language of the rule indicate that the provisions of 51.53(c)(1) and (c)(2) apply to all license renewal applicants, including those for subsequent license renewal, but section 51.53(c)(3) only applies to initial license renewal applicants. The fact that the Commission deliberately confined the applicability of section 51.53(c)(3) to initial license renewal applicants (and subsequently declined to change this language, even when editing other parts of the provision through notice-and-comment rulemaking) reflects an intent — on which the public certainly would have been justified in relying — not to relieve subsequent license renewal applicants, and ultimately the NRC Staff, of the obligation to consider Category 1 issues on a plant-specific basis.

We acknowledge that there is language in the regulatory analysis accompanying the 2013 revisions to Part 51 based on the 2013 GEIS suggesting a contrary view of the meaning of section 51.53.³⁵ In the regulatory analysis, the

information developed for those Category 2 issues applicable to the plant under § 51.53(c)(3)(ii) and any new and significant information.” 10 C.F.R. § 51.95(c)(4). These references to the GEIS in sections 51.71 and 51.95, along with section 51.53(c), were added when Part 51 was revised in 1996. As such, and contrary to the analysis in CLI-20-3, they must be read in that context and are applicable to an initial license renewal period. *See* 1991 Proposed Rule, 56 Fed. Reg. at 47,017 (“[T]he part 51 amendments apply to one renewal of the initial license.”).

³¹ *Christensen*, 529 U.S. at 588.

³² 10 C.F.R. § 51.53(c)(1)-(2).

³³ *Id.* § 51.53(c)(3) (emphasis added).

³⁴ *See* LBP-19-3, 89 NRC at 265.

³⁵ *See* “Final Rule: Revisions to Environmental Review for Renewal of Nuclear Power Plant Operating Licenses,” Commission Paper SECY-12-0063 (Apr. 20, 2012) (ML110760045 (package)),
(Continued)

Staff included prospective subsequent license renewal applicants as “affected licensees.”³⁶ But the regulatory analysis is not the regulation and cannot be used to change the plain meaning of the regulation.³⁷

Moreover, we cannot interpret our regulations in a manner that conflicts with our NEPA responsibility. NEPA requires the NRC to discuss the environmental impacts of the proposed action, which is the operation of Turkey Point for an additional twenty years beyond the expiration of its renewed licenses. NRC rules codified the findings of the GEIS and designated certain topics as Category 1 issues that the Staff had considered and evaluated when drafting the GEIS. We cannot retroactively decide that the GEIS covered impacts of subsequent license renewal. As discussed below, the 1996 GEIS indicated that its scope was limited to one period of license renewal. Although there are some ambiguous statements in the text of the 2013 GEIS, these isolated cases of ambiguous text are clearly outweighed by the numerous definitive other statements in the GEIS that the document only examined the environmental impacts of a single, twenty-year license renewal and the lack of statements indicating that the scope of the 2013 GEIS was expanded from the original version. Even if the Staff had intended to address subsequent license renewal in the 2013 GEIS, the occasional ambiguous phrasing did not put the public on notice of such an intention, particularly given the language in section 51.53(c)(3) confining its applicability to initial license renewal applicants.³⁸ To provide a meaningful opportunity for public comment, the agency must adequately describe its intentions to the public.³⁹

Encl. 2 at 25 (ML110760321) (Regulatory Analysis); Applicant’s Surreply to New Arguments Raised in Reply Pleadings (Sept. 20, 2018), at 11-12 (FPL Surreply); NRC Staff’s Response to the Applicant’s Surreply and the Petitioners’ Response, Regarding the Applicability of 10 C.F.R. § 51.53(c)(3) to Subsequent License Renewal Applications (Nov. 2, 2018), at 8-9, 11-12. The Board also notes that some NRC guidance documents discuss license renewal broadly and do not distinguish between initial and subsequent license renewal. See LBP-19-3, 89 NRC at 271 & n.42 (discussing Regulatory Guide 4.2 and “Standard Review Plans for Environmental Reviews for Nuclear Power Plants” (Final Report), NUREG-1555, Supplement 1: Operating License Renewal, rev. 1 (June 2013) (ML13106A246)).

³⁶ Regulatory Analysis at 25.

³⁷ The regulatory analysis is also not the agency’s NEPA analysis, and the reference to subsequent license renewal applicants as affected licensees in the regulatory analysis does not fulfill NEPA’s mandate to disclose the environmental impacts of subsequent license renewal.

³⁸ NEPA obligates an agency “to consider every significant aspect of the environmental impact of a proposed action,” and to “inform the public that it has indeed considered environmental concerns in its decisionmaking process.” *Baltimore Gas & Elec. Co. v. Nat. Res. Def. Council, Inc.*, 462 U.S. 87, 97 (1983).

³⁹ See 40 C.F.R. § 1502.1 (“[The EIS] shall provide full and fair discussion of significant environmental impacts and shall inform decisionmakers and the public of reasonable alternatives that would avoid or minimize adverse impacts or enhance the quality of the human environment.”).

1. Part 51

In the statements of consideration (SOC) to the 1991 proposed rule for the Part 51 revisions, the Commission explicitly described the rule as applying only to initial renewals and not subsequent license renewals, in contrast with Part 54.⁴⁰ The 1996 final rule made no change to this representation.⁴¹ The SOC for the 1996 final rule stated that the final rule “is consistent with the generic approach and scope of the proposed” rule.⁴² Most importantly, the 1996 final rule retained the restriction that only “applicants seeking an *initial* renewal license” need not consider alternatives for reducing adverse environmental impacts for Category 1 issues in Table B-1.⁴³ This restriction remains in the current regulation.

In 2009, the NRC published its proposed rule amending Part 51, including updating Table B-1 and “other related provisions in Part 51 (e.g., § 51.53(c)(3)).”⁴⁴ The NRC proposed revisions to section 51.53(c)(3), but it did not seek to change the phrase “for those applicants seeking an initial renewed license.”⁴⁵ Neither the proposed rule nor the 2013 final rule indicated an expansion in the temporal scope of the 2013 GEIS to account for subsequent license renewal. In fact, subsequent license renewal is not mentioned at all.

FPL argued to the Board that the NRC’s intent to review and update the GEIS and Table B-1 on a ten-year cycle does not make sense if their applicability was limited to initial license renewals.⁴⁶ We disagree. Many reactors could have submitted applications for initial license renewal ten years or more after

⁴⁰ Environmental Review for Renewal of Operating Licenses; Proposed Rule, 56 Fed. Reg. 47,016, 47,017 (Sept. 17, 1991) (“The part 54 rule could be applied to multiple renewals of an operating license for various increments. However, the part 51 amendments apply to one renewal of the initial license for up to 20 years beyond the expiration of the initial license.”) (1991 Proposed Rule); *see also id.* at 47,020 (The GEIS will “characterize the nature and magnitude of impacts and other issues that will result from the refurbishments necessary for license renewal and the potential environmental impacts of operating plants for 20 years beyond their current 40-year licensing limit.”).

⁴¹ *See* 1996 Final Rule, 61 Fed. Reg. at 28,468-69 (summarizing changes to the rule).

⁴² *Id.* at 28,468.

⁴³ *Id.* at 28,487 (emphasis added). When section 51.53 was modified in 2007 to clarify its applicability to combined license applications, there was also a slight phrasal change from “those applicants seeking an initial *renewal* license” to “those applicants seeking an initial *renewed* license.” *Compare id. with* Licenses, Certifications, and Approvals for Nuclear Power Plants; Final Rule, 72 Fed. Reg. 49,352, 49,513 (Aug. 28, 2007) (emphasis added). The 2007 amendments further support the plain language interpretation of the rule — if “initial” was not intended to be a restriction, the NRC had an opportunity to remove it while it was already revising the same phrase in 51.53(c)(3).

⁴⁴ Revisions to Environmental Review for Renewal of Nuclear Power Plant Operating Licenses; Proposed Rule, 74 Fed. Reg. 38,117, 38,117 (July 31, 2009).

⁴⁵ *See id.* at 38,128, 38,132. In addition, the section-by-section analysis in the 2013 final rule used the phrase “applicants seeking an initial license renewal,” similar to the phrase used in the rule itself — “applicants seeking an initial renewed license.” 2013 Final Rule, 78 Fed. Reg. at 37,312.

⁴⁶ FPL Surreply at 6.

the Part 51 revisions were finalized in 1996. In fact, plants at thirty-three sites applied for initial license renewals in 2006 or later, with the most recent submission of a license renewal application in 2017 for River Bend Station, Unit 1.⁴⁷ Therefore, updating the GEIS and Table B-1 on a ten-year cycle is consistent with the regulatory language and has ensured that the agency relies on current information when preparing supplemental EISs (SEISs) for initial license renewal applications submitted in 2006 and beyond.

2. *The License Renewal GEISs*

Neither the original 1996 GEIS nor the revised 2013 GEIS analyzed the environmental impacts of subsequent license renewal periods. The 1996 GEIS stated it “examines how [the currently operating commercial nuclear power] plants and their interactions with the environment would change if such plants were allowed to operate (under the proposed license renewal regulation 10 CFR Part 54) for a maximum of 20 years past the term of the original plant license of 40 years.”⁴⁸ The 1996 GEIS also contained a prototypic license renewal schedule, which contemplated an initial license and a single, renewed license: “The new license would go into effect at that point, covering the balance of the original 40-year term, as well as the additional 20-year term.”⁴⁹ There was no mention of a potential subsequent license renewal term.

The 2013 GEIS contained language indicating its scope was limited to an initial period of license renewal. For example, Appendix E on postulated accidents stated the following:

Since the NRC’s understanding of severe accident risk has evolved since issuance of the 1996 GEIS, this appendix assesses more recent information on severe accidents that might alter the conclusions in Chapter 5 of the 1996 GEIS. This revision considers how these developments would affect the conclusions in the 1996 GEIS and provides comparative data where appropriate. This revision does not attempt to provide new quantitative estimates of severe accident impacts. In addition, *the revision only covers one initial license renewal period for each plant (as did the 1996 GEIS)*. Thus, the population projections, meteorology, and exposure indices used in the 1996 GEIS are assumed to remain unchanged for purposes of this analysis.⁵⁰

⁴⁷ NRC, Status of Initial License Renewal Applications and Industry Initiatives, <https://www.nrc.gov/reactors/operating/licensing/renewal/applications.html> (last visited Feb. 2, 2022).

⁴⁸ 1996 GEIS at 2-1.

⁴⁹ *Id.* at 2-36. This sixty-year schedule is supported by additional information in Appendix B to the 1996 GEIS, where the Staff also assumed a total plant life of sixty years. *Id.* at B-52.

⁵⁰ *Id.* at E-2 (emphasis added).

This statement limits the scope of the analysis for this topic in both the 1996 GEIS and the 2013 GEIS. Moreover, there is no technical basis in the 1996 GEIS or the 2013 GEIS upon which to conclude that operational years sixty through eighty would have the same environmental impacts as operational years forty through sixty.

If the Staff intended to change the scope of the 2013 GEIS to include subsequent license renewal, when previous versions of the GEIS did not include this timeframe (and the limiting language set forth in section 51.53(c)(3) remained unchanged), then in order to comply with NEPA and the APA this should have been clearly communicated to the public at the beginning of the updating process. The NRC cannot require members of the public to parse language in a regulatory analysis or glossary to discern that the agency is making a major shift in the scope of an EIS and rulemaking; this change must be clearly communicated to allow for proper public participation.

C. Effect of Our Decision

Administrative litigation before our agency has been pending in the *Turkey Point* proceeding since the application for subsequent license renewal was filed.⁵¹ Consequently, FPL was aware its licenses were subject to modification, suspension, or revocation as a result of the adjudicatory process.

The interpretation we apply today is consistent with the intent and text of NEPA and the APA, as well as judicial interpretations of those laws. This decision aligns the agency interpretation of section 51.53 with the plain language of the regulation.

We conclude that the Staff did not conduct an adequate NEPA analysis before issuing FPL licenses for the subsequent license renewal period.⁵² While FPL's subsequently renewed licenses became immediately effective upon issuance,⁵³ the environmental analysis associated with the previous licenses analyzed the impacts of operation until 2032 and 2033 for Units 3 and 4, respectively. We conclude that it is appropriate for FPL to maintain its current subsequently renewed licenses, but with shortened terms to match the end dates of the previous licenses (i.e., July 19, 2032, and April 10, 2033, for Units 3 and 4, respectively) until completion of the NEPA analysis. Accordingly, we direct the Staff to amend the licenses to this effect. Given the timeframe involved, we fully expect that the Staff will be able to evaluate the environmental impacts prior to FPL

⁵¹ We are also issuing a decision today in *Peach Bottom* to provide direction to those parties.

⁵² The Staff issued the licenses, consistent with NRC regulations, after completing its review of FPL's application, which included the issuance of a draft plant-specific SEIS for public comment, a final plant-specific SEIS, and a record of decision.

⁵³ See 10 C.F.R. § 54.31(c).

entering the subsequent license renewal period. While we recognize that FPL and other subsequent license renewal applicants have relied on CLI-20-3 and prior agency statements, our holding today will ultimately promote the agency's goals of clear communication with the public and transparency in our actions.

Consistent with this order, we will separately direct the Staff to update the GEIS to cure the NEPA deficiency by addressing the subsequent license renewal period.⁵⁴ We will also issue an order on the dockets of all pending subsequent license renewal proceedings to address the pending adjudicatory matters.

In the instant matter, we direct FPL, the Staff, and the Intervenor to provide their views on any practical effects of the current licenses remaining in place with the modified end dates as well as any practical effects if the previous licenses were reinstated. After considering briefing on the issue, we will issue a subsequent order to provide additional direction, if any, to the parties regarding the status of the licenses.

III. CONCLUSION

For the reasons described above, we reverse CLI-20-3. We leave the licenses in place and *direct* the Staff to modify the expiration dates for Units 3 and 4 to 2032 and 2033, respectively. We further *direct* the parties to submit their views on the practical effects of (1) the subsequent renewed licenses continuing in place and (2) the previous licenses being reinstated by **March 21, 2022**. The parties' responses are due by **March 31, 2022**.

IT IS SO ORDERED.

For the Commission

Annette L. Vietti-Cook
Secretary of the Commission

Dated at Rockville, Maryland,
this 24th day of February 2022

⁵⁴ We provide our direction for addressing the NEPA deficiency discussed in this order in Staff Requirements — SECY-21-0066 — “Rulemaking Plan for Renewing Nuclear Power Plant Operating Licenses — Environmental Review (RIN 3150-AK32; NRC-2018-0296)” (Feb. 24, 2022) (ML22053A308). Because we have determined that the GEIS did not cover the subsequent license renewal period, the Staff cannot exclusively rely on the GEIS for Category 1 issues until environmental impacts from the subsequent license renewal term are evaluated. However, the Staff may still use the current GEIS as necessary, through tiering and incorporation by reference, in its development of subsequent license renewal NEPA documents.

Commissioner Wright, Dissenting in Part

I disagree with my colleagues' rationale and holding reversing our previous decision in CLI-20-3. I have serious concerns about the message this action sends to the public, applicants, licensees, and other stakeholders. Therefore, I dissent from the decision, with the narrow exception of the status of the licenses and the path forward to resolve the purported NEPA deficiency.

I continue to agree with our previous interpretation in CLI-20-3. In my view, based on regulatory ambiguity, it is appropriate to read the language of Part 51, the regulatory history, regulatory analysis, and agency guidance holistically.¹ This holistic analysis supports the view that 10 C.F.R. § 51.53(c)(3) applies to both initial and subsequent license renewal applications.

I view the majority's decision to reverse direction now as arbitrary and inconsistent with the NRC's Principles of Good Regulation. The majority's decision is arbitrary because my colleagues do not base the reversal on any new information or arguments beyond what we previously considered and rejected in issuing CLI-20-3. The reversal is also contrary to the NRC's Principles of Good Regulation, particularly the principles of Openness, Clarity, and Reliability. For the NRC to function as an effective and credible regulator, our stakeholders must be able to rely on our statements and positions. Such reliance is impossible when we may change our position at any time, based on nothing other than the information and arguments previously considered and rejected.

Moreover, changing course in this proceeding under these circumstances short-circuits our agency's well-established and predictable adjudicatory process, set forth in the Atomic Energy Act of 1954, as amended and detailed in our regulations.² The Atomic Safety and Licensing Board considered the specific issues of this case and held that the Generic Environmental Impact Statement for License Renewal of Nuclear Power Plants (GEIS) and regulation applied to subsequent license renewal.³ We upheld that decision after considering all arguments and positions.⁴ In fact, there was a previous challenge to CLI-20-3 in federal court,⁵ and the agency would comply with any direction, remand, or

¹ CLI-20-3, 91 NRC 133, 141, 142-44, 146, 146-47, 150-51 (2020).

² See 42 U.S.C. § 2239; 10 C.F.R. Part 2.

³ LBP-19-3, 89 NRC 245, 272-73 (2019).

⁴ CLI-20-3, 91 NRC at 155.

⁵ See Petition for Review, Friends of the Earth, Natural Resources Defense Council, Inc., and Miami Waterkeeper v. U.S. Nuclear Regulatory Commission and United States of America, No. 20-1026 (D.C. Cir. Jan. 31, 2020).

adverse decision resulting from such a challenge.⁶ Here, however, the majority is simply changing position arbitrarily.

The majority also asserts that their reversal of CLI-20-3 promotes clear communication and transparent decision-making.⁷ I disagree and find that the reversal directly contravenes those goals. We previously clearly communicated our position on this matter in CLI-20-3. My colleagues note that “[a]gencies may change positions and interpretations, so long as they explain their reasoning for doing so.”⁸ While I agree in principle, the majority has not explained its reasoning here; rather, the majority is reversing CLI-20-3 based on information previously considered and rejected. In my view, that does not provide a sufficient basis for reversal.

While I strongly disagree with the substantive decision and the majority’s rationale for reaching that decision, I join with the majority on the limited issue of the path forward. Given the majority’s reversal, I agree that an equitable and efficient solution is to leave in place the subsequently renewed licenses while the Staff works to update its environmental analysis to comply with the majority’s new holding. This approach imposes the least impact possible on stakeholders that understandably relied on our previous statements and CLI-20-3 and appropriately places the burden of curing the purported NEPA deficiency on the agency. Leaving the licenses in place also avoids jeopardizing any safety or environmental improvements that FPL may have put in place to comply with subsequently renewed licenses. Consistent with our separate direction, I expect that the Staff will work to update the GEIS as expeditiously as possible.

⁶ Similarly, if we were to consider new information indicating that a change in direction was necessary, we could certainly take appropriate action after considering and accounting for that new information.

⁷ Majority Opinion at p. 37.

⁸ *Id.* at p. 30.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Christopher T. Hanson, Chairman
Jeff Baran
David A. Wright

In the Matter of

DUKE ENERGY CAROLINAS, LLC
(Oconee Nuclear Station,
Units 1, 2, and 3)

Docket Nos. 50-269-SLR
50-270-SLR
50-287-SLR

EXELON GENERATION COMPANY, LLC
(Peach Bottom Atomic Power
Station, Units 2 and 3)

Docket Nos. 50-277-SLR
50-278-SLR

FLORIDA POWER & LIGHT
COMPANY
(Turkey Point Nuclear Generating
Units 3 and 4)

Docket Nos. 50-250-SLR
50-251-SLR

NEXTERA ENERGY POINT
BEACH, LLC
(Point Beach Nuclear Plant,
Units 1 and 2)

Docket Nos. 50-266-SLR
50-301-SLR

VIRGINIA ELECTRIC AND POWER
COMPANY
(North Anna Power Station,
Units 1 and 2)

Docket Nos. 50-338-SLR
50-339-SLR

February 24, 2022

MEMORANDUM AND ORDER

We issued CLI-22-2 today,¹ which set forth the rationale for our conclusion that 10 C.F.R. § 51.53(c)(3) only applies to an initial license renewal applicant's preparation of an environmental report and that the Generic Environmental Impact Statement for License Renewal of Nuclear Plants (GEIS)² did not address subsequent license renewal. In this order, we provide direction for open subsequent license renewal proceedings.

In recognition of the need to correct this National Environmental Policy Act (NEPA) deficiency, we will not issue any further licenses for subsequent renewal terms until the NRC staff (Staff) has completed an adequate NEPA review for each application. Licensing reviews should continue to move forward, and in adjudicatory matters, any contentions that do not challenge the contents of the GEIS or site-specific environmental impact statement should proceed.³ With respect to *Turkey Point* and *Peach Bottom*, where the Staff has already issued subsequently renewed licenses, we issued orders today to address the status of the licenses.

Separately, we are directing the Staff to review and update the 2013 GEIS so that it covers operation during the subsequent license renewal period.⁴ We believe the most efficient way to proceed is to direct the Staff to review and update the 2013 GEIS, then take appropriate action with respect to the pending subsequent license renewal applications to ensure that the environmental impacts for the period of subsequent license renewal are considered. Nevertheless, we understand that an applicant may not wish to wait for the completion of the generic analysis and associated rulemaking. In that case, the applicant may submit a revised environmental report providing information on environmental impacts during the subsequent license renewal period. In such a case, petitioners or intervenors will be given an opportunity to submit new or amended

¹ *Florida Power & Light Co.* (Turkey Point Nuclear Generating Units 3 and 4), CLI-22-2, 95 NRC 26 (2022).

² "Generic Environmental Impact Statement for License Renewal of Nuclear Plants" (Final Report), NUREG-1437, rev. 1, vols. 1-3 (June 2013) (ADAMS accession nos. ML13106A241, ML13106A242, ML13106A244) (2013 GEIS).

³ We will issue a separate order ruling on two of the three contentions on appeal in the *Point Beach* proceeding. We will address Contention 2, which asserts a violation of a safety regulation. We will also address Contention 1, which is a NEPA-based contention but raises a legal issue separate from the adequacy of the contents of the GEIS or site-specific environmental impact statement.

⁴ Staff Requirements — "SECY-21-0066 — Rulemaking Plan for Renewing Nuclear Power Plant Operating Licenses — Environmental Review (RIN 3150-AK32; NRC-2018-0296)" (Feb. 24, 2022) (ML22053A308).

contentions based on new information in the revised site-specific environmental impact statement.

As a general matter, in CLI-22-2 the Commission found that the 2013 GEIS did not consider the impacts from operations during the subsequent license renewal period and applicants for subsequent license renewal must evaluate Category 1 impacts in their environmental reports. Accordingly, these impacts must be addressed on a site-specific basis in the Staff's site-specific environmental impact statements. Because the applicants in the above-captioned proceedings have all submitted environmental reports, and the Staff can request additional information if needed during the environmental review process, we do not find it necessary for these applicants to submit revised environmental reports.

We dismiss the environmental contentions and motions pending in the above-captioned proceedings and take *sua sponte* review under 10 C.F.R. § 2.341(a)(2) of the Board's decision, LBP-22-1,⁵ in *Oconee* and dismiss all three proposed environmental contentions. We will provide an opportunity to file contentions after the NRC (1) updates the GEIS to address environmental impacts during the subsequent license renewal term and (2) completes the site-specific environmental impact statements.⁶ All of the pending matters include a challenge to the sufficiency of the Staff's environmental review. Through the orders we issue today, we acknowledge that the environmental review is incomplete in these cases and are separately directing the Staff to cure the NEPA deficiencies. The public, including the intervenors and petitioners in the above-captioned proceedings, and applicants will be afforded an opportunity to comment on the upcoming revision to the GEIS and the associated rulemaking through the normal agency processes.⁷ The public will also have an opportunity to comment during the development of the site-specific environmental impact statements. After each site-specific review is complete, a new notice of opportunity for hearing — limited to contentions based on new information in the site-specific environmental impact statement — will be issued. This approach will not require intervenors to meet heightened pleading standards in 10 C.F.R. § 2.309(c) for newly filed or refiled contentions.⁸

⁵ *Duke Energy Carolinas, LLC* (Oconee Nuclear Station, Units 1, 2, and 3), LBP-22-1, 95 NRC 49 (2022).

⁶ While not all of the pending contentions directly challenge the scope of the 2013 GEIS, because the NRC will be updating the GEIS and site-specific environmental analyses, it would be inefficient to continue litigating any of the pending environmental contentions based on environmental information that may change.

⁷ See generally 10 C.F.R. § 51.73 (requiring a comment period for draft EISs and supplemental EISs).

⁸ Petitioners will be subject to the general requirements set out in 10 C.F.R. § 2.309(a) for intervention. We expect that petitioners would update references, as appropriate, in any refiled contentions.

Accordingly, we dismiss without prejudice the motions, petitions, and appeals pending before us in the *Peach Bottom*, *Turkey Point*, and *North Anna* proceedings. We take *sua sponte* review of the Board's decision, LBP-22-1, in *Oconee* and dismiss without prejudice the three environmental proposed contentions. We terminate the *North Anna* and *Oconee* proceedings and leave open the *Peach Bottom* and *Turkey Point* proceedings so that we may determine the status of the licenses. We dismiss Contention 3 in *Point Beach* without prejudice and will issue a separate order ruling on the appeal of Contentions 1 and 2 in that proceeding.

IT IS SO ORDERED.

For the Commission

Annette L. Vietti-Cook
Secretary of the Commission

Dated at Rockville, Maryland,
this 24th day of February 2022.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Christopher T. Hanson, Chairman
Jeff Baran
David A. Wright

In the Matter of

EXELON GENERATION COMPANY, LLC
(Peach Bottom Atomic Power
Station, Units 2 and 3)

Docket Nos. 50-277-SLR
50-278-SLR
February 24, 2022

MEMORANDUM AND ORDER

In considering the pending motions of Beyond Nuclear, Inc. for leave to file a new contention and to reopen the record, we have the opportunity to reconsider the Commission's decision in CLI-20-11, which applied the reasoning in CLI-20-3 in the *Turkey Point* proceeding to this case.¹ Today, we reversed CLI-20-3, which held that 10 C.F.R. § 51.53(c)(3) applied to a subsequent license renewal applicant's preparation of an environmental report,² and now reverse the portion of CLI-20-11 related to Contention 2A, in which Beyond Nuclear claimed that the environmental report failed to address accident risks posed by aging reactor equipment during a second license renewal term.

¹ See Beyond Nuclear, Inc.'s Motion for Leave to File New Contention Based on Draft Supplement 10 to Generic Environmental Impact Statement for Subsequent License Renewal of Peach Bottom Operating License (Sept. 3, 2019; corrected Sept. 5, 2019); Beyond Nuclear, Inc.'s Motion to Reopen the Record For Purposes of Considering and Admitting a New Contention Based on Draft Supplement 10 to Generic Environmental Impact Statement For Subsequent License Renewal of Peach Bottom Operating License and Request For Consideration of Some Elements of the Motion Out of Time (Sept. 23, 2019); CLI-20-11, 92 NRC 335 (2020); *Florida Power & Light Co.* (Turkey Point Nuclear Generating Units 3 and 4), CLI-20-3, 91 NRC 133 (2020).

² See *Florida Power & Light Co.* (Turkey Point Nuclear Generating Units 3 and 4), CLI-22-2, 95 NRC 26 (2022).

I. BACKGROUND

The Atomic Safety and Licensing Board (Board) terminated the proceeding for the subsequent license renewal application of Exelon Generation Company, LLC,³ for Peach Bottom Atomic Power Station, Units 2 and 3.⁴ Beyond Nuclear appealed, seeking reversal of the Board's decision on Contention 2, which challenged the adequacy of Exelon's environmental report.⁵ In CLI-20-11, the Commission affirmed the Board's decision and, with respect to Contention 2A, relied, in large part, on the decision in CLI-20-3.⁶ After the NRC staff (Staff) issued its draft supplement to the generic environmental impact statement for license renewal for Peach Bottom,⁷ Beyond Nuclear filed motions for leave to file a new contention and to reopen the record in the proceeding.

II. DISCUSSION

In today's related decision in the *Turkey Point* proceeding, CLI-22-2, we held that 10 C.F.R. § 51.53(c)(3) only applies to an initial license renewal applicant's preparation of an environmental report and that the Generic Environmental Impact Statement for License Renewal of Nuclear Plants⁸ did not address subsequent license renewal. For the reasons explained in CLI-22-2, we conclude that the Staff did not conduct an adequate NEPA analysis before issuing Exelon licenses for the subsequent license renewal period for Peach Bottom.⁹

³ On February 1, 2022, Exelon Generation Company, LLC completed a license transfer and corporate reorganization. Peach Bottom's parent company is now Constellation Energy Generation, LLC, and it is no longer affiliated with Exelon Corporation. See *Exelon Generation Co., LLC* (Braidwood Station, Units 1 and 2), CLI-22-1, 95 NRC 1, 5 n.11 (2022).

⁴ LBP-19-5, 89 NRC 483, 506 (2019).

⁵ CLI-20-11, 92 NRC at 336-37. The Board evaluated Contention 2 as three separate environmental challenges and designated them as Contentions 2A, 2B, and 2C. *Id.* at 337.

⁶ *Id.* at 343, 347. Commissioner Baran and Commissioner Hanson dissented with respect to Contention 2A, "conclud[ing] that applying 10 C.F.R. § 51.53(c)(3) to subsequent license renewals is at odds with the regulation and the agency's obligations under [the National Environmental Policy Act (NEPA)]." *Id.* at 348.

⁷ "Generic Environmental Impact Statement for License Renewal of Nuclear Plants, Supplement 10, Second Renewal, Regarding the Subsequent License Renewal for Peach Bottom Atomic Power Station Units 2 and 3" (Draft Report for Comment), NUREG-1437, Supplement 10 (July 2019) (ADAMS accession no. ML19210D453).

⁸ "Generic Environmental Impact Statement for License Renewal of Nuclear Plants" (Final Report), NUREG-1437, rev. 1, vols. 1-3 (June 2013) (ML13106A241, ML13106A242, ML13106A244) (2013 GEIS).

⁹ Because the 2013 GEIS did not cover the period of subsequent license renewal, Exelon cannot solely rely on incorporation by reference of the 2013 GEIS to address Category 1 issues.

As we have motions pending before us and the proceeding remains open,¹⁰ we can modify, suspend, or revoke Exelon's licenses, as appropriate.¹¹

While Exelon's subsequently renewed licenses became immediately effective upon issuance,¹² the environmental analysis associated with the previous licenses analyzed the impacts of operating until 2033 and 2034 for Units 2 and 3, respectively. We conclude that it is appropriate for Exelon to maintain its current subsequently renewed licenses at this time, but with shortened terms to match the end dates of the previous licenses (i.e., August 8, 2033, and July 2, 2034, for Units 2 and 3, respectively) until completion of the NEPA analysis. Accordingly, we direct the Staff to amend the licenses to this effect.

Consistent with this order, we will also separately direct the Staff to update the GEIS to cure the NEPA deficiency by addressing the subsequent license renewal period.¹³ Given the timeframe involved, we fully expect that the Staff will be able to evaluate the environmental impacts prior to Exelon entering the subsequent license renewal period.

III. CONCLUSION

For the reasons described above, we reverse the portion of CLI-20-11 related to Contention 2A. We leave the licenses in place and *direct* the Staff to modify the expiration dates for Units 2 and 3 to 2033 and 2034, respectively. We further *direct* the parties to submit their views on the practical effects of (1) the subsequent renewed licenses continuing in place and (2) the previous licenses being reinstated by **March 21, 2022**. The parties' responses are due by **March 31, 2022**. After considering briefing on the issue, we will issue a subsequent order to provide additional direction, if any, to the parties regarding the status of the licenses. We address the pending motions in a separate order issued today on the dockets of all subsequent license renewal proceedings.¹⁴

¹⁰ The hearing record, however, closed after the Board resolved Contentions 1 and 2. *See Virginia Electric and Power Co.* (North Anna Power Station, Unit 3), CLI-12-14, 75 NRC 692, 700 (2012).

¹¹ *AmerGen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-08-13, 67 NRC 396, 400 (2008) ("A license renewal may be set aside (or appropriately conditioned) even after it has been issued, upon subsequent administrative or judicial review.").

¹² *See* 10 C.F.R. § 54.31(c).

¹³ We provide our direction for addressing the NEPA deficiency discussed in this order in Staff Requirements — "SECY-21-0066 — Rulemaking Plan for Renewing Nuclear Power Plant Operating Licenses — Environmental Review (RIN 3150-AK32; NRC-2018-0296)" (Feb. 24, 2022) (ML22053A308).

¹⁴ *Duke Energy Carolinas, LLC* (Oconee Nuclear Station, Units 1, 2, and 3), CLI-22-3, 95 NRC 40 (2022).

IT IS SO ORDERED.

For the Commission

Annette L. Vietti-Cook
Secretary of the Commission

Dated at Rockville, Maryland,
this 24th day of July 2022.

Commissioner Wright, Dissenting in Part

I disagree with my colleagues' rationale and holding reversing our previous decision in CLI-20-3. As discussed in my partial dissent to *Turkey Point*, I continue to agree with our previous interpretation in CLI-20-3. Moreover, I view the majority's decision to reverse direction now as arbitrary, inconsistent with the NRC's Principles of Good Regulation, and contrary to the agency's goals of clear communication and transparent decision-making. This reversal, based only on information and arguments previously considered and rejected, undermines the NRC's role as an effective and credible regulator. The majority's decision makes it impossible for stakeholders to rely on our statements and positions. It also short-circuits the agency's well-established and predictable adjudicatory process.

But here, as in *Turkey Point*, while I strongly disagree with the majority's approach procedurally and substantively, I join my colleagues on the limited issue of the status of the licenses and the path forward. Given the majority's decision, I agree that an equitable and efficient solution is to leave in place the subsequently renewed licenses while the Staff works to update its environmental analysis to comply with the majority's new holding.¹ I expect that the Staff will work to update the GEIS as expeditiously as possible.

¹This approach imposes the least impact possible on stakeholders that understandably relied on our previous statements and CLI-20-3 and appropriately places the burden of curing the purported NEPA deficiency on the agency. Leaving the licenses in place also avoids jeopardizing any safety or environmental improvements that the licensee may have put in place to comply with subsequently renewed licenses.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

G. Paul Bollwerk, III, Chairman
Nicholas G. Trikouros
Dr. Gary S. Arnold

In the Matter of

Docket Nos. 50-269-SLR
50-270-SLR
50-287-SLR
(ASLBP No. 22-973-01-SLR-BD01)

DUKE ENERGY CAROLINAS, LLC
(Oconee Nuclear Station,
Units 1, 2, and 3)

February 11, 2022

In this proceeding concerning a subsequent license renewal (SLR) application by Duke Energy Carolinas, LLC (Duke) for the Oconee Nuclear Station, Units 1, 2, and 3, while concluding that petitioners Beyond Nuclear, Inc., and Sierra Club, Inc. (collectively Petitioners) have established their standing to intervene, the Licensing Board denies their hearing request, determining with regard to their three contentions that (1) Petitioners' Contention 1 asserting 10 C.F.R. § 51.53(c)(3)'s exclusion of 10 C.F.R. Part 51, subpart A, appendix B, Table B-1 Category 1 issues from NEPA consideration does not apply in an SLR proceeding fails to fulfill the 10 C.F.R. § 2.309(f)(1) contention admissibility standards; and (2) Petitioners' 10 C.F.R. § 2.335 waiver request to permit consideration in this adjudication of their Contentions 2 and 3 challenging Duke's Environmental Report (ER) as deficient in its discussion of dam-failure impacts, including its assessment of associated severe accident mitigation alternatives (SAMAs), does not meet the requirements for obtaining a waiver.

**LICENSE APPLICATION: LICENSE RENEWAL
(ENVIRONMENTAL INFORMATION)**

NEPA: GENERIC ISSUES (LICENSE RENEWAL)

An application for either an initial or a subsequent renewal of the 10 C.F.R. Part 50 operating license for an existing nuclear power plant is governed by the provisions of 10 C.F.R. Part 54. The environmental contents of such an application are described in section 54.23, which provides that the application must “include a supplement to the [ER] that complies with the requirements of subpart A of 10 CFR Part 51.” 10 C.F.R. § 54.23. The information required for such a supplement is outlined in section 51.53(c), which also provides in paragraph (3)(i) that “[t]he [ER] for the operating license renewal stage is not required to contain analyses of the environmental impacts of the license renewal issues identified as Category 1 issues in appendix B to subpart A of this part.” *Id.* § 51.53(c)(3)(i). Other Part 51 provisions extend this exemption for Category 1 issues to the Staff’s draft and final supplements to the agency’s generic environmental impact statement (GEIS) for license renewal. *See id.* §§ 51.71(d), 51.95(c)(1).

NEPA: GENERIC ISSUES (LICENSE RENEWAL)

As appendix B to subpart A of Part 51 makes clear, “[t]he Commission has assessed the environmental impacts associated with granting a renewed operating license for a nuclear power plant . . . [and] Table B-1 summarizes the Commission’s findings on the scope and magnitude of environmental impacts” that NEPA requires to be addressed. *Id.* pt. 51, subpart A, app. B. Table B-1, in turn, indicates that the “[d]ata supporting this table are contained in NUREG-1437, Revision 1, ‘[GEIS] for License Renewal of Nuclear Plants (June 2013)’” and that for Category 1 items, “[t]he generic analysis of the issue may be adopted in each plant-specific review.” *Id.* tbl. B-1 nn.1-2.

NEPA: GENERIC ISSUES (LICENSE RENEWAL)

**RULES OF PRACTICE: CHALLENGE TO COMMISSION
REGULATIONS; WAIVER OF RULE OR REGULATION**

Commission caselaw establishes that an adjudicatory challenge based on an applicant’s failure to deal appropriately with a Category 1 item constitutes an attack on an agency rule, making a section 2.335(b) waiver the sole vehicle for raising such an issue in an adjudication. *See Entergy Nuclear Vermont Yankee, LLC, and Entergy Nuclear Operations, Inc.* (Vermont Yankee Nuclear Power Station), CLI-07-3, 65 NRC 13, 20 (2007) (citing *Florida Power & Light Co.*

(Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 11-13 (2001)).

**NEPA: GENERIC ISSUES (LICENSE RENEWAL); SEVERE
ACCIDENT MITIGATION ALTERNATIVES (SAMAs)**

RULES OF PRACTICE: WAIVER OF RULE OR REGULATION

While a Table B-1 Category 2 site-specific issue generally would be subject to adjudicatory challenge in a license renewal proceeding, in instances in which a facility-specific SAMA analysis has been considered in an environmental impact statement, under section 51.53(c)(3)(ii)(L) a license renewal contention regarding the adequacy of a previously considered SAMA cannot be litigated absent a section 2.335(b) waiver. *Exelon Generation Co., LLC* (Limerick Generating Station, Units 1 and 2), CLI-13-7, 78 NRC 199, 211-12 (2013) (indicating section 51.53(c)(3)(ii)(L) affords the “functional equivalent” of the Category 1 issue preclusion established by section 51.53(c)(3)(i)), *petition for review denied sub nom. NRDC v. NRC*, 823 F.3d 641 (D.C. Cir. 2016).

**RULES OF PRACTICE: STANDING TO INTERVENE
(REQUIREMENT FOR INDEPENDENT PRESIDING OFFICER
DETERMINATION)**

Even when a petitioner’s standing has not been contested, an independent Board determination is required about whether it has fulfilled the requirements to establish standing to intervene in a proceeding. *See* 10 C.F.R. § 2.309(d)(2); *see also Exelon Generation Co., LLC* (Peach Bottom Atomic Power Station, Units 2 and 3), LBP-19-5, 89 NRC 483, 491 (2019), *aff’d on other grounds*, CLI-20-11, 92 NRC 335 (2020).

RULES OF PRACTICE: STANDING (REPRESENTATIONAL)

As the Commission noted recently, to establish representational standing, in addition to providing the information required by 10 C.F.R. § 2.309(d)(1) to identify the organization seeking to intervene and its interest in the proceeding as it is seeking to represent the interests of its members, the organization also “must show that at least one member has standing and has authorized the organization to represent [the member] and to request a hearing on [the member’s] behalf.” *Southern Nuclear Operating Co.* (Vogtle Electric Generating Plant, Unit 3), CLI-20-6, 91 NRC 225, 237-38 (2020).

RULES OF PRACTICE: STANDING (PROXIMITY PRESUMPTION)

Recently applied by several licensing boards in SLR proceedings, the proximity presumption excuses a petitioner otherwise meeting the requirements for standing from having to make a specific showing of injury in fact so long as that petitioner resides, works, or otherwise has regular contacts within a 50-mile radius of the reactor facility in question. *See Virginia Electric and Power Co.* (North Anna Power Station, Units 1 and 2), LBP-21-4, 93 NRC 179, 196-97 (2021), *appeal pending*; *Peach Bottom*, LBP-19-5, 89 NRC at 490-91; *Florida Power & Light Co.* (Turkey Point Nuclear Generating Units 3 and 4), LBP-19-3, 89 NRC 245, 258-59 (2019), *appeal dismissed and referred ruling aff'd*, CLI-20-3, 91 NRC 133 (2020).

RULES OF PRACTICE: CONTENTIONS (ADMISSIBILITY)

When a hearing requestor seeks admission of a contention submitted as part of a timely intervention petition, that contention must satisfy the six admissibility factors set forth in section 2.309(f)(1). Those factors require the proponent of a contention to

- (i) Provide a specific statement of the issue of law or fact to be raised or controverted . . . ;
- (ii) Provide a brief explanation of the basis for the contention;
- (iii) Demonstrate that the issue raised in the contention is within the scope of the proceeding;
- (iv) Demonstrate that the issue raised in the contention is material to the findings the NRC must make to support the action that is involved in the proceeding;
- (v) Provide a concise statement of the alleged facts or expert opinions which support the requestor's/petitioner's position on the issue and on which the petitioner intends to rely at hearing . . . ; [and]
- (vi) . . . [P]rovide sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact.

10 C.F.R. § 2.309(f)(1)(i)-(vi). These six criteria aim to “focus litigation on concrete issues and result in a clearer and more focused record for decision.” Changes to Adjudicatory Process, 69 Fed. Reg. 2182, 2202 (Jan. 14, 2004).

RULES OF PRACTICE: CONTENTIONS (BURDEN TO SATISFY ADMISSIBILITY CRITERIA)

The petitioner bears the burden to satisfy each of the admissibility criteria, *see Entergy Nuclear Operations, Inc.* (Palisades Nuclear Plant), CLI-15-23, 82 NRC 321, 329 (2015) (“[I]t is Petitioners’ responsibility, not the Board’s, to

formulate contentions and to provide ‘the necessary information to satisfy the basis requirement’ for admission.” (quoting *Statement of Policy on Conduct of Adjudicatory Proceedings*, CLI-98-12, 48 NRC 18, 22 (1998))), and a failure to comply with any of the admissibility requirements constitutes grounds for rejecting a proposed contention, *see* 2004 Part 2 Changes, 69 Fed. Reg. at 2221; *see also Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-99-10, 49 NRC 318, 325 (1999).

NEPA: GENERIC ISSUES (LICENSE RENEWAL)

RULES OF PRACTICE: PRECEDENTIAL EFFECT

The legal issue whether section 51.53(c)(3)’s exclusion of Category 1 issues from NEPA consideration applies in an SLR proceeding has been ruled upon by the Commission in holdings that found this provision applicable to SLR proceedings. *Turkey Point*, CLI-20-3, 91 NRC at 141-45; *Peach Bottom*, CLI-20-11, 92 NRC at 342-43). As was recently illustrated by the *North Anna* licensing board in responding to a similar assertion in that SLR proceeding, the Commission’s prior rulings resolving this point are binding precedent that the Board must follow in this SLR proceeding. *See North Anna*, LBP-21-4, 93 NRC at 189 n.11.

RULES OF PRACTICE: WAIVER OF RULE OR REGULATION

A contention challenging established NRC regulatory findings, including the Part 51, subpart A, appendix B exclusion of Category 1 environmental determinations and SAMA analyses, requires submission of a petition for a waiver pursuant to 10 C.F.R. § 2.335(b). *See Exelon Generation Co., LLC* (Limerick Generating Station, Units 1 and 2), CLI-12-19, 76 NRC 377, 386 (2012) (identifying SAMAs as the “functional equivalent of a Category 1 issue, removing [them] from litigation in . . . case-by-case license renewal adjudications”).

RULES OF PRACTICE: CHALLENGE TO COMMISSION REGULATIONS

In accordance with the Commission’s policy goals, an NRC regulatory determination published as a rule is generally not subject to adjudicatory challenge. *See Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Unit 2), CLI-03-14, 58 NRC 207, 218 (2003) (“Petitioners may not seek an adjudicatory hearing ‘to attack generic NRC requirements or regulations, or to express generalized grievances about NRC policies.’” (quoting *Duke Energy*

Corp. (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 334 (1999))).

**RULES OF PRACTICE: WAIVER OF RULE OR REGULATION
(SPECIAL CIRCUMSTANCES)**

As 10 C.F.R. § 2.335(b) indicates, it is possible for a hearing requestor in an adjudication to obtain a waiver of the applicability of a Commission regulation if “special circumstances with respect to the subject matter” exist in the immediate proceeding, i.e., if the application of the pertinent rule “would not serve the purposes for which [it] was adopted.” Over time, Commission caselaw has defined the nature of such “special circumstances” within the meaning of section 2.335(b), culminating in the Commission’s *Millstone* decision that identified the following four factors as pertinent to evaluating whether a waiver is appropriate:

- (i) the rule’s strict application would not serve the purposes for which it was adopted;
- (ii) special circumstances exist that were not considered, either explicitly or by necessary implication, in the rulemaking proceeding leading to the rule sought to be waived;
- (iii) those circumstances are unique to the facility rather than common to a large class of facilities; and
- (iv) waiver of the regulation is necessary to reach a significant safety [or environmental] problem.

Limerick, CLI-13-7, 78 NRC at 207-08 (citing *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-05-24, 62 NRC 551, 559-60 (2005)).

RULES OF PRACTICE: WAIVER OF RULE OR REGULATION

The ultimate authority for granting a waiver lies with the Commission, but the decision whether to advance a section 2.335 waiver request proffered in an adjudicatory proceeding to the Commission is made in the first instance by the licensing board assigned to the adjudication. *See* 10 C.F.R. § 2.335(d).

**RULES OF PRACTICE: WAIVER OF RULE OR REGULATION
(PRIMA FACIE SHOWING)**

For each of the *Millstone* factors, a petitioner must make a “*prima facie* showing” to allow a licensing board to “certify the matter directly to the Commission,” in the absence of which the board “may not further consider the matter.”

Id. § 2.335(c). Although not defined in the agency’s regulations, to constitute a prima facie showing, caselaw suggests that to meet the “substantial” showing required in connection with a section 2.335 waiver petition, *Tennessee Valley Authority* (Watts Bar Nuclear Plant, Unit 2), LBP-10-12, 71 NRC 656, 662 n.9 (citing *Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), ALAB-895, 28 NRC 7, 22 (1988); *Pacific Gas and Electric Co.* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-653, 16 NRC 55, 72 (1981)), *petition for interlocutory review denied*, CLI-10-29, 72 NRC 556 (2010), the information concerning each factor must be “legally sufficient to establish a fact or case unless disproved,” *Seabrook*, ALAB-895, 28 NRC at 22 (quoting *Diablo Canyon*, ALAB-653, 16 NRC at 72), and must be presented by affidavit “in a persuasive manner with adequate supporting facts,” *Watts Bar*, LBP-10-12, 71 NRC 662 n.9.

RULES OF PRACTICE: WAIVER OF RULE OR REGULATION (PRIMA FACIE SHOWING)

The question whether a prima facie showing has been made is one generally associated with meeting the burden of production or the burden of going forward during an evidentiary hearing. *See NextEra Energy Seabrook, LLC* (Seabrook Station, Unit 1), LBP-20-9, 92 NRC 58, 94-95 & n.191 (2020) (“An Intervenor has the initial ‘burden of going forward,’ which requires an intervenor to establish a prima facie case for claims asserted in the reformulated contention. The admission of a contention, by itself, does not satisfy the ‘burden of going forward.’ An intervenor must ‘provid[e] probative evidence or expert testimony.’” (footnotes omitted)), *review declined*, Memorandum from Annette Vietti-Cook, Secretary of the Commission, to Board and Parties (May 11, 2021) (unpublished). But in the context of determining whether a section 2.335 waiver petition makes a prima facie showing, whether provided by an expert or otherwise, that support must deal adequately with potentially relevant information. *See Watts Bar*, LBP-10-12, 71 NRC at 670-71 (indicating petitioner’s expert declaration is insufficient to provide prima facie support for section 2.335 waiver request in that expert’s claim of unanalyzed environmental impacts because “more work needs to be done” to bring unit online fails to indicate what the work or the impacts might entail).

RULES OF PRACTICE: WAIVER OF RULE OR REGULATION (PRIMA FACIE SHOWING; SPECIAL CIRCUMSTANCES)

To make a successful showing regarding the *Millstone* factors, a petitioner must meet “extremely high standards” showing the existence of “compelling

circumstances,” *Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), CLI-89-20, 30 NRC 231, 245 (1989), stating “with particularity” the special circumstances that justify the need for waiver, a standard that is “stringent by design” and imposes a “substantial burden” on the participant seeking the waiver, *Limerick*, CLI-13-7, 78 NRC at 207, 208.

**RULES OF PRACTICE: WAIVER OF RULE OR REGULATION
(SUPPORTING AFFIDAVIT)**

Section 2.335(b) requires that in support of a waiver request a petitioner must provide “an affidavit that identifies the specific aspect or aspects of the subject matter of the proceeding as to which the application of the rule or regulation (or provision of it) would not serve the purposes for which the rule or regulation was adopted . . . [and] must state with particularity the special circumstances alleged to justify the waiver or exception requested.”

**RULES OF PRACTICE: WAIVER OF RULE OR REGULATION
(SUPPORTING INFORMATION OR EXPERT OPINION)**

In the circumstance of assessing whether section 2.335’s strict standards have been met, a passing reference made without any quantification or other technical support or explanation will not abide, even from an expert. *See Entergy Nuclear Operations, Inc.* (Palisades Nuclear Plant), CLI-15-23, 82 NRC 321, 328 (2015) (“[A]n expert opinion that merely states a conclusion . . . without providing a reasoned basis or explanation for that conclusion is inadequate because it deprives the Board of the ability to make the necessary, reflective assessment of the opinion.”) (citation omitted); *USEC, Inc.* (American Centrifuge Plant), CLI-06-10, 63 NRC 451, 472 (2006) (same).

RULES OF PRACTICE: DISCOVERY

Prior to having an admitted contention there is no adjudicatory discovery available by which a petitioner can obtain redacted information. *See Wisconsin Electric Power Co.* (Point Beach Nuclear Plant, Unit 1), ALAB-696, 16 NRC 1245, 1263 (1982).

**RULES OF PRACTICE: WAIVER OF RULE OR REGULATION
(SIGNIFICANT ENVIRONMENTAL PROBLEM)**

Lacking the requisite showing that the information provided meets the benchmark of presenting “a seriously different picture of the environmental impact of

the proposed project from what was previously envisioned,” *Callaway*, CLI-11-5, 74 NRC at 167-68 (quoting *Hydro Resources, Inc.* (2929 Coors Road, Suite 101, Albuquerque, NM 87120), CLI-99-22, 50 NRC 3, 14 (1999)), a petitioner has not adequately established a prima facie showing that there is a “significant” environmental issue that merits a waiver under section 2.335 so as to permit consideration of the petitioner’s contention in an adjudicatory proceeding.

NEPA: NRC RESPONSIBILITIES

The Board’s determination regarding Petitioners’ waiver request does not negate the Staff’s responsibility (1) in conducting its “hard look” licensing review of the Duke ER, to assess whether new and significant information exists that requires additional consideration; or (2) per 10 C.F.R. § 51.73, to consider whether any information provided by public comments as part of the environment review process for Duke’s SLR application merits further analysis as new and significant information. *See Limerick*, CLI-13-7, 78 NRC at 216-17.

TECHNICAL ISSUES DISCUSSED

The following technical issues are discussed: severe accident mitigation alternatives; probabilistic risk assessment; dam-failure rates; flood protection; severe accidents.

MEMORANDUM AND ORDER **(Denying Intervention and Terminating Proceeding)**

By application dated June 7, 2021, licensee Duke Energy Carolinas, LLC (Duke) is seeking second twenty-year renewals of its 10 C.F.R. Part 50 operating licenses for Units 1, 2, and 3 at the Oconee Nuclear Station (ONS).¹ In a September 27, 2021 hearing request, Beyond Nuclear, Inc., and Sierra Club, Inc., (collectively Petitioners) submitted three contentions contesting the Environmental Report (ER) portion of Duke’s subsequent license renewal (SLR) application.² Two of Petitioners’ contentions, designated as Contentions 2 and 3,

¹ See Letter from Steven M. Snider, Site Vice President, ONS, to NRC Document Control Desk (June 7, 2021) (ADAMS Accession No. ML21158A194) [hereinafter Oconee SLR Application].

² See Hearing Request and Petition to Intervene by [Petitioners] and Petition for Waiver of 10 C.F.R. §§ 51.53(c)(3)(i), 51.53(c)(3)(ii)(L), 51.71(d), and 51.95(c)(1) and 10 C.F.R. Part 51 Subpart A, Appendix B, Table B-1 to Allow Consideration of Category 1 NEPA Issues (Sept. 27, 2021) (Continued)

claim Duke's ER is deficient in its discussion of dam-failure impacts, including its assessment of associated severe accident mitigation alternatives (SAMAs), for which Petitioners also provide a 10 C.F.R. § 2.335 waiver request to the degree litigation of those issues might be precluded by certain provisions in 10 C.F.R. Part 51. *See* Hearing Petition at 13-22. In contrast, Petitioners' other contention, labeled Contention 1, maintains that those Part 51 preclusion provisions are limited to initial license renewals and so do not apply to second license renewal proceedings such as this one. *See id.* at 11-13. Both Duke and the Nuclear Regulatory Commission (NRC) Staff oppose Petitioners' hearing request, asserting there is no basis for further adjudicatory consideration of either their contentions or the waiver request.³

Although Petitioners have established their representational standing to intervene, they have failed to demonstrate that their contentions are litigable in this proceeding. Their first contention does not raise a genuine dispute, as required by 10 C.F.R. § 2.309(f)(1)(vi), because it asserts a legal position that has been squarely rejected in controlling Commission decisions. Further, Petitioners' request for a waiver of the NRC regulations that prohibit this Board from adjudicating their second and third contentions fails to make the requisite *prima facie* showing of "special circumstances" required for such a waiver under section 2.335(b). Accordingly, Petitioners' hearing and waiver requests must be denied and this proceeding terminated.

I. BACKGROUND

A. Procedural Background

Submitted in response to a July 28, 2021 *Federal Register* hearing opportunity notice regarding the Duke SLR application,⁴ Petitioners' three contentions raise both legal and factual questions about whether the Duke ER satisfies the requirements in the NRC's 10 C.F.R. Part 51 regulations implementing the Na-

[hereinafter Hearing Petition]; *see also* Oconee SLR Application, encl. 3, attach. 2 (Appendix E, Applicant's [ER], Subsequent Operating License Renewal Stage, [ONS] Units 1, 2, and 3 (Mar. 2021) (ADAMS Package Accession No. ML21158A193)). Within the agency's ADAMS records system, the publicly available version of the ONS ER has been divided into seven segments, with the most relevant to this proceeding being the first, which contains sections 1.0 through 3.0, *see id.* (ADAMS Accession No. ML21158A195) [hereinafter ER Part 1], and the second, which contains sections 4.0 through 10.0 and attachments A (NRC NEPA Issues for License Renewal) and B (ONS NPDES Permit), *see id.* (ADAMS Accession No. ML21158A196) [hereinafter ER Part 2].

³ *See* Applicant's Answer Opposing Request for Hearing, Petition to Intervene, and Petition for Waiver Submitted by [Petitioners] (Oct. 22, 2021) at 2-4 [hereinafter Duke Answer]; NRC Staff's Answer Opposing [Petitioners] Hearing Request (Oct. 22, 2021) at 2 [hereinafter Staff Answer].

⁴ *See* [Duke]; Duke Energy; [ONS], Units 1, 2, and 3, 86 Fed. Reg. 40,662 (July 28, 2021).

tional Environmental Policy Act (NEPA). In their second and third contentions, Petitioners assert that Duke's ER is deficient because it fails to (1) discuss purported new and significant environmental impacts associated with reactor accidents at ONS that could be caused by the failure of the nearby Jocassee Dam; and (2) properly assess new and significant information affecting Duke's SAMA analysis intended to mitigate the effects of such an event. *See* Hearing Petition at 13-18. Further, Petitioners acknowledge that such flooding accident impact issues would otherwise be precluded from consideration in this license renewal proceeding because they involve a "Category 1" (or Category-1 equivalent) issue listed in Table B-1 of Part 51, subpart A, appendix B of the agency's NEPA implementation provisions. *See id.* at 18-19. Petitioners thus seek a 10 C.F.R. § 2.335(b) waiver of 10 C.F.R. Part 51, subpart A, appendix B, and sections 51.53(c)(3)(i), 51.53(c)(3)(ii)(L), 51.71(d), and 51.95(c)(1) to permit Board consideration of both contentions in this adjudication. *See id.* at 19-22. Additionally, in their first contention Petitioners interpose a legal claim that the applicability of these Part 51 preclusion provisions is limited to initial license renewals and so do not apply to this SLR proceeding. *See id.* at 11-13.

By memorandum dated September 29, 2021, the Secretary of the Commission referred Petitioners' hearing request to the Chief Administrative Judge,⁵ who, in turn, on October 4, 2021, assigned the intervention petition to this Licensing Board to rule on standing and contention admissibility/waiver matters and preside at any hearing.⁶ While not contesting Petitioners' representational standing to intervene in this proceeding, in their October 22, 2021 answers to Petitioners' hearing request, both Duke and the Staff assert that Petitioners' three contentions are inadmissible and their waiver request fails to meet the requisite standards in section 2.335. *See* Duke Answer at 1 n.3, 2-4; Staff Answer at 1-2. Petitioners' November 5, 2021 reply maintains that their waiver request should be granted and their contentions admitted.⁷

⁵ *See* Memorandum from Annette L. Vietti-Cook, NRC Secretary, to E. Roy Hawken, Chief Administrative Judge (Sept. 29, 2021).

⁶ *See* [Duke], Establishment of Atomic Safety and Licensing Board, 86 Fed. Reg. 56,299 (Oct. 8, 2021), *superseded by* [Duke], Establishment of Atomic Safety and Licensing Board, 86 Fed. Reg. 58,703 (Oct. 22, 2021) (providing corrected Atomic Safety and Licensing Board Panel docket number).

⁷ *See* Petitioners' Reply to Oppositions by [Duke] and NRC Staff to Petitioners' Hearing Request and Petition to Intervene and Waiver Petition (Nov. 5, 2021) at 1 [hereinafter Petitioners Reply]. Subsequently, on November 15, 2021, Duke submitted a motion to strike portions of Petitioners' reply filing. *See* [Duke] Motion to Strike Portions of the Reply Filed by [Petitioners] (Nov. 15, 2021). In accordance with a Board scheduling order, only the Petitioners submitted a response, opposing the motion. *See* Petitioners' Response to [Duke's] Motion to Strike Portion of Petitioners' Reply (Dec. 1, 2021) at 1; *see also* Licensing Board Order (Establishing Briefing Schedule Associated with Applicant [Duke's] Motion to Strike (Nov. 16, 2021) at 2 & n.4 (unpublished).

In a series of issuances, the Board scheduled an initial prehearing conference to consider the efficacy of Petitioners' hearing request.⁸ A virtual conference was conducted on November 16, 2021, during which the Board heard oral argument from the participants on the sufficiency of Petitioners' waiver and contention admissibility claims regarding Contentions 2 and 3.⁹ Thereafter, in a November 22, 2021 issuance, the Board requested information on the supporting basis for a statement in a January 2011 Staff assessment regarding external flooding concerns at ONS "that the potential failure of the Jocassee Dam from either an overtopping event or seismic event was not credible."¹⁰ Duke and the Staff provided responses to this request on November 29 and 30, 2021, respectively, with Petitioners responding in a filing dated December 7, 2021.¹¹

⁸ See Licensing Board Memorandum and Order (Initial Prehearing Conference Scheduling and Procedures) (Oct. 29, 2021) (unpublished) [hereinafter Conference Procedures Order]; Licensing Board Memorandum and Order (Scheduling Prehearing Conference) (Nov. 4, 2021) (unpublished); Licensing Board Memorandum and Order (Clarification on Prehearing Conference Procedures) (Nov. 10, 2021) (unpublished).

⁹ See Tr. at 1-134; see also Licensing Board Memorandum and Order (Adopting Transcript Corrections for Initial Prehearing Conference) (Dec. 16, 2021) (unpublished). In its October 29, 2019 order on scheduling and procedures for the initial prehearing conference, the Board indicated that because Petitioners' standing was not contested and the issue raised by their Contention 1 had been addressed by the Commission in precedential rulings that were binding on the Board, the focus of the oral argument at the conference would be on the admissibility of Petitioners' Contentions 2 and 3 and the associated section 2.335 waiver request. See Conference Procedures Order at 3 & n.2.

¹⁰ Licensing Board Memorandum and Order (Request to Provide Post-Initial Prehearing Conference Information) (Nov. 22, 2021) at 1 (unpublished) (quoting Letter from Eric J. Leeds, Director, NRC Office of Nuclear Reactor Regulation (NRR), to Preston Gillespie, Site Vice President, ONS at 1 (Jan. 28, 2011) (ADAMS Accession No. ML110280153) [hereinafter January 2011 Leeds Letter]) [hereinafter Licensing Board Post-Argument Information Request Order].

¹¹ See [Duke] Response to the Atomic Safety and Licensing Board's November 22, 2021 Order (Nov. 29, 2021); NRC Staff Response to the Atomic Safety and Licensing Board's November 22, 2021 Memorandum and Order (Nov. 30, 2021); Petitioners' Response to [Duke] and NRC Staff's Responses to ASLB'S November 22 Order (Dec. 7, 2021) [hereinafter Petitioners Response to Licensing Board Post-Argument Information Request].

In addition, during the proceeding Duke submitted another item for Board consideration. In a November 8, 2021 information notice, Duke advised the Board that it had sent a report to the NRC Office of the Inspector General (OIG) about an alleged violation of the post-employment restrictions of 18 U.S.C. § 207(a)(1) by Jeffrey Mitman, the former NRC Staff senior reliability and risk analyst who provided a declaration in support of Petitioners' hearing request, to which the NRC Staff and Petitioners provided responses. See Letter from Ryan K. Lighty, Duke Counsel, to Licensing Board at 1-3 (Nov. 8, 2021); NRC Staff Response to [Licensing Board] November 10, 2021 Memorandum and Order and to Duke's November 8, 2021 Notification Letter (Nov. 19, 2021) at 2 (indicating OIG's internal processes allow 10 days to assess whether an allegation warrants further action, with OIG's strategic goal to complete any allegation investigation it institutes within 18 months); Petitioners' Response to Duke's Notification Regarding Information Potentially Relevant to the

(Continued)

B. Environmental Review Process Regarding an SLR Application¹²

An application for either an initial or a subsequent renewal of the 10 C.F.R. Part 50 operating license for an existing nuclear power plant is governed by the provisions of 10 C.F.R. Part 54.¹³ The environmental contents of such an application are described in section 54.23, which provides that the application must “include a supplement to the [ER] that complies with the requirements of subpart A of 10 CFR Part 51.” 10 C.F.R. § 54.23. The information required for such a supplement is outlined in section 51.53(c), which also provides in paragraph (3)(i) that “[t]he [ER] for the operating license renewal stage is not required to contain analyses of the environmental impacts of the license renewal issues identified as Category 1 issues in appendix B to subpart A of this part.” *Id.* § 51.53(c)(3)(i). Other Part 51 provisions extend this exemption for Category 1 issues to the Staff’s draft and final supplements to the agency’s generic environmental impact statement (GEIS) for license renewal. *See id.* §§ 51.71(d), 51.95(c)(1).

As appendix B to subpart A of Part 51 makes clear, “[t]he Commission has assessed the environmental impacts associated with granting a renewed operating license for a nuclear power plant . . . [and] Table B-1 summarizes the Commission’s findings on the scope and magnitude of environmental impacts” that NEPA requires to be addressed. *Id.* pt. 51, subpart A, app. B. Table B-1, in turn, indicates that the “[d]ata supporting this table are contained in NUREG-1437, Revision 1, ‘[GEIS] for License Renewal of Nuclear Plants (June 2013)’” and that for Category 1 items, “[t]he generic analysis of the issue may be adopted in each plant-specific review.” *Id.* tbl. B-1 nn.1-2. Commission caselaw establishes that an adjudicatory challenge based on an applicant’s failure to deal appropriately with a Category 1 item constitutes an attack on an agency rule,

Adjudicatory Proceeding (Nov. 19, 2021) at 2 (indicating that because Mr. Mitman was never involved in the “particular matter” of Duke’s SLR application while an agency employee, he did not violate 18 U.S.C. § 207(a)(1)); *see also* Licensing Board Memorandum and Order (Schedule for Responses to Applicant [Duke’s] Information Notification (Nov. 10, 2021) (unpublished).

¹² In a recent decision regarding a challenge to the SLR application for the North Anna facility, the licensing board provided an overview discussion about this process, some of which we reiterate here with revisions to encompass the flooding impacts challenges that are the focus of this proceeding. *See Virginia Electric and Power Co.* (North Anna Power Station, Units 1 and 2), LBP-21-4, 93 NRC 179, 189-93 (2021), *appeal pending*.

¹³ An initial and subsequent renewal each add an additional 20 years to the original 40-year term of a Part 50 operating license, so that in the case of the ONS facility, if the Duke SLR application is granted, the Units 1, 2, and 3 operating license terms would run until February 6, 2053, October 6, 2053, and July 19, 2054, respectively. *See* Staff Answer at 3.

making a section 2.335(b) waiver the sole vehicle for raising such an issue in an adjudication.¹⁴

Among its listings, Table B-1 specifically identifies summary environmental impact findings relating to “Postulated Accidents,” including “Design-basis accidents” and “Severe accidents.”¹⁵ *Id.* pt. 51, subpart A, app. B, tbl. B-1. A design-basis accident is not only classified as a Category 1 item, but its impacts finding is designated as “SMALL,”¹⁶ with “[t]he NRC staff conclud[ing] that the environmental impacts of design-basis accidents are of small significance to all plants.”¹⁷ *Id.* In contrast, severe accidents and the SAMA analyses associated with such accidents in the NEPA context are classified as items under Category 2, which is a Table B-1 listing designating those items for which “the analysis reported in the [GEIS] has shown that . . . additional plant-specific review is required.”¹⁸ *Id.* n.2. And the Table B-1 summary impacts finding for such accidents states:

¹⁴ See *Entergy Nuclear Vermont Yankee, LLC, and Entergy Nuclear Operations, Inc.* (Vermont Yankee Nuclear Power Station), CLI-07-3, 65 NRC 13, 20 (2007) (citing *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 11-13 (2001)).

¹⁵ The Table B-1 summary impact findings are based on the generic analysis of design-basis and severe accidents provided in the referenced GEIS, which was originally promulgated in 1996 and was updated in 2013. See 1 Office of Nuclear Regulatory Research (RES), NRC, [GEIS] for License Renewal of Nuclear Plants, NUREG-1437, Main Report, Final Report (May 1996) (ADAMS Accession No. ML040690705) [hereinafter 1996 GEIS]; 1 NRR, NRC, [GEIS] for License Renewal of Nuclear Plants, NUREG-1437, Main Report, Final Report (rev. 1 June 2013) (ADAMS Accession No. ML13106A241) [hereinafter 2013 Revised GEIS].

¹⁶ Table B-1 defines the significance level of a “SMALL” impacts designation as

[f]or the issue, environmental effects are not detectable or are so minor that they will neither destabilize nor noticeably alter any important attribute of the resource. For the purposes of assessing radiological impacts, the Commission has concluded that those impacts that do not exceed permissible levels in the Commission’s regulations are considered small as the term is used in this table.

10 C.F.R. pt. 51, subpart A, app. B, tbl. B-1 n.3.

¹⁷ As the basis for its findings regarding design-basis accidents, the 1996 GEIS states that

[b]ecause of the requirements that continuous acceptability of the consequences and aging management programs be in effect for license renewal, the environmental impacts as calculated for design-basis accidents should not differ significantly from initial licensing assessments over the life of the plant, including the license renewal period. In addition, any refurbishment necessary to prepare for license renewal would be done in a fashion consistent with the limits set for design-basis accidents and would not alter their consequences. Accordingly, the design of the plant relative to design-basis accidents during the extended license period is considered to remain acceptable and the environmental impacts of those accidents will not be examined further in this section.

1996 GEIS at 5-12.

¹⁸ With respect to the impacts of severe accidents, under the general heading of “Probabilistic
(Continued)

SMALL. The probability-weighted consequences of atmospheric releases, fallout onto open bodies of water, releases to groundwater, and societal and economic impacts from severe accidents are small for all plants. However, alternatives to mitigate severe accidents must be considered for all plants that have not considered such alternatives.

Id. Additionally, while a Table B-1 Category 2 site-specific issue generally would be subject to adjudicatory challenge in a license renewal proceeding, in instances such as here in which a facility-specific SAMA analysis has been considered in an environmental impact statement,¹⁹ under section 51.53(c)(3)(ii)(L) a license renewal contention regarding the adequacy of a previously considered SAMA cannot be litigated absent a section 2.335(b) waiver.²⁰

The Commission's 2013 Revised GEIS did not change the 1996 GEIS's analysis of the impacts of either design-basis or severe accidents due to seismic events;²¹ however, that GEIS included this observation regarding the issues of seismic risk and flooding:

The NRC will not make a decision or any recommendations on the basis of information presented in this GEIS regarding seismic risk and flooding at nuclear

Assessment of Severe Accidents," acknowledging "[s]evere accidents initiated by tornadoes, floods, earthquakes, fires, and sabotage have not traditionally been discussed in quantitative terms in [final environmental statements]," the 1996 GEIS goes on to note that:

Although external events are not discussed in further detail in this chapter, it should be noted that the NRC is continuing to evaluate ways to reduce the risk from nuclear power plants from external events. For example, each licensee is performing an individual plant examination to look for plant vulnerabilities to internal and externally initiated events and considering potential improvements to reduce the frequency or consequences of such events. Additionally, . . . as part of the review of individual license renewal applications, a site-specific consideration of alternatives to mitigate severe accidents will be performed in order to determine if improvements to further reduce severe accident risk or consequences are warranted.

Id. at 5-17, 5-18.

¹⁹ Because there had not been a SAMA analysis done at the time the original Part 50 operating licenses were issued for ONS Units 1, 2, and 3, consistent with Table B-1's finding for severe accidents, such an analysis was performed by Duke and reviewed by the Staff as part of the initial license renewal proceeding for the ONS facility. *See* NRR, NRC, [GEIS] for License Renewal of Nuclear Plants, NUREG-1437, at 5-3 (supp. 2 Dec. 1999) (ADAMS Accession No. ML003670518) [hereinafter ONS GEIS Supp.].

²⁰ *Exelon Generation Co., LLC* (Limerick Generating Station, Units 1 and 2), CLI-13-7, 78 NRC 199, 211-12 (2013) (indicating section 51.53(c)(3)(ii)(L) affords the "functional equivalent" of the Category 1 issue preclusion established by section 51.53(c)(3)(i)), *petition for review denied sub nom. NRDC v. NRC*, 823 F.3d 641 (D.C. Cir. 2016).

²¹ *See* 3 NRR, NRC, [GEIS] for License Renewal of Nuclear Plants, NUREG-1437, Appendices, Final Report at B-29 to -30 (rev. 1 June 2013) (ADAMS Accession No. ML13106A244).

power plants. The NRC's assessment of seismic and flood hazards for existing nuclear power plants is a separate and distinct process from license renewal reviews. Seismic and flood hazard issues are addressed by the NRC on an ongoing basis at all licensed nuclear facilities. As such, decisions and recommendations concerning seismic risk and flooding at nuclear power plants are outside the regulatory scope of this GEIS. Nevertheless, following the accident at the Fukushima Dai-ichi nuclear power plant resulting from the March 11, 2011, Great Tohoku Earthquake and subsequent tsunami, the NRC established the Near-Term Task Force as directed by the Commission on March 23, 2011, in COMGBJ-11-0002. The Japan Near-Term Task Force assessment resulted in the issuance of 10 CFR 50.54(f) letters on March 12, 2012, directing that seismic and flooding reevaluations be conducted at existing nuclear power plants.²²

Further, in the June 2013 statement of considerations accompanying the Commission's final rule updating the regulatory framework for the 1996 GEIS, the Commission stated:

The NRC's evaluation of the consequences of the Fukushima events is ongoing. As such, the NRC will continue to evaluate the need to make improvements to existing regulatory requirements based on the task force report and additional studies and analyses of the Fukushima events as more information is learned. To the extent that any revisions are made to the NRC's regulatory requirements, they would be made applicable to nuclear power reactors regardless of whether or not they have a renewed license. Therefore, no additional analyses have been performed in the revised GEIS as a result of the Fukushima events. In the event that the NRC identifies information from the Fukushima events that constitutes new and significant information with respect to the environmental impacts of license renewal, the NRC will discuss that information in its site-specific SEISs to the GEIS, as it does with all such new and significant information.²³

²² 2013 Revised GEIS at 1-16 (citing Letter from Eric J. Leeds, Director, NRC NRR, and Michael R. Johnson, Director, NRC Office of New Reactors (NRO), to All Power Reactor Licensees and Holders of Construction Permits in Active or Deferred Status (Mar. 12, 2012) (ADAMS Accession No. ML12053A340) [hereinafter March 2012 NRC Fukushima Section 50.54(f) Letter]).

²³ Revisions to Environmental Review for Renewal of Nuclear Power Plant Operating Licenses, 78 Fed. Reg. 37,282, 37,292 (June 20, 2013); *see also* 2013 Revised GEIS at 1-34 (stating no additional evaluation of seismic and flooding evaluations in this GEIS in light of ongoing Fukushima lessons-learned assessment; identification of Fukushima event-related information that is "new and significant" will be discussed in site-specific supplemental environmental impact statements (SEISs) to this GEIS); *id.* at 3-51 (explaining NRC's well-established reactor design criteria and standards, which are intended to ensure the ability to withstand environmental hazards, such as earthquakes and flooding, without loss of capacity to perform their safety functions, requires that safety-related structures, systems, and components be designed to take into account the most severe natural phenomena historically reported for the site and surrounding area); *id.* at 3-61 (indicating site-specific

(Continued)

Finally, for the ONS SLR application, the environmental evaluation of flooding events is found in the ER's discussion of postulated accidents, including design-basis accidents and severe accidents, its consideration of SAMAs, and its analysis of the possible existence of "new and significant information" regarding such accidents and SAMAs. *See* ER Part 2, at 4-2, 4-7 (tbl. 4.0-2), 4-10 (tbl. 4.0-3), 4-74 to -82. Indicating that it had considered developments in a number of areas, including risk-beneficial plant changes implemented in response to recommendations from the Fukushima Dai-ichi Near-Term Task Force, and citing a probabilistic risk assessment (PRA) model to support its conclusion about SAMAs, Duke asserted no such "new and significant" information existed. *See id.* at 4-74, 4-76, 4-77 to -78, 4-79, 4-82; *see also id.* at 5-1 to -3 (indicating no "new and significant information" identified based on Duke's review process).

C. Consideration of Dam Breach-Related Events for ONS

Relative to both their second and third contentions and their section 2.335 waiver request, Petitioners' principal focus is on the purported failure of Duke's ER "to address the environmental impacts of flooding caused by failure of the Jocassee Dam in light of newly available information demonstrating the significance of the environmental risk, or to re-evaluate SAMAs in light of this new information." Hearing Petition at 3. In this regard, as the ER reflects, the Jocassee Dam is a prominent feature in the vicinity of the ONS facility. The facility itself is located on Lake Keowee near the 150-foot Keowee earth-fill dam that, along with the 170-foot high Little River earth-fill dam, created the lake in 1971.²⁴ Situated approximately 11 miles north of the ONS facility is the much larger Jocassee Dam, completed in 1973. *See* ER Part 1, at 3-76. This 385-foot high rockfill dam confines Lake Jocassee, which has a surface area of some 7565 acres, a shoreline of approximately 75 miles, and a volume of 1,160,298 acre-feet. *See id.*; AEC Safety Evaluation at 3-6.

A breach of the Jocassee Dam and the impact on ONS of a resulting flood has been a matter of evolving regulatory concern. When ONS was first licensed

design bases for flood protection are prescribed by facility's final or updated final safety analysis report (FSAR/UFSAR) and applicable technical specifications and NRC evaluates any new information or operating experience relating to flooding as it becomes available, to determine if changes are needed at existing plants and are considered during site-specific safety reviews and addressed on an ongoing basis through the reactor oversight process and other NRC safety programs separate from the license renewal process).

²⁴ *See* Directorate of Licensing, Atomic Energy Commission (AEC), Safety Evaluation by the [AEC Licensing Directorate] in the Matter of Duke Power Company, [ONS] Units 2 and 3, Docket Nos. 50-270/287, at 3-5 (July 6, 1973) (ADAMS Accession No. ML12276A272) [hereinafter AEC Safety Evaluation]; *see also* ER Part 1, at 3-76.

in the early 1970s, a Jocassee Dam failure was not considered a credible event based on dam design and construction.²⁵ A potential Jocassee Dam failure thus was not made part of the current licensing basis for the facility, instead being considered a beyond-design-basis event. *See* Tr. at 81-82 (Lighty). Moreover, during initial facility licensing for the ONS facility, which is situated at 796 feet mean sea level (MSL), Duke calculated the probable maximum flood on Lake Keowee to be [REDACTED] MSL, with potential wind-generated wave runup reaching [REDACTED] MSL. *See* AEC Safety Evaluation at 3-6; June 2016 NRC Flooding Investigative Report at 83. Duke concluded these levels would not exceed the [REDACTED] MSL heights of the nearby Keowee Dam and the protective dike for that dam's hydropower intake. *See* AEC Safety Evaluation at 3-6. In its review, the AEC Staff generated similar probable maximum flood estimates and agreed that at [REDACTED] MSL, the Keowee Dam and the intake protective dike could "adequately withstand" the probable maximum flood so there would be no flooding problems at the ONS site. *Id.* at 3-6 to -7; *see also* June 2016 NRC Flooding Investigative Report at 83.

In the early 1980s, to provide an independent means of achieving and maintaining safe shutdown of one or more ONS units under certain postulated scenarios such as fires, turbine building floods, and security incidents, Duke built a standby shutdown facility (SSF) that includes subsystems to provide reactor coolant makeup, auxiliary service water for steam generator injection, electrical power via a diesel generator and batteries, and support systems. *See* June 2016 NRC Flooding Investigative Report at 83. With the SSF entrance identified as being at 797 feet MSL, the Staff's safety evaluation at that time determined this to be above the maximum expected flood onsite and therefore consistent with NRC flood protection requirements and guidelines. *See id.* However, as part of a 1983 PRA conducted by Duke and the Electric Power Research Institute, after considering various Jocassee Dam failure modes, timing possibilities, and lake levels, Duke found that while the estimated dam-failure frequency was 2.5E-05 per year (or about once in 40,000 years), there nonetheless could be a resulting flood above plant-yard grade.²⁶ At that time, among the measures

²⁵ *See* Letter from Stephen G. Burns, NRC Chairman, to Carolyn N. Lerner, Special Counsel, U.S. Office of Special Counsel (OSC), encl. at 83 (June 30, 2016) (NRC Flooding Working Group, Investigative Report to the Chairman of the U.S. NRC Re: OSC File No. 01-15-5254 (undated)), <https://osc.gov/Documents/Public%20Files/FY17/DI-15?5254/DI-15?5254%20Agency%20Report.pdf> [hereinafter June 2016 NRC Flooding Investigative Report].

²⁶ *See* Letter from J.W. Hampton, Vice President, ONS, to NRC Document Control Desk, attach. at 3 (Mar. 14, 1994) (ADAMS Accession No. ML15261A316) [hereinafter March 1994 Hampton Letter Attachment]; *see also* June 2016 NRC Flooding Investigative Report at 83; Letter from Dave Baxter, Vice President, ONS, to NRC Document Control Desk, attach. 1, at 7 (Sept. 26, 2008) (Jocassee Project Description and Oconee Flooding Licensing Basis History) (ADAMS Accession No. ML082750106) [hereinafter September 2008 Baxter Letter].

Duke implemented to address this risk was construction of an additional [REDACTED] flood barrier at the SSF doorway to protect the SSF from floods up to [REDACTED] MSL. *See* March 1994 Hampton Letter Attachment at 3; June 2016 NRC Flooding Investigative Report at 83. Thereafter, as part of its 1990 response to NRC Generic Letter 88-20 calling for individual plant examinations (IPEs) to address severe accident issues, Duke submitted a 1987 PRA, initiated to take into account plant changes, current materials, and data, that found the Jocassee Dam failure frequency was estimated to be 1.58E-05 per year (or once in about 63,000 years).²⁷

The early 1990s brought another Jocassee Dam inundation study, this one in response to a Federal Energy Regulatory Commission (FERC) mandate. A 1992 Duke inundation study indicated that, based on the latest computer models and a number of FERC-required conservative assumptions, the estimated yard flood level of approximately [REDACTED] (an equivalent of approximately [REDACTED] MSL) would render inoperable all SSF systems necessary for safe shutdown and maintenance of the three ONS reactors.²⁸ Further, as a consequence of a 1994 agency inspection report regarding ONS service water system operational performance that raised questions about the difference between the 1992 FERC-associated review and the 1990 Duke PRA study,²⁹ in 1995 Duke submitted to the NRC another analysis of Jocassee Dam flood risk as part of an Individual Plant Examination for External Events (IPEEE) that showed the estimated core

²⁷ *See* March 1994 Hampton Letter Attachment at 3 (referencing NRC Letter to All Licensees Holding Operating Licenses and Construction Permits for Nuclear Power Reactor Facilities, [IPE] for Severe Accident Vulnerabilities – 10 CFR § 50.54(f), Generic Letter No. 88-20 (Nov. 23, 1988), <https://www.nrc.gov/reading-rm/doc-collections/gen-comm/gen-letters/1988/g188020.html>); June 2016 NRC Flooding Investigative Report at 83, 84.

²⁸ *See* January 2011 Leeds Letter, encl. at 1 (Safety Evaluation by [NRR] Related to [Duke] Confirmatory Action Letter — Commitments to Address External Flooding Concerns, Closure of Inundation Site Results [ONS], Docket Nos. 50-269, 50-270, and 50-287) [hereinafter January 2011 Staff Safety Evaluation]; June 2016 NRC Flooding Investigative Report at 83-84; *see also* March 1994 Hampton Letter Attachment at 3-4.

²⁹ *See* Letter from Albert F. Gibson, Division Director, NRC Region II, to J.W. Hampton, Vice President, ONS at 2 (Feb. 11, 1994) (noting 1990 Duke IPE submittal is inconsistent with NRC inspection finding that SSF could not withstand postulated Jocassee Dam failure) (ADAMS Accession No. ML15261A308); *id.* encl. 3, at 29-30 (NRC Region II, Inspection Report Nos. 50-269/93-25, 50-270/93-25, and 50-287/93-25 (Feb. 10, 1994) (indicating, contrary to 1990 Duke IPE submittal, recently completed Jocassee Dam failure reanalysis for another regulatory agency resulted in a flood height at least [REDACTED] above the SSF wall) (ADAMS Accession No. ML15261A314); Letter from Albert F. Gibson, Division Director, NRC Region II, to J.W. Hampton, Vice President, ONS, encl. 2, at 16 (Dec. 19, 1994) (NRC Region II, Inspection Report Nos. 50-269/94-31, 50-270/94-31, and 50-287/94-31 (Dec. 16, 1994) (closing inspection item 50-269, 270, 287/93-25-11 based on FSAR change removing SSF mitigation for a rapid Jocassee Dam failure and Duke indication it will provide external flood risk reanalysis as part of 1995 IPE external events submittal)) (ADAMS Accession Nos. ML16154A725 (transmittal letter) and ML16154A728 (enclosure 2 inspection report)).

damage frequency (CDF) as 7.0E-06 per year (or about once in 143,000 years) for a Jocassee Dam seismic failure.³⁰ Moreover, as part of a 1999 review of the July 1998 Duke application for the initial Part 54 renewal of the ONS Part 50 facility operating licenses, the Staff's GEIS supplement determined there was no new and significant information regarding either design-basis accidents or severe accidents and that Duke's SAMA analysis for the facility, including those items associated with a potential Jocassee Dam failure, was acceptable. *See* ONS GEIS Supp. at 5-1 to -14; June 2016 NRC Flooding Investigative Report at 84.

The issue of Jocassee Dam failure and ONS facility flooding next arose in the context of an April 2006 NRC Staff inspection report.³¹ This report detailed the circumstances surrounding Duke's June 2005 identification of a breach of a passive flood protection barrier for the SSF when Duke in August 2003 attempted to accommodate a temporary electrical power cable routing by removing an access cover that was part of that barrier. *See* April 2006 Staff Inspection Report at 6; June 2016 NRC Flooding Investigative Report at 85. Noting that the SSF external flood barrier was designed to protect that building against a [REDACTED] flood and citing a "recently completed flood analysis indicat[ing] that a Jocassee Dam failure could result in an external flood height of at least [REDACTED] and the 1992 FERC study predicting such a failure "could result in flood waters of approximately [REDACTED] deep" at ONS, the report characterized the issue of flood protection measures as "unresolved pending further Staff inspection and assessment." April 2006 Staff Inspection Report at 7. Thereafter, in August 2006 the NRC Staff made a preliminary performance deficiency "white finding" determination of low to moderate risk significance for this "uncompensated for and uncontrolled flowpath [that] existed through the SSF wall, which could have rendered the SSF unable to perform its intended functions in the event

³⁰ *See* Duke Power Co., ONS, IPEEE Submittal Report at 5-27 (Dec. 21, 1995) (ADAMS Accession No. ML15118A407); *see also* September 2008 Baxter Letter at 8; Letter from David E. LaBarge, Senior Project Manager, NRC NRR, to W.R. McCollum, Jr., Vice President, ONS, encl. 1, at 2 (Mar. 15, 2000) (Staff Evaluation Report of [IPEEE] Submittal by [Duke] for [ONS], Units 1, 2, and 3) (indicating "[e]xternal flooding events contribute about 7.0E-6/[reactor year] to the CDF") (ADAMS Accession No. ML003694349); June 2016 NRC Flooding Investigative Report at 84. The December 1995 Duke IPEEE was submitted pursuant to Generic Letter 88-20, Supplement 4. *See* NRC Letter to All Licensees Holding Operating Licenses and Construction Permits for Nuclear Power Reactor Facilities, [IPEEE] for Severe Accident Vulnerabilities — 10 CFR § 50.54(f), Generic Letter No. 88-20 (supp. 4 June 28, 1991), <https://www.nrc.gov/reading-rm/doc-collections/gen-comm/gen-letters/1988/gl88020s4.html>.

³¹ *See* Letter from D. Charles Payne, Acting Branch Chief, NRC Region II, to B.H. Hamilton, Site Vice President, ONS, encl. (Apr. 28, 2006) (NRC Integrated Inspection Report 05000269/2006002, 05000270/2006002, 05000287/2006002) (ADAMS Accession No. ML061180451) [hereinafter April 2006 Staff Inspection Report].

of an external flood in excess of [REDACTED] above [MSL]).”³² The Staff found this unacceptable from either a quantitative/risk analysis or qualitative/deterministic perspective because it (1) resulted in an increase in risk, with an estimated CDF change of 3.3E-06 per year; and (2) failed to preserve defense-in-depth in that SSF unavailability meant “no other event mitigation systems would be available to prevent core damage.” August 2006 Casto Letter at 2. With minor adjustments, this white finding was finalized in November 2006.³³

During the next eighteen months, Duke sought unsuccessfully to overturn this finding in a series of appeals and requests for reconsideration. *See* June 2016 NRC Flooding Investigative Report at 85. This included Staff consideration of a January 2007 updated Jocassee Dam fragility study submitted by Duke in February 2007.³⁴ In its November 2007 reconsideration denial, while agreeing with Duke that the seismic contribution to the Jocassee Dam failure frequency was “negligible” so that a Duke analysis of a random or “sunny-day” dam failure was most appropriate,³⁵ the Staff indicated that, rather than the Duke-provided estimate of 1.4E-05 per year (once in about 71,000 years), an estimated dam-failure frequency of 1.8E-04 per year (once in about 5500 years) was appropriate. *See* November 2007 Staff White Finding Reconsideration Denial at 1; June 2016 NRC Flooding Investigative Report at 85. Accordingly, while acknowledging there are some uncertainties in such a quantitative/risk analysis estimate, the Staff concluded that the “large increase in the ‘sunny day’ dam-failure frequency more than compensates for the uncertainties in the quantitative considerations” so as to provide confidence that the Staff’s supporting risk

³² *See* Letter from Charles Casto, Division Director, NRC Region II, to B.H. Hamilton, Site Vice President, ONS at 2 (Aug. 31, 2006) (ADAMS Accession No. ML080780143) [hereinafter August 2006 Casto Letter].

³³ *See* Letter from William D. Travers, Regional Administrator, NRC Region II, to B.H. Hamilton, Site Vice President, ONS at 2 (Nov. 22, 2006) (ADAMS Accession No. ML063260282).

³⁴ *See* Letter from William D. Travers, Regional Administrator, NRC Region II, to Bruce H. Hamilton, Site Vice President, ONS at 1 (Nov. 20, 2007) (ADAMS Accession No. ML073241045) [hereinafter November 2007 Staff White Finding Reconsideration Denial]; *see also* June 2016 NRC Flooding Investigative Report at 85; Letter from Bruce H. Hamilton, Site Vice President, ONS, to NRC Document Control Desk at 1 (Feb. 5, 2007) (ADAMS Accession No. ML070440337).

³⁵ As the June 2016 NRC Flooding Investigative Report noted, “[a] ‘sunny-day’ failure is a random failure of a dam, not caused by a flood or earthquake. These dam failures may occur because of failures of embankments, foundations, or other dam components, potentially because of an inherent design flaw. NRC guidance indicates that sunny-day failures cannot be screened out.” June 2016 NRC Flooding Investigative Report at 49 n.104 (citing Japan Lessons-Learned Project Directorate, JLD-ISG-2013-01, Guidance [f]or Assessment of Flooding Hazards Due to Dam Failure, Interim Staff Guidance at 6-1 (rev. 0 July 29, 2013) (ADAMS Accession No. ML13151A153) [hereinafter July 2013 JLD-ISG-2013-01 Interim Staff Guidance]).

analysis “is appropriately characterized as [white/]low to moderate.” November 2007 Staff White Finding Reconsideration Denial at 2.

While this resolved the controversy over the April 2006 SSF flood barrier breach inspection finding, it did not alleviate the NRC Staff’s concern about ONS site external flooding, including a possible Jocassee Dam failure. In August 2008, the Staff sent Duke a 10 C.F.R. § 50.54(f) request seeking information “to determine whether unfavorable physical characteristics of the site exist relative to a Jocassee Dam failure, and whether [ONS] lacks appropriate and adequate compensating engineering safeguards for such an event.”³⁶ There followed a series of communications between the Staff and Duke,³⁷ culminating in a June 3, 2010 Duke letter listing compensatory measures that Duke had undertaken or would undertake to mitigate external flooding hazards resulting from a potential Jocassee Dam failure.³⁸ The NRC Staff responded on June 22, 2010, with a confirmatory action letter (CAL) requiring that (1) the June 3, 2010 compensatory measures, as listed in an enclosure with implementation dates, remain in place until a final resolution of the Jocassee Dam failure-related ONS site inundation matter was reached; (2) Duke provide all documentation needed

³⁶ Letter from Joseph G. Giitter, Division Director, NRC NRR, to Dave Baxter, Vice President, ONS at 1 (Aug. 15, 2008) (ADAMS Accession No. ML081640244) [hereinafter August 2008 Staff Jocassee Dam Failure Section 50.54(f) Letter]; *see also* June 2016 NRC Flooding Investigative Report at 85-86.

³⁷ Among the communications during this nearly two-year period were an initial September 2008 Duke response in which it committed to doing inundation and sensitivity analyses; an April 2009 Staff request for additional information (RAI) outlining the Staff’s views on what these studies should include; a November 2009 Duke response to the Staff’s April 2009 request providing the requested studies and a corrective action plan; a January 2010 Duke description of interim measures taken or planned to mitigate flooding from a sunny-day Jocassee Dam failure, including raising the SSF flood wall by [REDACTED] MSL; a January 2010 set of additional Staff RAIs requesting information to aid in determining whether the ONS site is adequately protected from external flooding events for the entire Jocassee earthen works; and Duke’s March 2010 response to the additional Staff RAIs. *See* September 2008 Baxter Letter, attach. 4 (Regulatory Commitments); Letter from Joseph G. Giitter, Division Director, NRC NRR, to Dave Baxter, Vice President, ONS at 1-3 (Apr. 30, 2009) (ADAMS Accession No. ML090570779) [hereinafter April 2009 Giitter Letter]; Letter from Dave Baxter, Vice President, ONS, to NRC Document Control Desk at 3 (Nov. 30, 2009) (ADAMS Accession No. ML093380701); Letter from Dave Baxter, Vice President, ONS, to NRC Document Control Desk, attach. 1, at 3 & n.2 (Jan. 15, 2010) (In Place Measures that Address Postulated External Flood Threat Issues) (ADAMS Accession No. ML100210199); *id.* attach. 2 (Interim Commitments and Implementation Dates); Letter from Joseph G. Giitter, Division Director, NRC NRR, to Dave Baxter, Vice President, ONS at 1 (Jan. 29, 2010) (ADAMS Accession No. ML100271591); Letter from Dave Baxter, Vice President, ONS, to NRC Document Control Desk, attach. 1 (Mar. 5, 2010) (RAI Responses) (ADAMS Accession No. ML103430047); *see also* June 2016 NRC Flooding Investigative Report at 85-86.

³⁸ *See* Letter from Dave Baxter, Vice President, ONS, to NRC Document Control Desk, attach. 1 (June 3, 2010) (Status of External Flood Commitments) (ADAMS Accession No. ML101610083); *see also* June 2016 NRC Flooding Investigative Report at 86-87.

to demonstrate it had conducted an appropriate bounding analysis of ONS inundation from a Jocassee Dam failure; and (3) in addition to the June 2010 compensatory measures, Duke provide “a list of all modifications necessary to adequately mitigate the inundation” and make such modifications.³⁹

With respect to the June 2010 Staff CAL requirements regarding mitigating measures, in a November 2010 letter Duke stated it had completed all those items identified except for an emergency response drill that it planned for December 2010,⁴⁰ and subsequently completed.⁴¹ Further, in an April 2011 response to the June 2010 Staff CAL request for a list of all additional modifications necessary to adequately mitigate inundation, Duke provided an overarching inundation mitigation strategy and outlined its plant modification plans to protect the SSF from flooding and extend its operational duration, which included constructing a dedicated, flood-protected offsite power path and several additional walls and sets of flood barriers as well as providing a means of spent fuel pool makeup water.⁴² In reviewing these Duke proposals, the Staff requested and received from Duke additional information on the ONS design basis, the justification for the assumptions supporting and a summary of the actions needed for undertaking the proposed mitigation strategies, the quality standards applied to the calculations and procedures supporting those strategies, and the construction codes and seismic criteria for the additional flood walls.⁴³ And based on its review of this

³⁹ See Letter from Luis A. Reyes, Administrator, NRC Region II, to David A. Baxter, Site Vice President, ONS at 1 (June 22, 2010) (ADAMS Accession No. ML101730329) [hereinafter June 2010 Staff CAL]; *id.*, encl. (Compensatory Measures).

⁴⁰ See Letter from T. Preston Gillespie, Jr., Vice President, ONS, to Luis Reyes, Regional Administrator, NRC Region II, at 1 (Nov. 29, 2010) (ADAMS Accession No. ML103490330); *id.*, attach. 1 (Status of External Flood Compensatory Measures); *see also* June 2016 NRC Flooding Investigative Report at 87.

⁴¹ See Memorandum from Patrick L. Hiland, Division Director, NRC NRR, and Joseph G. Giitter, Division Director, NRC NRR, to John A. Grobe, Deputy Director, NRC NRR, et al., Technical Basis for the Timeline to Resolve External Flooding at Oconee at 3 (Mar. 5, 2011) (ADAMS Accession No. ML103410042). The date on this letter is March 5, 2010, but the concurrence block makes it clear this was a 2011 letter. *See id.* at 4.

⁴² See Letter from T. Preston Gillespie, Jr., Vice President, ONS, to Victor McCree, Regional Administrator, NRC Region II, at 2 (Apr. 29, 2011) (ADAMS Accession No. ML111460063); *id.* attach. 1 (Jocassee Dam Failure Flood Mitigation Strategy); *id.* attach. 2, at 2 (Description of Modifications).

⁴³ See Letter from John A. Grobe, Deputy Director, NRC NRR, to Preston Gillespie, Site Vice President, ONS, at 1-2 (Aug. 18, 2011) (ADAMS Accession No. ML12363A090); Letter from T. Preston Gillespie, Jr., Vice President, ONS, to NRC Document Control Desk, encl. (Oct. 17, 2011) (Response to August 18, 2011 [RAIs] Regarding ONS External Flooding) (ADAMS Accession No. ML11294A341); Letter from Michele G. Evans, Division Director, NRC NRR, to Preston Gillespie, Site Vice President, ONS at 1 (May 15, 2012) (ADAMS Accession No. ML12129A186); Letter

(Continued)

information, in September 2012 the NRC Staff accepted Duke's proposal to design and construct the structures protecting against sunny-day dam failures using FERC-accepted structural codes, with modification implementation expected by about June 2016.⁴⁴

As to the June 2010 Staff CAL direction to provide ONS site inundation bounding documentation, in an August 2010 response Duke included the results of simulation modeling intended to determine accurately ONS site water levels resulting from a hypothetical Jocassee Dam failure.⁴⁵ In a January 28, 2011 letter, the NRC Staff provided its assessment of this ONS site inundation bounding information, noting again that a random or "sunny-day" failure scenario was selected after a failure modes evaluation determined that the potential failure of the Jocassee Dam from either an overtopping event or seismic event "was not credible." January 2011 Leeds Letter at 1. In the accompanying January 2011 Staff Safety Evaluation, while noting that certain of the simulation model runs performed by Duke showed "the greatest depth at the SSF of [REDACTED] (or approximately [REDACTED] MSL), the Staff "agreed with the licensee's approach" that the appropriate modeling methodology for this sunny-day failure scenario showed that the maximum water levels at the SSF would be [REDACTED] MSL, the same as the top elevation of the intake dike that "will allow flooding of the plant upon overtopping, independent of the breach location(s)." January 2011 Staff Safety Evaluation at 12. Also, the Staff determined that "the licensee ha[d] included conservatism of the parameters utilized in the dam breach scenario" such that this "scenario will bound the inundation at ONS, therefore providing reasonable assurance for the overall flooding scenario at the site," and this "scenario will be the new flooding basis for the site." *Id.* at 13. Duke thus having submitted what the Staff considered the documentation necessary to demonstrate a Jocassee Dam failure-associated ONS site inundation had been bounded, and Duke having committed to keep the June 2010 compensatory measures "in place until a final resolution ha[d] been agreed upon between Duke and the NRC staff," the

from T. Preston Gillespie, Jr., Vice President, ONS, to NRC Document Control Desk, attach. 1 (June 14, 2012) (Response to May 15, 2012, [RAIs] Regarding ONS External Flooding) (ADAMS Accession No. ML12167A372); *id.* attach. 2 (Codes and Standards for [ONS] External Flood Mitigation Solutions).

⁴⁴ See Letter from Michele G. Evans, Division Director, NRC NRR, to Preston Gillespie, Site Vice President, ONS at 1-2 (Sept. 20, 2012) (ADAMS Accession No. ML12219A163) [hereinafter September 2012 Evans Letter]; see also June 2016 NRC Flooding Investigative Report at 87. The 2016 implementation date reflected the circumstances surrounding the agency's then-ongoing post-Fukushima domestic reactor safety review process concerning, among other things, flooding and seismic events. See *infra* note 46 and accompanying text.

⁴⁵ See Letter from Dave Baxter, Vice President, ONS, to NRC Document Control Desk, attach. 1 (Aug. 2, 2010) (RAI Responses) (ADAMS Accession No. ML102170006) [hereinafter August 2010 Duke Flooding Evaluation].

Staff concluded that “this technical assessment officially closes the CAL action” requiring Duke to provide adequate scenario-bounding documentation. *Id.*

A little more than a month later, a March 11, 2011 earthquake and resulting tsunami caused, over the next several days, reactor core meltdowns and hydrogen explosions at the Fukushima Dai-ichi facility in Japan. In the aftermath of this severe accident, agency attention turned to the safety of United States reactors from seismic and flooding events. Consequently, in March 2012 the agency issued a section 50.45(f) request for information (RFI) to Duke and all other power reactor licensees to provide information “to support the NRC staff’s evaluation of whether further regulatory action was needed in the areas of seismic and flooding design.” March 2012 NRC Fukushima Section 50.54(f) Letter at 2. Specifically, using present-day NRC requirements and guidance as well as current methodologies and practices, these licensees were to perform reevaluations of “seismic hazards at their sites” and “all appropriate external flooding sources, including the effects from local intense precipitation on the site, probable maximum flood (PMF) on stream[s] and rivers, storm surges, seiches, tsunami, and dam failures.” *Id.*, encl. 1, at 5-6 (Recommendation 2.1: Seismic); *id.*, encl. 2, at 6 (Recommendation 2.1: Flooding). Moreover, regarding the June 2010 Staff CAL, in its September 2012 letter accepting Duke’s proposal to design and construct Jocassee Dam failure inundation mitigation structures, the NRC Staff advised Duke that the June 2010 CAL would remain “active until it can be superseded by regulatory action related to the Fukushima responses.”⁴⁶ Also, according to this Staff letter, if the post-Fukushima RFI review indicated “that the Jocassee Dam will not fail due to overtopping or seismic failure, and the NRC staff review supports this determination, then the NRC will accept the [January 2011 Staff Safety Evaluation] as defining the bounding flood at the Oconee site due to dam failure.” September 2012 Evans Letter at 2.

In response to the NRC Staff’s March 2012 Fukushima RFI, in March 2013 Duke submitted a flood hazard reevaluation report (FHRR),⁴⁷ which Duke updated in March 2015 in response to Staff RAIs requesting a dam-failure reanalysis applying alternate breach methodologies and a recently-completed Jocassee Dam-specific seismic analysis.⁴⁸ Further, in an August 2014 letter to the Staff,

⁴⁶ September 2012 Evans Letter at 2; *see also* Memorandum to File from John P. Boska, Senior Project Manager, NRC NRR, encl. at 5, 7 (Mar. 19, 2013) (LIC-504 Assessment, Integrated Risk-Informed Decision Making Process for Emergent Issues Regarding External Flooding Resulting From Dam Failure, [Duke], [ONS], Units 1, 2, and 3, Docket Nos. 50-269, 50-270, and 50-287) (ADAMS Accession No. ML16070A287).

⁴⁷ *See* Letter from T.P. Gillespie, Jr., Vice President, ONS, to NRC Document Control Desk at 1 (Mar. 13, 2013) (ADAMS Accession No. ML13079A227).

⁴⁸ *See* Letter from Scott L. Batson, Vice President, ONS, to NRC Document Control Desk at 2 (Mar. 6, 2015) (ADAMS Accession No. ML15072A106).

acknowledging that “[a]ll CAL compensatory measures will remain in effect until regulatory action allows their suspension,” Duke indicated its understanding that (1) the FHRR would be the basis for further facility modifications rather than the still-outstanding June 2010 Staff CAL; and (2) final approval of the FHRR would allow the June 2010 Staff CAL flooding basis to be replaced by the Fukushima flood analysis of upstream dam failures, which, in turn would allow Duke to update its June 2010 Staff CAL response with a new mitigation strategy and corresponding modifications.⁴⁹

In a September 2015 interim Staff response (ISR) letter, based on its review of Duke’s FHRR addressing ONS reevaluated flooding hazards relative to both design-basis and beyond-design-basis external events, the NRC Staff (1) concluded the FHRR was suitable for assessing mitigating strategies and developing a mitigating strategies assessment in that it provided Duke with suitable input values associated with the three reevaluated flood hazard mechanisms, including dam failure, that exceeded ONS’s current design basis; and (2) directed that these values be utilized in an additional focused evaluation addressing those flooding hazards.⁵⁰ The September 2015 ISR Letter also indicated that the Staff’s soon-to-be issued report documenting the basis for these conclusions would address the impact of FHRR review on the previous ONS flooding analyses submitted in response to the June 2010 Staff CAL. *See* September 2015 ISR Letter at 2. Then, after providing Duke with a January 2016 audit report detailing the Staff’s regulatory review process regarding Duke’s FHRR submittals,⁵¹ the Staff issued its April 14, 2016 FHRR final assessment.⁵²

The Staff’s April 2016 FHRR final assessment considered the adequacy of FHRR information regarding Jocassee Dam hydrologic overtopping, seismic failure, and sunny-day failure.⁵³ The Staff concluded that (1) Duke had conducted

⁴⁹ *See* Letter from Scott L. Batson, Vice President, ONS, to NRC Document Control Desk at 1, 2 (Aug. 8, 2014) (ADAMS Accession No. ML14225A540).

⁵⁰ *See* Letter from Juan F. Uribe, Project Manager, NRC NRR, to Scott Batson, Vice President, ONS at 2 (Sept. 24, 2015) (ADAMS Accession No. ML15239B261) [hereinafter September 2015 ISR Letter]; *id.*, encl. 1, tbl. 2 (Recalculated Flood Hazards for Flood-Causing Mechanisms for Use in the [Mitigating Strategies Assessment]).

⁵¹ *See* Letter from Juan Uribe, Project Manager, NRC NRR, to Scott Batson, Vice President, ONS, at 1 (Jan. 12, 2016) (ADAMS Accession No. ML15355A164).

⁵² *See* Letter from Jack R. Davis, Division Director, NRC NRR, and Anne Boland, Division Director, NRC NRR, to Scott Batson, Site Vice President, ONS (Apr. 14, 2016) (ADAMS Accession No. ML15352A207) [hereinafter April 2016 Davis/Boland FHRR Final Assessment Letter].

⁵³ *See id.*, encl. 1, at 19-38 (Staff Assessment by [NRR] Related to [FHRR] Near-Term Task Force Recommendation 2.1, [ONS] Units Nos. 1, 2, and 3, Docket No. 50-269, 50-270, and 50-287) (ADAMS Accession No. ML17335A438) [hereinafter April 2016 Staff FHRR Final Assessment].

(Continued)

the hazard reevaluation using appropriate present-day methodology and current regulatory guidance; and (2) Duke's information regarding these reevaluated flood-causing mechanisms would be appropriate input to use in its additionally required focused evaluation. *See* April 2016 Staff FHRR Final Assessment at 41. The Staff also concluded, based on its evaluation of the FHRR information, that both Jocassee Dam hydrologic overtopping and seismically induced failure modes were "not reasonable based on present-day methodologies and guidance." *Id.* at 21, 27.

Additionally, the final FHRR assessment provided a summary comparison of Duke's 2010 and post-Fukushima-related 2015 flood hazards evaluations, noting that although both "appropriately followed engineering and regulatory guidance," the 2010 evaluation was "based on several conservative assumptions" while the 2015 evaluation (1) removed some conservatism in the 2010 analysis; (2) was consistent with Commission direction regarding the March 2012 Fukushima RFI flood hazard reevaluations; and (3) provided an appropriate basis for assessing the need for specific actions included in the June 2010 Staff CAL.⁵⁴ And in this regard, the Staff indicated that the revised 2015 Duke FHRR provided "an acceptable alternative flood hazard analysis for ONS for the purpose of meeting the terms of the [June 2010 Staff CAL]" and that following "completion of the associated flooding modifications . . . the NRC [would] evaluate whether the terms of the [June 2010 Staff] CAL [had] been satisfied." April 2016 Davis/Boland FHRR Final Assessment Letter at 2.

Thereafter, in a late April 2016 letter, Duke informed the NRC Staff that it had completed the five external flood modification measures it committed to implementing in response to the June 2010 Staff CAL to support dam-failure flood mitigation.⁵⁵ In a June 2016 report documenting a May 2016 inspection, the Staff concluded that its review of those actions, as well as "previously completed inspection activities related to interim compensatory measures, and the [April 2016 Davis/Boland FHRR Final Assessment Letter], provide adequate assurance that the required terms as directed by the [June 2010 Staff] CAL have been satisfied by ONS. The [June 2010 Staff CAL] is now closed."⁵⁶ Addi-

Although this enclosure and the enclosure cited in footnote 54 below were publicly-withheld attachments to the April 2016 Davis/Boland FHRR Final Assessment Letter cited in note 52, when these enclosures later were publicly released they were assigned the cited ADAMS accession numbers.

⁵⁴ *See id.*, encl. 2, at 4 (Comparison of the 2010 and 2015 Postulated Jocassee Dam Failure and Downstream Flooding Evaluations by [Duke]) [hereinafter Staff 2010/2015 Evaluation Comparison].

⁵⁵ *See* Letter from Scott L. Batson, Vice President, ONS, to NRC Document Control Desk at 2 (Apr. 29, 2016) (ADAMS Accession No. ML16131A671).

⁵⁶ Letter from Catherine Haney, Regional Administrator, NRC Region II, to Scott Batson, Site Vice President, ONS, at 1 (June 16, 2016) (ADAMS Accession No. ML16168A176) [hereinafter June 2016 Haney Letter].

tionally, the Staff reiterated its intent, as outlined in the April 2016 Staff Final FHRR Assessment, to “address ongoing external flooding issues for ONS within the framework of the Fukushima Near-Term Task Force Recommendation 2.1 process, to ensure consistency in the staff’s approach to addressing these issues for all plants.” June 2016 Haney Letter at 1.

In July 2017, Duke submitted its Staff-mandated focused evaluation. In assessing the three reevaluated flood hazard mechanisms, including dam failure, that the Staff identified in its September 2015 ISR Letter as requiring additional evaluation, Duke stated that, per current NRC-endorsed Nuclear Energy Institute (NEI) guidance, “ONS has reliable, passive protection of [k]ey [s]tructures, [s]ystems, and [c]omponents . . . to maintain [k]ey [s]afety [f]unctions . . . for the three flood causing mechanisms.”⁵⁷ The NRC Staff then issued a June 2018 focused evaluation assessment finding that “the [ONS focused evaluation] was performed consistent with the [NRC-endorsed NEI] guidance” and that Duke “has demonstrated that effective flood protection, if appropriately implemented, exists for the . . . dam breach flood mechanisms during a beyond-design-basis external flooding event.”⁵⁸ The Staff indicated as well that “additional regulatory actions associated with the reevaluated flood hazard are not warranted” and that Duke “has satisfactorily completed providing responses to the 50.54(f) activities associated with the reevaluated flood hazards.”⁵⁹ Finally, in November 2020, the NRC Staff provided Duke with a letter documenting that Duke had provided the information requested by the NRC in conjunction with the March 2012 NRC Fukushima Section 50.54(f) Letter and that “the actions required by the [NRC]

⁵⁷ See Letter from Thomas D. Ray, Vice President, ONS, to NRC Document Control Desk at 2 (July 31, 2017) (ADAMS Accession No. ML17222A068). As referenced in this letter, *see id.*, an NEI guidance document received Staff endorsement as providing appropriate methods for satisfying the March 2012 NRC Fukushima Section 50.54(f) Letter, *see* NRR, NRC, JLD-ISG-2016-01, Guidance for Activities Related to Near-Term Task Force Recommendation 2.1, Flooding Hazard Reevaluation; Focused Evaluation and Integrated Assessment, Interim Staff Guidance at 4 (rev. 0 July 11, 2016) (ADAMS Accession No. ML16162A301).

⁵⁸ Letter from Juan F. Uribe, Project Manager, NRC NRR, to Ed Burchfield, Jr., Site Vice President, ONS, at 2 (June 18, 2018) (ADAMS Accession No. ML18141A755) [hereinafter June 2018 Uribe Letter].

⁵⁹ *Id.*, encl. 2, at 10 (Staff Assessment by [NRR] Related to the Focused Evaluation for [ONS], Units 1, 2, and 3 as a Result of the Reevaluated Flooding Hazard Near-Term Task Force Recommendation 2.1 — Flooding (CAC Nos. MG0265, MG0266, MG0267, and EPID L-2017-JLD-0029). The Staff’s ONS focused evaluation assessment also indicated that Duke submitted an ONS mitigating strategies assessment in January 2017, which the Staff in a July 2017 evaluation found “was performed consistent” with the NRC-endorsed NEI guidance and “demonstrated that the mitigation strategies, if appropriately implemented, are reasonably protected from reevaluated flood hazard conditions for beyond-design-basis external flooding events.” *Id.* at 2-3.

in orders issued following the accident at the Fukushima Dai-ichi Nuclear Power Station have been completed for [ONS].”⁶⁰

It is against this regulatory and historical background that we consider Petitioners’ hearing request.

II. STANDING

While Petitioners’ standing has not been contested, an independent Board determination is required about whether each has fulfilled the requirements to establish standing to intervene in this proceeding.⁶¹ And in that regard, as the Commission noted recently, to establish the representational standing claimed by Petitioners, in addition to providing the information required by 10 C.F.R. § 2.309(d)(1) to identify the organization seeking to intervene and its interest in the proceeding as it is seeking to represent the interests of its members, the organization also “must show that at least one member has standing and has authorized the organization to represent [the member] and to request a hearing on [the member’s] behalf.”⁶²

In this instance, Petitioners rely on the proximity presumption as a principal element for establishing their representational standing. Recently applied by several licensing boards in SLR proceedings, this presumption excuses a petitioner otherwise meeting the requirements for standing from having to make a specific showing of injury in fact so long as that petitioner resides, works, or otherwise has regular contacts within a 50-mile radius of the reactor facility in question.⁶³ Member affidavits supplied with Petitioners’ hearing request show that each has at least one member residing within 50 miles of the ONS facility who has met the other standing requirements specified above.⁶⁴

⁶⁰ Letter from Robert J. Bernardo, Project Manager, NRC NRR, to J. Ed Burchfield, Jr., Site Vice President, ONS, at 1 (Nov. 17, 2020) (ADAMS Accession No. ML20304A369) [hereinafter November 2020 Bernardo Letter].

⁶¹ See 10 C.F.R. § 2.309(d)(2); see also *Exelon Generation Co., LLC* (Peach Bottom Atomic Power Station, Units 2 and 3), LBP-19-5, 89 NRC 483, 491 (2019), *aff’d on other grounds*, CLI-20-11, 92 NRC 335 (2020).

⁶² *Southern Nuclear Operating Co.* (Vogtle Electric Generating Plant, Unit 3), CLI-20-6, 91 NRC 225, 237-38 (2020).

⁶³ See *North Anna*, LBP-21-4, 93 NRC at 196-97; *Peach Bottom*, LBP-19-5, 89 NRC at 490-91; *Florida Power & Light Co.* (Turkey Point Nuclear Generating Units 3 and 4), LBP-19-3, 89 NRC 245, 258-59 (2019), *appeal dismissed and referred ruling aff’d*, CLI-20-3, 91 NRC 133 (2020).

⁶⁴ See Hearing Petition, attachs. 2A & 2B (affidavits of Beyond Nuclear, Inc., and Sierra Club, Inc. members residing approximately two miles from the ONS facility); *id.*, attach. 2C (affidavit of Sierra Club, Inc. member residing approximately 20 miles from the ONS facility). The distance measurements provided above are Google Maps-based calculations.

We thus conclude that each of the Petitioners has established its representational standing to intervene in this proceeding.

III. ADMISSIBILITY OF PETITIONERS' CONTENTION 1

Beyond establishing standing, a petitioner in a licensing proceeding also must tender at least one litigable contention for its hearing request to be granted. In the context of this SLR proceeding, to establish the litigability of their three contentions, Petitioners must establish both that (1) the contentions are admissible pursuant to the standards in 10 C.F.R. § 2.309(f)(1); and (2) with respect to Contentions 2 and 3, the section 2.335 standards have been met for obtaining a waiver of the restriction on challenging a Commission rule in the context of an adjudicatory proceeding. We begin by addressing the admissibility of Petitioners' first issue statement under section 2.309(f)(1).

A. Contention Admissibility Standards Under 10 C.F.R. § 2.309(f)(1)

When a hearing requestor, such as Petitioners here, seeks admission of a contention submitted as part of a timely intervention petition, that contention must satisfy the six admissibility factors set forth in section 2.309(f)(1). Those factors require the proponent of a contention to

- (i) Provide a specific statement of the issue of law or fact to be raised or controverted . . . ;
- (ii) Provide a brief explanation of the basis for the contention;
- (iii) Demonstrate that the issue raised in the contention is within the scope of the proceeding;
- (iv) Demonstrate that the issue raised in the contention is material to the findings the NRC must make to support the action that is involved in the proceeding;
- (v) Provide a concise statement of the alleged facts or expert opinions which support the requestor's/petitioner's position on the issue and on which the petitioner intends to rely at hearing . . . ; [and]
- (vi) . . . [P]rovide sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact.

10 C.F.R. § 2.309(f)(1)(i)-(vi).

These six criteria aim to "focus litigation on concrete issues and result in a clearer and more focused record for decision."⁶⁵ The petitioner bears the bur-

⁶⁵ Changes to Adjudicatory Process, 69 Fed. Reg. 2182, 2202 (Jan. 14, 2004) [hereinafter 2004 Part 2 Changes].

den to satisfy each of the criteria,⁶⁶ and a failure to comply with any of the requirements constitutes grounds for rejecting a proposed contention.⁶⁷

B. Petitioners' Contention 1

As set forth in their hearing request, Petitioners' Contention 1, "Failure to Comply with 10 C.F.R. [§] 51.53(c)(2)," states:

Duke's [ER] fails to satisfy 10 C.F.R. § 51.53(c)(2) because it fails to fulfill that provision's requirement to discuss "the environmental impacts of alternatives and any other matters described in [10 C.F.R.] § 51.45." In particular, Duke incorrectly relies on 10 C.F.R. § 51.53(c)(3) to excuse it from discussing significant environmental impacts classified as "Category 1" in 10 C.F.R. Part 51, [Subpart] A, Appendix B. By its own terms, however, [section] 51.53(c)(3) applies only to "applicants seeking an initial renewed license," and therefore does not apply to SLR applicants. Pursuant to 10 C.F.R. §§ 51.53(c)(2) and 51.45(a), Duke must discuss all significant environmental impacts of the proposed approval of Duke's SLR application, including the environmental impacts of reactor accidents and alternatives for avoiding or mitigating those impacts. The impacts that must be considered include the environmental impacts of a core melt accident caused by failure of the Jocassee Dam. Relevant information that must be considered is set forth in Contentions 2 and 3, below, which are hereby adopted and incorporated by reference.

Hearing Petition at 11 (footnote omitted). As Petitioners recognize, however, the legal issue they frame with this contention, i.e., whether section 51.53(c)(3)'s exclusion of Category 1 issues from NEPA consideration applies in an SLR proceeding such as this one, has been ruled upon by the Commission in holdings that found this provision applicable to SLR proceedings. *See id.* at 12 (citing *Turkey Point*, CLI-20-3, 91 NRC at 141-45; *Peach Bottom*, CLI-20-11, 92 NRC at 342-43); Petitioners Reply at 2 (recognizing *Turkey Point* and *Peach Bottom* decisions are binding but indicating Contention 1 raised to preserve right to seek judicial review). As was recently illustrated by the *North Anna* licensing board in responding to a similar assertion in that SLR proceeding, the Commission's prior rulings resolving this point are binding precedent that the Board must

⁶⁶ *See Entergy Nuclear Operations, Inc.* (Palisades Nuclear Plant), CLI-15-23, 82 NRC 321, 329 (2015) ("[I]t is Petitioners' responsibility, not the Board's, to formulate contentions and to provide 'the necessary information to satisfy the basis requirement' for admission." (quoting *Statement of Policy on Conduct of Adjudicatory Proceedings*, CLI-98-12, 48 NRC 18, 22 (1998))).

⁶⁷ *See* 2004 Part 2 Changes, 69 Fed. Reg. at 2221; *see also Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-99-10, 49 NRC 318, 325 (1999).

follow in this SLR proceeding. *See North Anna*, LBP-21-4, 93 NRC at 189 n.11.

Accordingly, we find this legal contention inadmissible as failing to raise a genuine dispute over a material issue of law. *See* 10 C.F.R. § 2.309(f)(1)(vi).

IV. PETITIONERS' 10 C.F.R. § 2.335(b) WAIVER PETITION REGARDING CONTENTIONS 2 AND 3

As is detailed in section I.B above, a contention challenging established NRC regulatory findings, including the Part 51, subpart A, appendix B exclusion of “Category 1 environmental determinations and SAMA analyses” disputed by Petitioners, *see* Hearing Petition at 10-11, requires submission of a petition for a waiver pursuant to 10 C.F.R. § 2.335(b).⁶⁸ And as Petitioners’ hearing request makes clear, their Contentions 2 and 3 both raise challenges to matters included in appendix B, Table B-1, Category 1, or the equivalent, under the 2013 Revised GEIS as it applies to Duke’s ER for this SLR proceeding, *see id.* at 2-3, thereby posing the issue whether these contentions can meet the standards set forth in section 2.335 so as to be litigable in this adjudication. For the reasons set forth below, we find that for both these contentions, Petitioners have failed to fulfill the section 2.335 waiver requirements. Further, because this determination precludes litigation of these two contentions in this proceeding,⁶⁹ we need not address the question whether either contention meets the admissibility standards of section 2.309(f)(1).

⁶⁸ *See Exelon Generation Co., LLC* (Limerick Generating Station, Units 1 and 2), CLI-12-19, 76 NRC 377, 386 (2012) (identifying SAMAs as the “functional equivalent of a Category 1 issue, removing [them] from litigation in . . . case-by-case license renewal adjudications”).

⁶⁹ One licensing board has indicated that when a section 2.335 rule waiver is required to permit further consideration of a contention, “[a]bsent a rule waiver, [the contention] is outside the scope of this proceeding, *see* 10 C.F.R. § 2.309(f)(1)(iii), because it constitutes an impermissible challenge to a Commission regulation. *See id.* § 2.335(a).” *Florida Power & Light Co.* (Turkey Point Nuclear Generating Units 3 and 4), LBP-19-8, 90 NRC 139, 170 (2019). This acknowledgment of the established principle that, absent a rule waiver, a challenge to a Commission rule “would be outside the scope of an adjudication,” *Limerick*, CLI-13-7, 78 NRC at 206, does not, in our estimation, support the notion that the standards that govern the analysis of the admissibility of a contention under section 2.309(f)(1) are somehow co-extensive with those that apply in determining whether a contention is litigable in the context of a section 2.335 rule waiver determination. Indeed, as section 2.335 makes clear, its provisions apply “in any adjudicatory proceeding subject to [10 C.F.R. Part 2],” 10 C.F.R. § 2.335(a), including in a Part 2, subpart B enforcement proceeding in which a section 2.309(f)(1) admissible contention is not required for litigation to proceed relative to the hearing request of the subject of the agency enforcement order or civil penalty at issue, *see Exelon Generation Co., LLC* (Dresden Nuclear Power Station, Units 2 and 3), LBP-14-4, 79 NRC 319, 325-26 (2014) (citing *Andrew Siemaszko*, CLI-06-16, 63 NRC 708, 714 n.3 (2006)), *appeal dismissed as moot*, CLI-16-6, 83 NRC 147 (2016).

A. Standards for Obtaining a Waiver Under 10 C.F.R. § 2.335(b)

In accordance with the Commission's policy goals, an NRC regulatory determination published as a rule is generally not subject to adjudicatory challenge.⁷⁰ But as 10 C.F.R. § 2.335(b) indicates, it is possible for a hearing requestor in an adjudication to obtain a waiver of the applicability of a Commission regulation if "special circumstances with respect to the subject matter" exist in the immediate proceeding, i.e., if the application of the pertinent rule "would not serve the purposes for which [it] was adopted." Over time, Commission caselaw has defined the nature of such "special circumstances" within the meaning of section 2.335(b), culminating in the Commission's *Millstone* decision that identified the following four factors as pertinent to evaluating whether a waiver is appropriate:

- (i) the rule's strict application would not serve the purposes for which it was adopted;
- (ii) special circumstances exist that were not considered, either explicitly or by necessary implication, in the rulemaking proceeding leading to the rule sought to be waived;
- (iii) those circumstances are unique to the facility rather than common to a large class of facilities; and
- (iv) waiver of the regulation is necessary to reach a significant safety [or environmental] problem.⁷¹

The ultimate authority for granting a waiver lies with the Commission, but the decision whether to advance a section 2.335 waiver request proffered in an adjudicatory proceeding to the Commission is made in the first instance by the licensing board assigned to the adjudication. *See* 10 C.F.R. § 2.335(d). Further, for each of these *Millstone* factors, a petitioner must make a "*prima facie* showing" to allow a licensing board to "certify the matter directly to the Commission," in the absence of which the board "may not further consider the matter." *Id.* § 2.335(c). Although not defined in the agency's regulations, to constitute a *prima facie* showing, caselaw suggests that to meet the "substantial" showing required in connection with a section 2.335 waiver petition,⁷² the

⁷⁰ *See Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Unit 2), CLI-03-14, 58 NRC 207, 218 (2003) ("Petitioners may not seek an adjudicatory hearing 'to attack generic NRC requirements or regulations, or to express generalized grievances about NRC policies.'" (quoting *Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 334 (1999))).

⁷¹ *Limerick*, CLI-13-7, 78 NRC at 207-08 (citing *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-05-24, 62 NRC 551, 559-60 (2005)).

⁷² *Tennessee Valley Authority* (Watts Bar Nuclear Plant, Unit 2), LBP-10-12, 71 NRC 656, 662 (Continued)

information concerning each factor must be “legally sufficient to establish a fact or case unless disproved,”⁷³ and must be presented by affidavit “in a persuasive manner with adequate supporting facts.”⁷⁴

B. Petitioners Have Failed to Make a Prima Facie Showing of Special Circumstances Warranting a Section 2.335(b) Waiver for Contentions 2 and 3

In their Contention 2,⁷⁵ Petitioners first assert “new and significant information” has been overlooked by Duke in its ER, which “fails to consider the environmental implications of a core melt accident caused by failure of the

n.9 (citing *Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), ALAB-895, 28 NRC 7, 22 (1988); *Pacific Gas and Electric Co.* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-653, 16 NRC 55, 72 (1981)), *petition for interlocutory review denied*, CLI-10-29, 72 NRC 556 (2010).

⁷³ *Seabrook*, ALAB-895, 28 NRC at 22 (quoting *Diablo Canyon*, ALAB-653, 16 NRC at 72).

⁷⁴ *Watts Bar*, LBP-10-12, 71 NRC 662 n.9. The question whether a prima facie showing has been made is one generally associated with meeting the burden of production or the burden of going forward during an evidentiary hearing. See *NextEra Energy Seabrook, LLC* (Seabrook Station, Unit 1), LBP-20-9, 92 NRC 58, 94-95 & n.191 (2020) (“An Intervenor has the initial ‘burden of going forward,’ which requires an intervenor to establish a prima facie case for claims asserted in the reformulated contention. The admission of a contention, by itself, does not satisfy the ‘burden of going forward.’ An intervenor must ‘provid[e] probative evidence or expert testimony.’” (footnotes omitted)), *review declined*, Memorandum from Annette Vietti-Cook, Secretary of the Commission, to Board and Parties (May 11, 2021) (unpublished). But in the context of determining whether a section 2.335 waiver petition makes a prima facie showing, whether provided by an expert or otherwise, that support must deal adequately with potentially relevant information. See *Watts Bar*, LBP-10-12, 71 NRC at 670-71 (indicating petitioner’s expert declaration is insufficient to provide prima facie support for section 2.335 waiver request in that expert’s claim of unanalyzed environmental impacts because “more work needs to be done” to bring unit online fails to indicate what the work or the impacts might entail).

⁷⁵ Petitioners’ Contention 2, “Failure to Consider New and Significant Information Regarding Significant Impacts of Reactor Accidents Caused by Failure of Jocassee Dam,” alleges:

Duke has violated NEPA and 10 C.F.R. § 51.53(c)(3)(iv) by failing to address “new and significant information regarding the environmental impacts of license renewal of which [Duke] is aware.” The Commission should waive 10 C.F.R. § 51.53(c)(3) and the categorical exclusions of 10 C.F.R. Part 51, [Subpart] A, Appendix B, and require Duke to address those impacts in a complete environmental impact analysis, as set forth in 10 C.F.R. § 51.45.

The new and significant information of which Duke is aware, and that is not addressed in the [ER], consists of the following:

- Duke’s own risk analyses show that the likelihood of a core melt accident and containment failure caused by a random failure of the Jocassee Dam is significantly higher than presented in Duke’s [ER]. And even this higher estimate of Jocassee Dam failure

(Continued)

Jocassee Dam.”⁷⁶ Hearing Petition at 14-15, 18. Additionally, Petitioners maintain that Duke’s failure to implement measures to address the import of the January 2011 Staff Safety Evaluation constitutes an “unresolved safety issue” that they now pose in the form of an environmental contention involving “new and significant information” that requires attention under NEPA in this SLR proceeding. *Id.* at 3. In Contention 3,⁷⁷ Petitioners similarly maintain Duke

frequency is too low, given Duke’s failure to consider the additional credible contributors to Jocassee [D]am failure frequency of seismic events and dam overtopping.

- Duke fails to address the environmental significance of a 2011 Safety Evaluation, in which the NRC Staff determined that the potential for a random (*i.e.*, “sunny day”) Jocassee Dam failure constitutes an “adequate protection” issue requiring Duke to implement additional measures to protect against flooding of essential safety equipment and thereby prevent a reactor meltdown. By establishing the risk of a core melt accident with an associated containment failure due to failure of the Jocassee Dam as an adequate protection issue, the NRC effectively established it as a significant environmental issue as well.

Hearing Petition at 13-14.

⁷⁶In this regard, based on the supporting statement of an expert who appears to have substantial experience in the field of risk analysis, Petitioners’ Contention 2 maintains among other things that the dam-failure rate figure calculated by Petitioners’ expert is higher than the dam-failure rate figure provided in Duke’s ER, establishing that Duke’s failure rate is both “wrong,” as well as indicating it fails to account for “additional significant contributors to dam failure risk such as seismically-induced dam failure and dam overtopping” or “the risk contribution from shutdown operations.” Hearing Petition at 14-15 (citing Hearing Petition, attach. 1, ex. 1, § 3 (Jeffrey T. Mitman, NRC Relicensing Crisis at [ONS]: Stop Duke from Sending Safety Over the Jocassee Dam (Sept. 2021) [hereinafter Mitman Report])). In contesting these claims, Duke and the NRC Staff respectively assert, among other things, that the technical basis for Petitioners’ Contention 2 has “multiple and significant factual errors, omissions, and mischaracterizations” that deprive Petitioners’ hearing request of the needed support to demonstrate a genuine dispute, Duke Answer at 13-19, and is outside the scope of the proceeding by seeking improperly to conflate a NEPA environmental impact issue with a safety concern associated with a current licensing basis operating issue that is otherwise unrelated to the plant systems, structures, and components aging management issues that are the recognized focus for a litigable safety contention in a license renewal proceeding, *see* Staff Answer at 47-49.

⁷⁷After incorporating Petitioners’ arguments from Contention 2 regarding dam-failure risk analysis associated with core-melt accident and containment-failure probabilities and the purported failure to consider seismic events and dam overtopping, *see supra* note 75, Contention 3 adds:

- The NRC’s 2011 Safety Evaluation, discussed above in Contention 2, required Duke to implement certain measures for protection against a random (*i.e.*, “sunny day”) Jocassee Dam failure as a matter of providing “adequate protection” to public health and safety. By deeming these measures necessary, the NRC established them as SAMAs worthy of consideration. Indeed, in order to exclude a necessary safety measure, Duke would have a very high burden of justification. Yet, these measures are not discussed or implemented in the [ER].
- The [ER] fails to consider additional mitigative measures that may well be cost-effective

(Continued)

failed to consider “new and significant information” as it affects the outcome of Duke’s ER SAMA analysis.⁷⁸ *See id.*

For the purpose of determining whether a section 2.335 waiver is appropriate, these two contentions are complementary in that both can be addressed through a discussion about whether the contentions support a *prima facie* showing of special circumstances warranting a waiver of the pertinent regulations that otherwise would apply generic Category 1 environmental impact findings to Duke’s SLR application. In this regard, Petitioners seek to waive the application of 10 C.F.R. §§ 51.53(c)(3)(i) and 51.53(c)(3)(ii)(L) insofar as these provisions excuse an applicant from having to evaluate Category 1 items (and their functional equivalents, such as a SAMA analysis) in an ER prepared as part of an SLR application. *See id.* at 18. Moreover, in what we agree is “reasonable anticipation,” Petitioners also request a waiver of 10 C.F.R. §§ 51.71(d) and 51.95(c)(1) that excuse the NRC Staff from addressing these same items in both their draft and final GEIS supplement to be issued in subsequent phases of the SLR application review process. *See id.* at 18-19. Finally, Petitioners seek a waiver of 10 C.F.R. Part 51, subpart A, appendix B, Table B-1, for their Contention 2 and 3 challenges to those Category 1 findings associated with considering the environmental implications of a core-melt accident caused by failure of the Jocassee Dam. *See id.* at 18.

With this appendix B framework thus applying to both contentions, our determination whether the Petitioners’ have supplied the information required for a section 2.335(b) waiver request must be guided by the *Millstone* standards.

at Oconee, given the increased likelihood of a core melt accident. These measures include preemptively shutting down the reactors when reservoir water levels get too high, lowering the water levels in the lake behind the Jocassee and Keowee Dams, or lowering the crest elevation of some of the surround[ing] earthworks such that they overtop before the Jocassee Dam, thus lowering the flood impacts at ONS.

Hearing Petition at 16-17.

⁷⁸ As the support for Contention 3, Petitioners’ referenced Mr. Mitman’s expert report in which he suggests “Duke’s SAMA analysis does not reflect any consideration of the extensive work done to incorporate the Jocassee Dam failure and flood routing analysis,” including the “significant flood control measures in the [January] 2011 [Staff] Safety Evaluation” required by the NRC, and fails to analyze the mitigation measures listed in the contention (i.e., preemptive ONS shut down when reservoir water levels get too high, lowering the lake water levels behind the Jocassee and Keowee Dams, lowering crest elevation of Jocassee Dam earthworks so they overtop before the dam), which are “some other obvious ways to reduce the flood hazard from Oconee.” Mitman Report at 24. In response, both Duke and the Staff challenge the contention as failing to acknowledge or analyze the mitigation measures already implemented by Duke and providing suggestions for additional SAMAs that are “casual recommendations” that, as compared to the existing Duke SAMA analysis, fail to provide the requisite “seriously different picture of the environmental impact” necessary to frame an admissible issue. Staff Answer at 52 (quoting *Union Electric Co. d/b/a Ameren Missouri* (Callaway Plant, Unit 2), CLI-11-5, 74 NRC 141, 167-68 (2005)); *see* Duke Answer at 39-40.

For the reasons set forth below, we conclude that Petitioners' failure to satisfy *Millstone* factor four — whether “waiver of the regulation is necessary to reach a significant safety [or environmental] problem,” *Limerick*, CLI-13-7, 78 NRC at 208 (citing *Millstone*, CLI-05-24, 62 NRC at 559-60) — precludes Petitioners from obtaining a waiver of section 2.335 for these two contentions.⁷⁹

To reiterate, to make a successful showing regarding the *Millstone* factors, a petitioner must meet “extremely high standards” showing the existence of “compelling circumstances,”⁸⁰ stating “with particularity” the special circumstances that justify the need for waiver, a standard that is “stringent by design” and imposes a “substantial burden” on the participant seeking the waiver, *Limerick*, CLI-13-7, 78 NRC at 207, 208. In considering whether Petitioners have met this overarching benchmark in connection with *Millstone* factor four, i.e., by demonstrating there is a significant safety or environmental issue that needs to be reached to warrant a waiver, because of the technical nature of their contentions we will evaluate separately the issues posed within Contentions 2 and 3.

1. For Contention 2, Petitioners Have Failed to Make a Prima Facie Showing Under Millstone Factor Four that Waiver of the Regulation Is Necessary to Reach a Significant Safety or Environmental Problem

In support of *Millstone* factor four, Petitioners' waiver request makes only the general observation that a waiver “is necessary to address significant adverse

⁷⁹ With our finding below that Petitioners have failed to meet the fourth *Millstone* factor, we need not reach the issue whether their waiver request passes muster under *Millstone* factors one through three. Nonetheless, at least for Contention 2, more than a modicum of support under *Millstone* factor two (i.e., lack of consideration in the rulemaking leading to the rule to be waived) and *Millstone* factor three (i.e., circumstances unique to the facility) may exist in these circumstances in that (1) under the 2013 Revised GEIS, for license renewal purposes any plant-specific environmental consideration of seismic and flooding issues associated with post-Fukushima evaluations (and seemingly other contemporaneous post-1996 GEIS analyses) is deferred to the next license renewal GEIS supplement process for the individual plant, *see supra* section I.B; and (2) although ONS has geographic proximity to a dam, relative to the basis for the 1996 GEIS generic environmental impact findings regarding severe accidents, as incorporated into the 2013 Revised GEIS, none of the 28 nuclear power plants “taken as a representative sample” were “specifically downstream of a dam,” Tr. at 60-61 (Woods). But even assuming that these two *Millstone* factors could be met, and that the remaining *Millstone* factor one (i.e., rule's strict application will not serve its adopted purposes) would be accommodated by an admissible Contention 2, *see Limerick*, CLI-13-7, 78 NRC at 210-11; *Turkey Point*, CLI-01-17, 54 NRC at 12, this would not alleviate the need to make a prima facie showing regarding the fourth *Millstone* factor, *see Turkey Point*, LBP-19-8, 90 NRC 169-70 (indicating intervenors' asserted need to review and challenge draft SEIS analysis of new information does not relieve their obligation to satisfy the four *Millstone* factors in their section 2.335 waiver petition), which we conclude Petitioners have failed to accomplish.

⁸⁰ *Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), CLI-89-20, 30 NRC 231, 245 (1989).

environmental impacts that have not previously been considered.”⁸¹ Hearing Petition at 22. And as we have observed previously, *see supra* note 75, the problems Petitioners reference in Contention 2 as having significant but unconsidered environmental impacts include (1) the difference between the probability figure used in the Duke ER, which also is alleged not to include the risks associated with seismically-induced dam failure and dam overtopping, and the probability figure provided in a March 2010 NRC generic dam-failure estimate, which purportedly shows that “the likelihood of a core melt accident caused by a random failure of the Jocassee Dam . . . is significantly higher” than postulated in the ER; and (2) the asserted failure to address the January 2011 Staff Safety Evaluation, as it “constitutes an adequate protection issue” that requires new flooding mitigation measures to prevent a reactor meltdown. Hearing Petition at 2-3. Duke disputes this, arguing that neither its risk analysis nor any of their other Jocassee Dam failure-related concerns can justify a waiver of the appendix B framework given Petitioners’ failure to challenge in any specific way the post-Fukushima Duke flooding analyses and implemented mitigation measures, along with the associated Staff evaluations that ultimately resulted in the closing of the June 2010 Staff CAL. *See* Duke Answer at 25-26. In the circumstances here, we agree that Petitioners’ failure to engage this regulatory history is at the root of their failure to identify a “significant issue” under *Millstone* factor four.⁸²

⁸¹ Notwithstanding the potential pleading issue with this summary discussion regarding Contention 2, we continue our analysis of whether Petitioners have fulfilled *Millstone* factor four to ensure the matter is fully explored.

⁸² As was noted previously, *see supra* note 76, the Petitioners did present the Board with a dam-failure rate figure higher than the dam-failure rate figure provided in Duke’s ER with the claim that Duke’s failure rate was “wrong.” Hearing Petition at 14-15. But Petitioners’ dam-failure rate has as a primary underpinning a March 2010 NRC Staff-generated generic failure rate for large rockfill dams similar to the Jocassee Dam. *See* Mitman Report at 22 (describing “NRC’s best estimate [initiating event frequency (IEF)] of 2.8E-4 per year”) (citing James Vail, Fernando Ferrante, and Jeff Mitman, Reliability and Risk Analysts, NRC NRR, Generic Failure Rate Evaluation for Jocassee Dam (Mar. 15, 2010) (ADAMS Accession No. ML13039A084)); *see also* June 2016 NRC Flooding Investigative Report at 86 (indicating that in March 2010 NRC Staff reevaluated the failure rate of rock-filled dams as about once in 3600 years). This, in turn, underscores a principal basis for Petitioners’ contention, i.e., its reliance on June 2010 Staff CAL-associated Staff appraisals, including the January 2011 Staff Safety Evaluation. This reliance is further highlighted by Petitioners’ second bulleted argument in support of Contention 2, *see supra* note 75, regarding the environmental significance of Duke’s alleged failure to address the January 2011 Staff Safety Evaluation and the “adequate protection” issue of the need for additional protective measures. Indeed, according to Petitioners’ counsel, “as long as a safety evaluation that is relied on in the GEIS remains unresolved, according to the NRC’s own regulatory practices it becomes an environmental issue.” Tr. at 16 (Curran).

Also indicative of this focus on the Staff’s pre-Fukushima assessment of a potential Jocassee Dam failure is Petitioners’ December 7, 2021 pleading filed in response to a November 22, 2021 Board
(Continued)

As recounted in section I.C above, in a letter issued within six months of its March 2012 Fukushima RFI, the Staff indicated that the agency's post-Fukushima regulatory process for assessing and addressing seismic and flooding hazards using present-day methodologies and guidance would, in the case of Oconee, supplant the still-outstanding June 2010 Staff CAL. *See* September 2012 Evans Letter at 2. Thereafter, as additional seismic dam failure, overtopping dam failure, and flooding analyses were provided in the 2015 Duke FHRR, this successive review process culminated in the Staff's June 2016 letter indicating that, on the basis of the Staff's review of post-Fukushima information provided by Duke, which included Duke's compensatory modification measures to address possible dam-break related flooding, the Staff was closing the June 2010 Staff CAL. *See* June 2016 Haney Letter at 1; *see also* April 2016 Davis FHRR Final Assessment Letter at 2; August 2014 Batson Letter at 2. Moreover, in an addendum to the April 2016 Staff Final FHRR Assessment there is a detailed discussion comparing the circumstances surrounding the August 2010 Duke Flooding Evaluation and the Staff's post-Fukushima activities regarding seismic and flooding that explains the basis for the Staff's adjusted approach. *See* Staff 2010/2015 Evaluation Comparison at 1-2. That addendum noted that the August 2010 Duke Flooding Evaluation, which the January 2011 Staff Safety Evaluation concluded provided documentation appropriate to the computation of "a conservative, bounding, estimation of a postulated sunny-day Jocassee Dam failure and subsequent downstream flooding at the ONS," is "based on several conservative assumptions including[] (1) breach size selection given the dam's construction and bedrock type at the dam site; [and] (2) a hypothetical time to reach a peak outflow . . . based on the quality of construction, basal rock type, and degree of monitoring of the Jocassee [D]am." *Id.* at 3, 4. The April 2016 Staff Final FHRR Assessment addendum further contrasted the August 2010 Duke Flooding Evaluation methodology with the approach taken in response to

request for information in which they discuss two NRC Staff member non-concurrence submissions, one from Mr. Mitman in January 2011 regarding the January 2011 Staff Safety Evaluation and another in April 2009 from a different NRC employee concerning the August 2008 Staff Jocassee Dam Failure Section 50.54(f) Letter. *See* Petitioners Response to Licensing Board Post-Argument Information Request at 3-9 (discussing NRC Form 757, Non-Concurrence Process (Jan. 10, 2011) (ADAMS Accession No. ML110260443) and NRC Form 757, Non-Concurrence Process (Apr. 6, 2009) (ADAMS Accession No. ML091170104)).

As a procedural matter, we observe that without seeking a page-limit extension, Petitioners' December 7, 2021 filing in response to the Board's November 22, 2021 issuance failed to conform to the Board-established page restriction for participant responsive submissions to its information request. *Compare id.* at 10 (signature page), *with* Licensing Board Post-Argument Information Request Order at 2 (indicating participant responsive submissions should be "no more than five pages"). Nonetheless, given the lack of objection from the other two participants, we take no adverse action regarding the second half of Petitioners' submission.

the March 2012 NRC Fukushima Section 50.54(f) Letter, which was based on the requirements of (1) Near-Term Task Force Recommendation 2.1;⁸³ and (2) the July 2013 JLD-ISG-2013-01 Interim Staff Guidance. According to the addendum, the former directed that a licensee must use present-day methodologies and regulatory guidance applicable to Part 52 licenses to assess all flood-causing mechanisms, which for ONS included the potential for hydrologic/overtopping, seismic, and sunny-day failures of the Jocassee Dam, while the latter clarified acceptable dam breach formulation methodologies that were not available for Staff use during its 2010 review of the Jocassee Dam-associated flooding issue. *See* Staff 2010/2015 Evaluation Comparison at 3; *see also* April 2016 Staff FHRR Final Assessment at 3-6.

Further, in evaluating Duke's information regarding these three failure modes using present-day methodologies and regulatory guidance, which included independent confirmatory analyses of the Jocassee Dam breach uncertainties range, the Staff determined that both seismically and overtopping-induced failures of the Jocassee Dam were not "reasonable mode[s] of failure" while the sunny-day Jocassee Dam failure mode was deemed "an unlikely, although reasonable, failure mode." Staff 2010/2015 Evaluation Comparison at 3; *see also* April 2016 Staff FHRR Final Assessment at 6-41. The Staff concluded as well that (1) the Duke 2015 FHRR reflected "a reasonable analysis that removes some conservatism" in the August 2010 Duke Flooding Evaluation consistent with recent Commission direction regarding licensees' section 50.54(f) letter flood hazard reevaluations; (2) Duke's estimated ONS flood levels were "reasonable," satisfying the Staff's information requests; and (3) the revised March 2015 Duke FHRR provided "an acceptable evaluation of a postulated sunny-day failure of the Jocassee Dam, and is appropriate to consider in assessing the need for specific actions" included in the June 2010 Staff CAL. Staff 2010/2015 Evaluation Comparison at 4. The Staff assessment did indicate that Duke still needed to provide a focused evaluation "confirming the capability of flood protection and available physical margin or a revised integrated assessment . . . for all reevaluated mechanisms not bounded by the current design basis." *Id.* And thereafter, in assessing Duke's focused evaluation the Staff concluded that Duke had implemented the necessary compensatory measures to mitigate a possible Jocassee Dam failure such that the focused evaluation requirement was fulfilled and the March 2012 NRC Fukushima Section 50.54(f) Letter could be closed. *See* June 2018 Uribe Letter at 2; November 2020 Bernardo Letter at 1.

⁸³ SECY-11-0093, Near-Term Report and Recommendations for Agency Actions Following the Events in Japan, encl. (July 12, 2011) (The Near-Term Task Force, NRC, Recommendations for Enhancing Reactor Safety in the 21st Century at 30 (July 12, 2011)) (ADAMS Accession No. ML111861807).

Petitioners do not reference the more recent information set forth above in their hearing petition or the supporting Mitman Report. Nonetheless, they still claim that they did not ignore those interactions and reviews. According to Petitioners, this material is simply irrelevant because the language of the January 2011 Staff Safety Evaluation establishes an “adequate protection” issue, while the post-Fukushima material does not employ the necessary “reasonable assurance of adequate protection to public health and safety” language. *See* Petitioners Reply at 11-14; Tr. at 50-51 (Curran). According to Petitioners, even if the documents state that the June 2010 Staff CAL is superseded or closed out, they have been unable to locate any documents addressing the close-out of the January 2011 Staff Safety Evaluation with its “adequate protection” issue. *See* Tr. at 94-95 (Curran). This, they assert, establishes that the January 2011 Staff Safety Evaluation continues to be outstanding and, in the context of NRC regulatory practice, by its very nature must be considered a “significant” issue. *See* Petitioners Reply at 6, 20.

As we consider Petitioners’ arguments in the context of this waiver determination, we conclude we cannot agree. Initially we note that, in determining whether the stringent standards applicable to the grant of a section 2.335 waiver have been met, we consider it entirely appropriate to take into account both what the required affidavit and additional material provided in support of a waiver request says and does not say.⁸⁴ And clearly of significance in this circumstance is the sequence of events that were part of a major, agency order-

⁸⁴ In this regard, section 2.335(b) requires that in support of a waiver request a petitioner must provide “an affidavit that identifies the specific aspect or aspects of the subject matter of the proceeding as to which the application of the rule or regulation (or provision of it) would not serve the purposes for which the rule or regulation was adopted . . . [and] must state with particularity the special circumstances alleged to justify the waiver or exception requested.” Recognizing this requirement, *see* Hearing Petition at 19, Petitioners’ have proffered two sworn “declarations,” one by its legal counsel and one by Mr. Mitman. In the former, Mr. Mitman’s declaration and report are identified as the source of any factual assertions in support of the waiver petition and counsel is identified as the source of any legal conclusions supporting the petition. *See id.* attach. 3, at 1-2 (Declaration of Diane Curran in Support of Petition for Waiver of 10 C.F.R. §§ 51.53(c)(3)(i), 51.53(c)(ii)(L), 51.71(d), 51.95(c)(1), and 10 C.F.R. Su[bp]art A, Appendix B, Table B-1 to Allow Consideration of Category 1 NEPA Issues and SAMA Issues (Sept. 27, 2021)). In contrast, the latter attests to the validity of the factual statements in the Mitman Report. *See id.* attach. 1, at 2 (Declaration of Jeffrey T. Mitman in Support of Beyond Nuclear and Sierra Club Hearing Request (Sept. 27, 2021)). Neither contains any identified discussion of “the specific aspect or aspects of the subject matter of the proceeding as to which the application of the rule or regulation (or provision of it) would not serve the purposes for which the rule or regulation was adopted” or “the special circumstances alleged to justify the waiver or exception requested,” the subjects a supporting affidavit is supposed to address under section 2.335(b). Instead, any recitation concerning these matters is confined to Petitioners’ hearing request, *see* Hearing Petition at 20-22, making it unclear to what extent the section 2.335(b) affidavit requirement has been fulfilled as a supporting basis for their waiver request.

instituted post-Fukushima effort intended to ensure “that the NRC can continue to have reasonable assurance of adequate protection of public health and safety in mitigating the consequences of a beyond-design-basis external event.”⁸⁵ This included the related Commission-endorsed effort initiated by the March 2012 NRC Fukushima Section 50.45(f) Letter, of which the April 2016 Staff Final FHR Assessment was a part, to use current scientific methodologies and agency regulatory guidance to identify and mitigate seismic and flooding hazards.⁸⁶

But despite the relevance of these post-Fukushima regulatory events to the assessment of seismic and flooding events at ONS and elsewhere, as is evident from the Mitman Report that provides the sole technical support for their hearing petition, Petitioners fail to engage with the numerous post-Fukushima documents and reports that were exchanged between Duke and the NRC from 2012 through 2020.⁸⁷ Their expert report makes no mention of the significance of the differences identified between the underlying bases for assessments conducted relative to the June 2010 Staff CAL, of which the January 2011 Staff Safety Evaluation was a component, and the post-Fukushima Duke analyses and associated Staff evaluations, particularly as outlined in the Staff 2010/2015

⁸⁵ Order Modifying Licenses [w]ith Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events (Effective Immediately), 77 Fed. Reg. 16,091, 16,092 (Mar. 19, 2012) (EA-12-049).

⁸⁶ See, e.g., Memorandum from Annette L. Vietti-Cook, NRC Secretary, to Mark A. Satorius, Executive Director for Operations (EDO) at 1 (July 28, 2015) (Staff Requirements — COMSECY-15-0019 — Closure Plan for the Reevaluation of Flooding Hazards for Operating Nuclear Power Plants) (ADAMS Accession No. ML15209A682); Memorandum from Mark A. Satorius, EDO, to the Commission at 1-3 (June 30, 2015) (COMSECY-15-0019, Closure Plan for the Reevaluation of Flooding Hazards for Operating Nuclear Power Plants) (ADAMS Accession No. ML15153A105).

⁸⁷ At the same time, based on Mr. Mitman’s otherwise unsupported statement in his report that “[i]t is widely understood in the nuclear industry and by the NRC that the risks from shutdown are comparable to those during power operations,” Mitman Report at 23, Petitioners seek to raise concerns about the credibility of Duke’s risk analysis based on Duke purportedly ignoring the issue of risk contribution from reactor shutdown operations, see Hearing Petition at 15; Petitioners Reply at 6 n.2; see also *supra* note 76. Even putting aside whether, as the Staff maintains, this has been identified by the Commission as an operational issue that is outside the scope of a license renewal proceeding, see Staff Answer at 49 (citing *Pacific Gas and Electric Co.* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-15-21, 82 NRC 295, 304-05 (2015)), in the circumstance of assessing whether section 2.335’s strict standards have been met, this passing reference, made without any quantification or other technical support or explanation, will not abide, even from an expert, see *Entergy Nuclear Operations, Inc.* (Palisades Nuclear Plant), CLI-15-23, 82 NRC 321, 328 (2015) (“[A]n expert opinion that merely states a conclusion . . . without providing a reasoned basis or explanation for that conclusion is inadequate because it deprives the Board of the ability to make the necessary, reflective assessment of the opinion.”) (citation omitted)); *USEC, Inc.* (American Centrifuge Plant), CLI-06-10, 63 NRC 451, 472 (2006) (same). It also is not clear how Mr. Mitman’s general concern about reactor shutdown risk, see Mitman Report at 23, relates to his view that reservoir level-related preemptive reactor shutdown should be considered an obvious SAMA strategy, see *id.* at 24.

Evaluation Comparison.⁸⁸ Nor does that expert report identify and explain the significance of what was addressed in the post-Fukushima Duke and Staff evaluations relative to the January 2011 Staff Safety Evaluation.⁸⁹

Instead, the report relies on what Petitioners' technical expert characterizes as the regulatory significance of the wording employed by the Staff in the April 2009 Giitter Letter and in its January 2011 Staff Safety Evaluation, as compared to the April 2016 Staff FHRR Final Assessment, as well as the difference in titles used in the January 2011 and April 2016 Staff documents, the former a "Safety Evaluation" and the latter a "Staff Assessment." *See* Mitman Report at 12, 13, 15. However, as a basis for their waiver request, these wording or title distinctions do not carry the regulatory significance Petitioners assign them.

According to Petitioners' expert report, the April 2009 Giitter Letter is significant because it indicates that the Staff planned to evaluate the results of Duke's inundation model benchmarking "to determine whether further regulatory actions are necessary to ensure there is adequate protection against external flooding at Oconee" and states the Staff's expectation that it would receive sensitivity analyses "which would establish an adequate licensing basis for external flooding." Mitman Report at 12 (quoting April 2009 Giitter Letter at 3). But this assertion is speculative and removes the letter from its context in the regulatory landscape. Equally plausible from the face of the letter is that it reflects the Staff's then-acknowledgment that if it ultimately wanted to issue an enforcement-type order to Duke regarding its ongoing Oconee inundation assessment, it would need to make such an "adequate protection" finding.⁹⁰ But again, parsing the

⁸⁸ *See Watts Bar*, LBP-10-12, 71 NRC at 670-71 (indicating claim in supporting expert declaration that the utility's past operational history without a nuclear facility means denying an operating license would be environmentally preferable is insufficient to provide prima facie support for petitioner's section 2.335 waiver request because, without showing comparative financial and environmental costs, expert's assertion "[t]hat it was not necessary to operate a facility in the past simply does not establish that it will be unreasonable to operate it in the future").

⁸⁹ Petitioners attempt to explain, at least in part, the lack of engagement with post-Fukushima documentation as being the result of having access to post-Fukushima Duke and Staff evaluation documents with "a significant portion" of the quantitative information excised as not publicly available. *See* Petitioners Reply at 14 n.8; *see also* Mitman Report at 1-2. It is true that prior to having an admitted contention, there is no adjudicatory discovery available by which they could obtain this redacted information. *See Wisconsin Electric Power Co.* (Point Beach Nuclear Plant, Unit 1), ALAB-696, 16 NRC 1245, 1263 (1982). Nonetheless, in the context of their section 2.335 petition seeking to show a "significant" environmental matter that requires a regulatory waiver, in our view this does not relieve Petitioners of the responsibility to address, to the extent they can, the adequacy of the post-Fukushima evaluations in the context of whatever relevant public information is available.

⁹⁰ *See* NRC, Management of Backfitting, Forward Fitting, Issue Finality, and Information Request, Directive Handbook 8.4, at 4-5 (Sept. 20, 2019) (indicating a backfitting evaluation is applicable to

(Continued)

language of the letter without acknowledging what has happened subsequently does not imbue that document with the significance Petitioners would assign it. Indeed, another 2010 document cited in Mr. Mitman's report, but not discussed in this context, bears this out.⁹¹ This "adequate protection" backfitting exception analysis regarding Oconee inundation issues apparently was prepared by the Staff as support for a possible license-modification enforcement order.⁹² But an order based on such a finding was never issued.⁹³

Instead, based on its interactions with the Staff, Duke committed to inundation-related mitigation modifications during the process associated with the June 2010 Staff CAL,⁹⁴ measures that the Staff determined in conjunction with its post-Fukushima evaluation process were acceptable, *see* June 2016 Haney Letter at 1. Given the Staff's willingness to proceed under the June 2010 Staff CAL without any ONS-specific license modification order, the Mitman Report-referenced language in the January 2011 Staff Safety Evaluation, which states that the Duke ONS site inundation bounding analysis information provided "reasonable assurance for the overall flooding scenario at the site," Mitman Report at 13 (quoting January 2011 Staff Safety Evaluation at 13), provides an insufficient basis for the significance attributed to it by Petitioners, at least with no supporting analysis contesting the adequacy of the Staff's post-Fukushima safety determinations regarding ONS Jocassee Dam-related inundation. And the same is the case with the Mitman Report's declaration that "[b]y titling [its April 2016] document a 'Staff Assessment' rather than a 'Safety Evaluation,' the NRC Staff indicated that the document did not have the regulatory equivalence of safety findings." Mitman Report at 15. As Duke points out, whether a

facility-specific inspection and licensing actions and requires an initial determination whether action is necessary to provide "adequate protection of public health and safety") (ADAMS Accession No. ML18093B087).

⁹¹ *See* Mitman Report at 18 n.81 (citing NRC, [ONS] Adequate Protection Backfit Documented Evaluation (document identified as "circa 2010") (ADAMS Accession No. ML14058A015) [hereinafter Backfit Documented Evaluation]).

⁹² *See* Backfit Documented Evaluation at 8 ("The objective of this documented evaluation . . . is to justify a backfit exception (under 10 CFR 50.109(a)(4)(ii)) to modify the ONS license to ensure that there is adequate protection against all types of external floods and to maintain defense-in-depth.").

⁹³ *See* Petitioners Reply at 10 ("the [January] 2011 [Staff] Safety Evaluation did not explicitly require Duke to take certain measures to ensure adequate protection of public health and safety").

⁹⁴ *See* June 2010 Staff CAL at 1, 2 (noting listed compensatory measures must remain in place until final resolution of the matter of ONS site inundation from Jocassee Dam failure has been determined by Duke and agreed upon by NRC, including implementation of all mitigation modifications, and indicating CAL does not preclude issuance of order formalizing commitments or requiring other actions, including enforcement actions).

“safety evaluation” has the regulatory significance attributed to it by Petitioners is not apparent either.⁹⁵

While Duke has accounted for the mitigative measures it implemented under this post-Fukushima evaluative process in assessing whether any “new and significant information” required further consideration in its ER, *see supra* section I.B, Petitioners have failed to engage with the underlying Duke and Staff post-Fukushima analyses that support those determinations. Instead, they have chosen to rely on purported distinctions in language associated with pre-Fukushima Staff evaluations that, in this context, are of highly questionable regulatory significance. Under these circumstances, lacking the requisite showing that the information they provide meets the benchmark of presenting “a seriously different picture of the environmental impact of the proposed project from what was previously envisioned,”⁹⁶ we are unable to conclude that Petitioners have adequately established a *prima facie* showing that there is a “significant” environmental issue that merits a waiver under section 2.335 so as to permit consideration of Petitioners’ Contention 2 in this adjudicatory proceeding.

2. *For Contention 3, Petitioners Have Failed to Make a Prima Facie Showing Under Millstone Factor Four that Waiver of the Regulation Is Necessary to Reach a Significant Safety or Environmental Problem*

Also in connection with *Millstone* factor four, Petitioners contend that waiver of the regulations is necessary to address the significant environmental problem of “SAMAs that may be cost-effective in preventing or mitigating those impacts but that have not previously been considered.” Hearing Petition at 22. This parallels their Contention 2 concern that, given the alternative risk estimate they have provided, Duke’s SAMA analysis “is incorrect and should be done again using reasonable and up-to-date assumptions.” *Id.* at 3. We determined regarding Contention 2, *see supra* section IV.B.1, that by treating as irrelevant the post-Fukushima Duke and Staff activities in addressing seismic and flooding issues,

⁹⁵ *See* Duke Answer at 14-15 & n.71 (quoting SECY-21-0037, NUREG-1409, “Backfitting Guidelines,” Rev. 1 (Mar. 31, 2021), encl. 1, at 1-5 (NRR, NRC, Backfitting Guidelines, Final Report (rev. 1 undated) (draft) (indicating Staff positions in safety evaluations “are not requirements” and are “not part of the licensing basis” for a facility) (ADAMS Accession No. ML21006A433)).

⁹⁶ *Callaway*, CLI-11-5, 74 NRC at 167-68 (quoting *Hydro Resources, Inc.* (2929 Coors Road, Suite 101, Albuquerque, NM 87120), CLI-99-22, 50 NRC 3, 14 (1999)). To be sure, this “seriously different picture” yardstick was identified in the context of determining whether “new and significant information” existed sufficient to trigger a Staff supplemental environmental analysis under NEPA. *See id.* While we do not necessarily equate the “new and significant information” standard governing NEPA supplementation with the “significant environmental problem” criterion under *Millstone* factor four, in assessing a waiver request the former would at least need to be met in determining what is “significant” under the latter.

including Duke's facility modifications that were implemented in accordance with the Staff's post-Fukushima regulatory guidance and assessed by Duke, for SAMA purposes, as part of its SLR ER, Petitioners failed to provide sufficient support to demonstrate the existence of a "significant" environmental issue under *Millstone* factor four. And in the context of Petitioners' waiver request, we conclude these same deficiencies deprive their Contention 3 concerns of any claim to being a "significant" environmental issue such that a waiver of the appendix B framework is warranted.

In sum, with respect to *Millstone* factor four, Petitioners have failed to put forth a supporting analysis that demonstrates with specificity a *prima facie* showing of a "significant" problem that must be addressed as part of this SLR proceeding so as to necessitate a waiver of the appendix B framework to allow adjudicatory consideration of the issues they have proffered in Contentions 2 and 3.⁹⁷ And without a demonstration by Petitioners of the "special circumstances" required to justify granting a section 2.335(b) waiver, the Board cannot certify to the Commission for a merits determination the matter whether such a waiver is called for so as to make their Contentions 2 and 3 eligible for adjudicatory consideration in this SLR proceeding.

V. CONCLUSION

For the reasons set forth above in section II.B, Petitioners have provided an adequate showing to establish their representational standing in this SLR proceeding for Duke's ONS facility. Nevertheless, for the reasons described in section III.B above, we find under the applicable standards in 10 C.F.R. § 2.309(f)(1) that Petitioners have failed to establish the grounds for admitting their Contention 1 challenging whether the exclusion of 10 C.F.R. Part 51, subpart A, appendix B, Table B-1 Category 1 issues from NEPA consideration applies in an SLR proceeding such as this one. Further, for the reasons set forth in section IV.B above, we conclude Petitioners have failed under the requirements set forth in 10 C.F.R. § 2.335 to justify certifying to the Commission whether to grant a waiver of the 10 C.F.R. Part 51 provisions that otherwise preclude the Board from considering in this adjudicatory proceeding the Duke ER adequacy issues posed by Petitioners' Contentions 2 and 3.

⁹⁷ Of course, the Board's determination regarding Petitioners' waiver request does not negate the Staff's responsibility (1) in conducting its "hard look" licensing review of the Duke ER, to assess whether new and significant information exists that requires additional consideration; or (2) per 10 C.F.R. § 51.73, to consider whether any information provided by public comments as part of the environment review process for Duke's SLR application merits further analysis as new and significant information. See *Limerick*, CLI-13-7, 78 NRC at 216-17.

For the foregoing reasons, it is this eleventh day of February 2022, ORDERED, that:

1. The September 27, 2021 hearing request of petitioners Beyond Nuclear, Inc., and the Sierra Club, Inc., and the accompanying 10 C.F.R. § 2.335 waiver request are *denied* and this proceeding is *terminated*.⁹⁸

2. In accordance with the provisions of 10 C.F.R. § 2.311, as this memorandum and order rules upon an intervention petition, any appeal to the Commission from this memorandum and order must be taken within 25 days after this issuance is served.

THE ATOMIC SAFETY AND
LICENSING BOARD

G. Paul Bollwerk, III, Chairman
ADMINISTRATIVE JUDGE

Nicholas G. Trikouros
ADMINISTRATIVE JUDGE

Dr. Gary S. Arnold
ADMINISTRATIVE JUDGE

Rockville, Maryland
February 11, 2022

Editor's Note: The following statement was provided by the NRC Staff as a prefatory note to the slip opinion of this decision as it now resides in the Electronic Hearing Docket file for this proceeding (ADAMS Accession No. ML24341A169):

This document is a redacted publicly available version. The original file is non-public, designated as Critical Energy/Electric Infrastructure Information (CEII) in ADAMS ML22042B286.

The redactions were approved by the Federal Energy Regulatory Commission (FERC) on August 13, 2024 (ML24324A040). To maintain consistency with

⁹⁸ Regarding the outstanding November 15, 2021 Duke motion to strike a portion of Petitioners' November 5, 2021 reply pleading, *see supra* note 7, our denial of Petitioners' hearing and waiver requests moots that Duke request.

similar FERC-approved documents issued on November 20, 2024 (ML24326A159), NRC staff also redacted the unit of measure associated with the redacted values.

NRC staff actions were taken in accordance with:

- The Memorandum of Understanding Between the NRC and FERC Regarding Treatment of Critical Energy/Electric Infrastructure Information found at: <https://www.nrc.gov/reading-rm/doc-collections/memo-understanding/2024/index.html>.
- The FERC definition of CEII found at: <https://www.ferc.gov/ceii>, and, <https://www.ferc.gov/enforcement-legal/ceii/designation-incoming-dam-safety-documents>.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Christopher T. Hanson, Chairman
Jeff Baran
David A. Wright

In the Matter of

**Docket Nos. 50-266-SLR
50-301-SLR**

**NEXTERA ENERGY POINT
BEACH, LLC
(Point Beach Nuclear Plant,
Units 1 and 2)**

March 23, 2022

APPEALS

The Commission's regulations allow a petitioner whose hearing request has been wholly denied to appeal as of right.

CONTENTIONS, ADMISSIBILITY

To be granted a hearing, a petitioner must demonstrate standing and propose at least one admissible contention.

CONTENTIONS, ADMISSIBILITY

A contention that challenges or seeks to impose requirements stricter than an agency regulation is inadmissible unless the Commission grants a waiver of that regulation.

SUBSEQUENT LICENSE RENEWAL

The NRC's safety review of a license renewal application does not entail a full reassessment of safety issues previously addressed in the licensing of

a plant, nor is it designed to review current operations; rather, it focuses on those potential detrimental effects of aging that are not routinely addressed by ongoing regulatory oversight programs and the applicant's plans for managing those effects during the period of extended operation.

SUBSEQUENT LICENSE RENEWAL

The NRC's environmental review is based in part on the license renewal applicant's environmental report, which must describe the impacts of the proposed action on the environment and discuss potential alternatives to the proposed action sufficient to enable the NRC to meet its statutory obligations under the National Environmental Policy Act.

CLEAN WATER ACT

The NRC's environmental review rests on the presumption that the agency cannot review and judge environmental permits issued under the Clean Water Act by the Environmental Protection Agency or an authorized state agency.

NATIONAL ENVIRONMENTAL POLICY ACT

Under the National Environmental Policy Act, an agency has no obligation to gather or consider environmental information if it has no statutory authority to act on that information.

NATIONAL ENVIRONMENTAL POLICY ACT

Clear statutory language provides that nothing in the National Environmental Policy Act shall be deemed to authorize any agency to impose, as a condition precedent to the issuance of any license or permit, any effluent limitation other than any such limitation established pursuant to the Clean Water Act.

MEMORANDUM AND ORDER

Today we address the appeal of Physicians for Social Responsibility Wisconsin (PSR) from the Board's denial of PSR's petition for leave to intervene and request for a hearing. For the reasons below, we affirm the Board's determina-

tion that Contentions 1 and 2 are inadmissible.¹ We dismissed Contention 3 in our recent order providing generic direction for all subsequent license renewal proceedings pending before the agency.²

I. BACKGROUND

On November 16, 2020, NextEra Energy Point Beach, LLC (NextEra) applied for a second (or subsequent) renewal of the operating licenses for the Point Beach Nuclear Plant for an additional twenty years.³ The NRC published notice of the opportunity to petition for leave to intervene and request a hearing regarding NextEra's application.⁴ PSR timely filed a petition and requested a hearing on four contentions.⁵

The NRC staff and NextEra opposed PSR's petition on the grounds that none of the four contentions PSR submitted were admissible under our hearing standards.⁶ After oral argument, the Board agreed that PSR had not submitted an admissible contention and therefore denied PSR's hearing request.⁷ PSR ap-

¹ See LBP-21-5, 94 NRC 1 (2021).

² *Duke Energy Carolinas, LLC* (Oconee Nuclear Station, Units 1, 2, and 3), CLI-22-3, 95 NRC 40 (2022) (dismissing pending environmental contentions and stating that the NRC will provide a new hearing opportunity on updated environmental information).

³ The Point Beach license renewal application consists of a cover letter and five enclosures. See Letter from Michael Strobe, NextEra, to NRC Document Control Desk (Nov. 16, 2020) (ADAMS accession no. ML20329A292 (package)). Enclosure 3 to the cover letter includes a publicly available version of the license renewal application and an environmental report. See Point Beach Nuclear Plant Units 1 and 2 Subsequent License Renewal Application (Public Version) (ML20329A247) (Application); Appendix E Applicant's Environmental Report Subsequent Operating License Renewal Point Beach Nuclear Plant Units 1 and 2 (ML20329A248) (Environmental Report).

⁴ NextEra Energy Point Beach, LLC; Point Beach Nuclear Plant, Units 1 and 2, 86 Fed. Reg. 6,684 (Jan. 22, 2021).

⁵ Petition of Physicians for Social Responsibility Wisconsin for Leave to Intervene in Point Beach Nuclear Plant, Units 1 and 2 Subsequent License Renewal Proceeding, and Requesting an Adjudicatory Hearing (Mar. 23, 2021) (Petition). PSR later moved to amend the second of its four contentions. See Physicians for Social Responsibility Wisconsin's Motion to Amend Contention 2 (Inadequately Tested Reactor Coolant Pressure Boundary) (Apr. 26, 2021) (Motion to Amend). The Board found that PSR timely moved to amend its second contention based upon the availability of new and materially different information. See LBP-21-5, 94 NRC at 37-40. Neither the Staff nor NextEra have appealed the Board's ruling on this point; therefore, we consider Contention 2 as amended.

⁶ See NRC Staff's Answer Opposing Physicians for Social Responsibility Wisconsin's Petition to Intervene (Apr. 19, 2021) (Staff Answer); NextEra Energy Point Beach, LLC's Answer Opposing the Physicians for Social Responsibility Wisconsin's Petition for Leave to Intervene and Request for Hearing (Apr. 19, 2021) (NextEra Answer).

⁷ See LBP-21-5, 94 NRC at 16-18.

pealed the Board's denial of three of its four contentions.⁸ The Staff and NextEra oppose PSR's appeal.⁹

While PSR's appeal was pending, we issued a decision in a separate subsequent license renewal proceeding, *Turkey Point*. In *Turkey Point*, we found that 10 C.F.R. § 51.53(c)(3), which allows applicants for "initial" license renewal to rely on the Generic Environmental Impact Statement for License Renewal (GEIS) in their environmental reports, does not apply to applications for subsequent license renewal.¹⁰ We further found that the GEIS itself does not describe the environmental impacts of operation during the period of subsequent license renewal. In a separate but related order, we therefore directed that the Staff revise the GEIS.¹¹ We also dismissed environmental contentions and motions pending in subsequent license renewal cases that challenged the contents of the GEIS or site-specific environmental impact statement and provided that the public would have an opportunity to file contentions based on new information in the revised site-specific environmental impact statements.¹²

II. DISCUSSION

A. Legal Standards

Our regulations allow a petitioner whose hearing request has been wholly denied to appeal as of right.¹³ Unless an appeal demonstrates an error of law or abuse of discretion, we will not disturb a licensing board's ruling on threshold decisions such as whether to grant a hearing request.¹⁴

⁸ PSR did not appeal the Board's denial of Contention 4. See Notice of Appeal of LBP-21-05 by Petitioner Physicians for Social Responsibility Wisconsin and Brief in Support of Appeal (Refiled) (Aug. 20, 2021), at 26 (Appeal).

⁹ See NRC Staff's Brief in Opposition to Physicians for Social Responsibility Wisconsin's Appeal of LBP-21-5 (Corrected) (Sept. 14, 2021); NextEra Energy Point Beach, LLC's Brief in Opposition to Physicians for Social Responsibility Wisconsin's Appeal of LBP-21-05 (Sept. 14, 2021) (NextEra Answer to Appeal).

¹⁰ *Florida Power & Light Co.* (Turkey Point Nuclear Generating Units 3 and 4), CLI-22-2, 95 NRC 26 (2022).

¹¹ *Oconee*, CLI-22-3, 95 NRC at 41 (citing Staff Requirements — SECY-21-0066 — Rulemaking Plan for Renewing Nuclear Power Plant Operating Licenses — Environmental Review (RIN 3150-AK32; NRC-2018-0296) (Feb. 24, 2022) (ML22053A308)).

¹² *Id.*

¹³ 10 C.F.R. § 2.311(c).

¹⁴ See, e.g., *Pacific Gas and Electric Co.* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-15-21, 82 NRC 295, 301 (2015).

1. Standards Governing Hearing Requests

To be granted a hearing, a petitioner must demonstrate standing and propose at least one admissible contention.¹⁵ A contention is admissible if it meets the standards in 10 C.F.R. § 2.309(f)(1). These standards require that a contention state a genuine dispute with the application that is supported by specific facts or expert opinion.¹⁶ The dispute raised must also be material to the findings the NRC must make regarding the underlying licensing action.¹⁷ A contention that challenges or seeks to impose requirements stricter than an agency regulation is inadmissible unless the Commission grants a waiver of that regulation.¹⁸

2. Standards Governing Subsequent License Renewal

The NRC's review of a license renewal application (including subsequent license renewal) consists of a safety review and an environmental review. The NRC's safety review is focused on the applicant's programs for managing the effects of aging during the period of extended operation for specified plant structures, systems, and components that the current licensing basis of the plant may not be sufficient to address.¹⁹ This includes a review of programs to manage the effects of aging on long-lived, passive structures and components.²⁰ For those structures and components, a license renewal applicant must demonstrate that the effects of aging will be adequately managed so that the intended functions will be maintained for the period of extended operation.²¹

The NRC's safety review of a license renewal application does not entail a full reassessment of safety issues previously addressed in the licensing of a plant, nor is it designed to review current operations; rather, it "focuses on those potential detrimental effects of aging that are not routinely addressed by ongoing regulatory oversight programs" and the applicant's plans for managing those effects during the period of extended operation.²² Ongoing operational

¹⁵ 10 C.F.R. § 2.309(d)(1), (f)(1).

¹⁶ *Id.* § 2.309(f)(1)(v)-(vi).

¹⁷ *Id.* § 2.309(f)(1)(iv).

¹⁸ *See id.* §§ 2.309(f)(1)(iii), 2.335(a), (b).

¹⁹ *See* Nuclear Power Plant License Renewal; Revisions; Final Rule, 60 Fed. Reg. 22,461, 22,469 (May 8, 1995).

²⁰ *See Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), CLI-10-14, 71 NRC 449, 456 (2010) (citing 10 C.F.R. § 54.21(a)(1)-(2)).

²¹ *See id.*; 10 C.F.R. § 54.21(a)(3).

²² *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 7 (2001).

issues are not reviewed because such issues are “effectively addressed . . . by ongoing agency oversight, review, and enforcement.”²³

The NRC’s environmental review is based in part on the license renewal applicant’s environmental report. The environmental report must describe the impacts of the proposed action on the environment and discuss potential alternatives to the proposed action sufficient to enable the NRC to meet its statutory obligations under the National Environmental Policy Act (NEPA).²⁴

B. Analysis

PSR claims that the Board erred in finding three of PSR’s contentions inadmissible. Briefly summarized, these contentions are: 1) NextEra’s environmental report is inadequate because it does not evaluate the alternative of replacing the once-through cooling system at Point Beach with cooling towers “as a means of reducing aquatic biota and migratory bird impingement, entrainment, and damage from thermal pollution;”²⁵ 2) NextEra’s use of calculations rather than metallurgical testing of physical samples (called capsules or coupons) to monitor embrittlement of the reactor pressure vessel during the period of extended operation is inadequate to protect against vessel rupture due to pressurized thermal shock;²⁶ and 3) NextEra’s environmental report does not adequately evaluate distributed solar generation coupled with battery storage as a reasonable alternative to license renewal.²⁷ As explained below, we affirm the Board’s determination that the first two contentions are inadmissible and dismissed the third contention in CLI-22-3.

1. Contention 1: Environmental Analysis of Cooling Towers

In Contention 1, PSR asserts that NextEra’s environmental report is deficient because it does not consider replacement of the once-through cooling system at Point Beach with cooling towers as a means of mitigating environmental impacts.²⁸ PSR claims that consideration of cooling towers is necessary because

²³ *Id.* at 9.

²⁴ *See* 10 C.F.R. §§ 51.45, 51.53(c), 54.23; National Environmental Policy Act of 1969 § 102, 42 U.S.C. § 4332.

²⁵ Appeal at 4.

²⁶ *Id.* at 11-15.

²⁷ *Id.* at 20-21.

²⁸ *See* Petition at 17-18. A once-through cooling system draws water from a river, lake, or other large water body through intake structures designed to screen out aquatic biota. The water is then
(Continued)

the once-through cooling system has “recurring effects of killing aquatic organisms and occasional birds” that could be mitigated by the installation of cooling towers.²⁹

The Board found Contention 1 inadmissible because NextEra provided evidence that the once-through cooling system at Point Beach has been properly permitted under the Federal Water Pollution Control Act (also known as the Clean Water Act) in lieu of an environmental analysis of the cooling system’s thermal, impingement, and entrainment impacts.³⁰ Citing our decision in *Vermont Yankee*, which addressed the NRC’s duty to conduct an environmental review of cooling water systems in light of the statutory scheme imposed by the Clean Water Act, the Board found that a license renewal applicant with a permitted once-through cooling system is not required to further evaluate the environmental impacts of that system or potential alternatives.³¹ This evaluation is not required because the Clean Water Act deprives the NRC of authority to “consider alternative cooling systems as that would improperly ‘second-guess[]’ the cooling system approved by the permitting agency.”³² The Board further found that NextEra had provided current determinations by the Wisconsin Department of Natural Resources (WDNR) — the Clean Water Act permitting authority in this case — that the once-through cooling system in use at Point Beach “represents interim [best technology available] for minimizing adverse environmental impact” and that the maximum heat load to be discharged by Point Beach using its once-through cooling system “is protective of the balanced, indigenous community of shellfish, fish and wildlife in and on Lake Michigan.”³³ Therefore, given WDNR’s determination that the once-through cooling system at Point Beach is permissible and the Commission’s decision in *Vermont Yankee*, the Board concluded that “further assessment of entrainment, impingement, or thermal impacts is not required.”³⁴

used to cool reactor systems before being discharged back to the water body, typically at an elevated temperature. By contrast, mechanical draft cooling towers are typically part of a closed cooling system that does not draw from large bodies of water and instead relies on evaporation to remove heat.

²⁹ *Id.* at 20.

³⁰ LBP-21-5, 94 NRC at 31-32 (citing Federal Water Pollution Control Act § 316(a), (b), 33 U.S.C. § 1326(a), (b)).

³¹ *Id.* at 31-33 (quoting *Entergy Nuclear Vermont Yankee, LLC, and Entergy Nuclear Operations, Inc.* (Vermont Yankee Nuclear Power Station), CLI-07-16, 65 NRC 371, 377 (2007)).

³² *Id.* at 31.

³³ *Id.* at 32 (quoting Environmental Report, Attach. B, WPDES Permit No. WI-0000957-080-0 § 1.3 (July 2016); Environmental Report, Attach. B, Letter from Amanda Minks, WDNR, to Steve Jaeger, WDNR (Aug. 29, 2012), at 3).

³⁴ *Id.*

On appeal, PSR does not argue that we overturn *Vermont Yankee* or suggest that the NRC has authority to require a modification of the permitted once-through cooling system based upon an environmental analysis of cooling tower impacts. Rather, PSR argues that the NRC has an independent duty under NEPA “to lay all facts about adverse environmental effects out for the public to understand.”³⁵ PSR argues that the Board should have recognized this duty and admitted Contention 1 to require that NextEra provide a public analysis of cooling tower impacts, which in turn might move Wisconsin to “formally act within the State process” for issuing permits under the Clean Water Act “such that modern cooling tower technology would be installed at Point Beach.”³⁶ PSR argues that because the State could consider an analysis of cooling tower impacts as “the basis for modifying its [Clean Water Act] responsibilities, in light of NEPA’s goals and policies,” Contention 1 must be admitted.³⁷

We are unpersuaded by PSR’s argument. As we explained in *Vermont Yankee*, the NRC’s environmental review “rests on the presumption that we need not — indeed *cannot* — review and judge environmental permits issued under the Clean Water Act by the [Environmental Protection Agency] or an authorized state agency.”³⁸ Accordingly, the permitting agency “determines what cooling system a nuclear power facility may use and NRC factors the impacts resulting from use of that system into the NEPA cost-benefit analysis.”³⁹ Under this statutory scheme, the NRC’s decision whether to renew the Point Beach licenses does not require an environmental analysis of cooling towers as an alternative.

PSR’s argument that NEPA imposes a duty “to lay all facts about adverse environmental effects out for the public to understand” even though the NRC lacks authority to require an alternative to the permitted once-through cooling system is also unavailing.⁴⁰ Under NEPA, “[a]n agency has no obligation to gather or consider environmental information if it has no statutory authority to act on that information.”⁴¹ As we explained in *Vermont Yankee*, the NRC has no statutory authority to review limitations or other requirements established by WDNR under the Clean Water Act and must accept at face value its determination that the once-through cooling system at Point Beach is sufficiently

³⁵ Appeal at 9.

³⁶ *Id.* at 10.

³⁷ *Id.* at 10-11.

³⁸ *Vermont Yankee*, CLI-07-16, 65 NRC at 387 n.77.

³⁹ *Id.* at 389 (quoting *Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), CLI-78-1, 7 NRC 1, 26-27 (1978)).

⁴⁰ Appeal at 9-10.

⁴¹ *Sierra Club v. FERC (Sabal Trail)*, 867 F.3d 1357, 1371-73 (D.C. Cir. 2017) (citing *Department of Transportation v. Public Citizen*, 541 U.S. 752, 767-68 (2004)).

protective of the environment.⁴² Clear statutory language provides that nothing in NEPA shall be deemed to authorize any agency to impose, as a condition precedent to the issuance of any license or permit, any effluent limitation other than any such limitation established pursuant to the Clean Water Act.⁴³ Efforts to seek and analyze more information on potential impacts from alternate cooling water systems, which the NRC has no authority to consider, would run counter to this direction.⁴⁴ Here, the NRC complies with NEPA by disclosing the impacts of the once-through cooling system as approved by WDNR.

The Board also noted that PSR did not seek a waiver of 10 C.F.R. § 51.53(c)(3)(ii)(B), which explicitly allows applicants for an initial license renewal to rely on their Clean Water Act certifications in lieu of an environmental analysis of system alternatives for the once-through cooling system.⁴⁵ Although our recent decision in *Turkey Point* found that the provisions of 10 C.F.R. § 51.53(c)(3) do not apply to applications for subsequent license renewal, this finding does not undermine the Board's conclusion that Contention 1 is inadmissible. Contention 1 is inadmissible due to a statutory limitation on our authority to regulate cooling systems that have been properly permitted under the Clean Water Act. This statutory limitation, currently reflected in 10 C.F.R. § 51.53(c)(3)(ii)(B), remains unchanged by our recent decision in *Turkey Point* and applies in this proceeding, even though 10 C.F.R. § 51.53(c)(3)(ii)(B) does not. Accordingly, we affirm the Board's dismissal of Contention 1.

2. Contention 2: Reactor Pressure Vessel Materials Testing

PSR asserts in Contention 2, as amended, that Point Beach's "continued operation violates 10 C.F.R. Part 50, Appendix A, Criterion 14 because the reactor coolant pressure boundary has not been tested so as to have an extremely low probability of abnormal leakage, of rapidly propagating failure, and of gross rupture, and the aging management plan does not provide the requisite reasonable assurance."⁴⁶ PSR claims that NRC and Point Beach have historically relied too much on "error-prone analytical calculations" rather than metallurgical testing to evaluate the integrity of the reactor pressure vessel and that not enough metallurgical samples (known as capsules or coupons) remain in the reactor vessel to adequately test its embrittlement over the period of extended opera-

⁴² See *Vermont Yankee*, CLI-07-16, 65 NRC at 376-77, 385-89.

⁴³ See Federal Water Pollution Control Act § 511(c)(2)(B), 33 U.S.C. § 1371(c)(2)(B).

⁴⁴ See *Vermont Yankee*, CLI-07-16, 65 NRC at 387 n.77 (citing *Public Citizen*, 541 U.S. at 754); see also Federal Water Pollution Control Act § 511(c)(2)(B), 33 U.S.C. § 1371(c)(2)(B).

⁴⁵ See LBP-21-5, 94 NRC at 31 n.111; 10 C.F.R. §§ 2.309(f)(iii), 2.335(a), (b), 51.53(c)(3)(ii)(B).

⁴⁶ See Petition at 31; Motion to Amend at 7.

tion.⁴⁷ PSR also asserts that continued reliance on calculations during the period of extended operation would be inadequate to protect against the risk of vessel rupture due to pressurized thermal shock because, according to a letter from the Electric Power Research Institute (EPRI), computer software for predicting embrittlement in boiling water reactors is “nonconservative.”⁴⁸ Therefore, PSR claims that reactor pressure vessel embrittlement — an aging-related issue — is not “adequately dealt with by regulatory processes” and warrants denial of NextEra’s application.⁴⁹

The Board found Contention 2 inadmissible because it did not raise a genuine dispute with the application.⁵⁰ The Board found that NextEra’s application set forth multiple aging analyses and management plans regarding reactor pressure vessel embrittlement, including a plan for capsule testing.⁵¹ The Board found that these plans provide for testing a capsule containing weld materials representative of Point Beach Units 1 and 2, that this capsule will have been subjected to neutron fluence that “will bound the projected fluence at the end of the [license renewal] operating term,” and that NextEra plans to use methodologies that comply with NRC regulations.⁵² Further, NextEra plans to “monitor irradiation embrittlement to neutron fluences greater than the projected neutron fluence at the end of the [subsequent period of operation]” using supplemental data from other Babcock & Wilcox reactors as part of its Reactor Vessel Material Surveillance Aging Management Program.⁵³ The Board found that PSR had not cited or addressed these parts of the application as required by 10 C.F.R. § 2.309(f)(1)(vi).⁵⁴

The Board also found that Contention 2 lacked technical support. The Board found that PSR did not support its assertions that NextEra’s aging management program improperly relies on administrative controls and “error-prone analytical calculations.”⁵⁵ The Board stated that PSR did not adequately explain how the EPRI letter addressing embrittlement calculations at boiling water reactors is relevant to Point Beach, which is a pressurized water reactor.⁵⁶ Therefore, the

⁴⁷ See Petition at 35-37.

⁴⁸ Motion to Amend at 3-6.

⁴⁹ Petition at 38-39.

⁵⁰ LBP-21-5, 94 NRC at 42-45.

⁵¹ *Id.* at 42 (citing Application, app. A, at A-25).

⁵² *Id.* at 42-43 (citing Application, app. A, at B-150).

⁵³ *Id.* at 43 (citing Application, app. A, at A-26, app. B at B-148 to -149).

⁵⁴ *Id.* at 43-44.

⁵⁵ *Id.* at 44.

⁵⁶ *Id.* at 44-45.

Board found Contention 2 lacked support and did not demonstrate a genuine dispute with the application as required by 10 C.F.R. § 2.309(f)(1)(v) and (vi).⁵⁷

The Board also found Contention 2 inadmissible because it challenged NRC regulations and the current licensing basis for Point Beach and thus raised issues outside the scope of the proceeding. Specifically, the Board found that PSR's assertions that Point Beach has for years been in violation of NRC regulations because "the reactor coolant boundary has not been tested" through adequate coupon testing challenged current and past operations, rather than NextEra's application for license renewal.⁵⁸ The Board also found PSR's general assertion that NextEra should use coupon testing rather than calculations to demonstrate reactor pressure vessel integrity to be an impermissible collateral attack on NRC regulations regarding neutron embrittlement and pressurized thermal shock, which permit reliance on calculations.⁵⁹

On appeal, PSR argues that the Board misconstrued Contention 2 as a challenge to the current licensing basis and misapplied the standards for contention admissibility. PSR argues that the "heart of Contention 2 is that [Point Beach] has inadequate physical samples (metal capsules/coupons from inside the reactor vessels of the two units) to enable metallurgical testing to understand the extent of embrittlement of the vessels and related components in order to assure the reactors will last" through the period of extended operation.⁶⁰ PSR argues that it does not challenge the current licensing basis for Point Beach, but instead, "the basis for the agency's refusal to resort to physical evidence and data on the status of metallurgical embrittlement of the reactor vessel and its components for the 20 year subsequent licensing period beginning in 2030."⁶¹ PSR reasserts its position that reliance on calculational methods to determine reactor pressure vessel embrittlement is not an adequate substitute for coupon testing and claims the Board erred by effectively requiring PSR to litigate the merits of this position at the contention admissibility stage.⁶²

We disagree. The Board did not require PSR to litigate the merits of its claim that Point Beach lacks an appropriate aging management strategy for the reactor pressure vessel. Instead, it found that PSR did not provide technical support for its claims regarding coupon testing or specifically dispute NextEra's aging management plans, which describe NextEra's plan to employ coupon testing and other methods to address reactor pressure vessel embrittlement. Moreover, PSR's generalized assertions that calculational methods are error prone

⁵⁷ *Id.* at 45.

⁵⁸ *Id.* at 41-42.

⁵⁹ *Id.* at 41, 44; *see* 10 C.F.R. § 50.61.

⁶⁰ Appeal at 11.

⁶¹ *Id.* at 16.

⁶² *Id.* at 17-18.

and should not substitute for coupon testing not only lacked adequate technical support but challenged NRC regulations governing neutron embrittlement and pressurized thermal shock without seeking a waiver of those regulations.

We also disagree with PSR that the Board misconstrued Contention 2 by finding that some aspects of the contention challenged the current licensing basis. Contention 2 stated that Point Beach’s “continued operation” violates NRC requirements “because the reactor pressure boundary has not been tested,” and PSR’s expert asserted that “[d]uring the last 50 years of operation” Point Beach “has been violating [General Design Criterion] 14 by not testing coupons.”⁶³ These aspects of Contention 2 challenged the basis for current and past operations, not NextEra’s plans for managing aging during the period of extended operation, and were thus inadmissible.

In summary, the Board found that Contention 2 was not adequately supported and did not raise a genuine dispute regarding issues within the scope of this proceeding. On appeal, PSR has shown no error in the Board’s decision. We therefore affirm the Board’s dismissal of Contention 2.

3. Contention 3: Environmental Report Analysis of Solar Power

In Contention 3, PSR asserts that NextEra’s environmental report failed to adequately evaluate the costs and benefits of replacing the power that would be generated by Point Beach with solar electric power as an alternative to license renewal.⁶⁴ PSR claims that a cost-benefit analysis is required because solar generation is technically feasible on a commercial scale and, when coupled with energy storage technology, can provide baseload power.⁶⁵ PSR also offers expert declarations that solar generation is preferable to license renewal due to the “harsh economic realities,” of nuclear,⁶⁶ the “dramatically-changing circumstances in the regional energy mix,”⁶⁷ and the low greenhouse gas emissions and environmental impacts from solar generation.⁶⁸ Further, the declining costs and growing deployment of solar generating capacity would, according to PSR, render the generating capacity of Point Beach “superfluous” and thus make license renewal unnecessary.⁶⁹

As described in CLI-22-3, we have dismissed Contention 3. Once an updated site-specific environmental impact statement is complete, a notice of opportunity

⁶³ See Petition at 31; Declaration of Arnold Gunderson (Mar. 23, 2021), ¶ 7.8.4.

⁶⁴ See Petition at 41-55.

⁶⁵ See *id.* at 45-49; Appeal at 20.

⁶⁶ Petition at 53 (citing Declaration of Mark Cooper, Ph. D. (Mar. 23, 2021), at 24).

⁶⁷ Declaration of Alvin Compaan, Ph. D. (Mar. 23, 2021), ¶ 3 (Compaan Decl.).

⁶⁸ Petition at 48-49 (citing Compaan Decl. ¶¶ 35, 37).

⁶⁹ *Id.* at 48.

for hearing — limited to contentions based on new information in the site-specific environmental impact statement — will be issued and will also allow PSR and other interested persons to resubmit their environmental contentions as well as to submit new or amended contentions.

III. CONCLUSION

For the reasons given above, we *affirm* the Board's determination that Contentions 1 and 2 are inadmissible. We dismissed Contention 3 in our recent order providing generic direction for all subsequent license renewal proceedings pending before the agency.

IT IS SO ORDERED.

For the Commission

Annette L. Vietti-Cook
Secretary of the Commission

Dated at Rockville, Maryland,
this 23d day of March 2022.

Additional Views of Commissioner Wright

I approve the decision regarding the Board's dismissal of Contentions 1 and 2. I disagree, however, with the reasoning behind the treatment of Contention 3. The treatment of Contention 3 relates to the majority's reversal of CLI-20-3 and the generic direction dispositioning contentions impacted by that reversal. As described in my partial dissents in *Turkey Point*, CLI-22-2, and *Peach Bottom*, CLI-22-4, I continue to agree with our previous interpretation in CLI-20-3. I view the majority's decision to reverse direction now as arbitrary, inconsistent with the NRC's Principles of Good Regulation, and contrary to the agency's goals of clear communication and transparent decision-making. This reversal, based only on information and arguments previously considered and rejected, undermines the NRC's role as an effective and credible regulator and impedes stakeholder reliance on our statements and positions.

While I disagree with the majority's reversal of CLI-20-3 both procedurally and substantively, I joined my colleagues on the limited issue of the path forward for the staff to update its environmental analysis and regulatory language to comply with the majority's new holding. Therefore, to carry out that direction, I approve the decision with respect to Contention 3.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Christopher T. Hanson, Chairman
Jeff Baran
David A. Wright

In the Matter of

**Docket Nos. 50-250-SLR
50-251-SLR**

**FLORIDA POWER & LIGHT
COMPANY
(Turkey Point Nuclear Generating
Units 3 and 4)**

June 3, 2022

NATIONAL ENVIRONMENTAL POLICY ACT

Under NEPA, the NRC must evaluate the environmental impacts of a proposed major federal action before taking that action.

MEMORANDUM AND ORDER

In CLI-22-2, we asked the parties to submit their views on the practical effects of two options — leaving in place the subsequently renewed licenses for Turkey Point Nuclear Generating Units 3 and 4 (Turkey Point Units 3 and 4) and reinstating the previous licenses.¹ The parties provided timely responses and answers.²

¹ CLI-22-2, 95 NRC 26, 37 (2022).

² Florida Power & Light Company's Views on License Status as Requested in Commission Order CLI-22-02 (Mar. 21, 2022) (FPL Views); NRC Staff Views on the Practical Effects of (1) the Subsequent Renewed Licenses Continuing in Place and (2) the Previous Licenses Being Reinstated (Mar. 21, 2022) (Staff Views); Views in Response to CLI-22-02 of Friends of the Earth, Natural Re-
(Continued)

I. BACKGROUND

The Staff issued the subsequently renewed licenses for Turkey Point Units 3 and 4 after completion of its safety and environmental reviews, and pursuant to 10 C.F.R. § 54.31(c), the licenses became immediately effective. We found in CLI-22-2 that the environmental review of the subsequent license renewal application in this case was incomplete.³ Since 2019, FPL has been operating under the subsequently renewed licenses, which include safety enhancements compared to the previous licenses. To best reconcile FPL's current licensing bases⁴ with the recognition that the agency's National Environmental Policy Act (NEPA) review was incomplete, we directed that the subsequently renewed licenses remain in place but with shortened terms to match the end dates of the previous licenses until completion of the NEPA analysis. After considering the pleadings of the parties, we will maintain this approach.

II. DISCUSSION

A. Confirmation of Direction in CLI-22-2

All parties acknowledge that there are safety benefits associated with the Turkey Point units operating under the subsequently renewed licenses compared

sources [Defense] Council, and Miami Waterkeeper (Mar. 21, 2022) (Environmental Organizations Views); Florida Power & Light Company's Response to Other Parties' Views on License Status as Requested in Commission Order CLI-22-02 (Mar. 31, 2022) (FPL Response to Other Views); NRC Staff's Response to Views on Practical Effects (Mar. 31, 2022) (Staff Response to Other Views); Friends of the Earth, Natural Resources Defense Council, and Miami Waterkeeper Response to Nuclear Regulatory Commission Staff's & Florida Power & Light Co.'s Views as Requested in Commission Order CLI-22-02 (Mar. 31, 2022) (Environmental Organizations Response to Other Views).

³ We reject FPL's suggestions that our concern in CLI-22-2 was with the "possibility" of an incomplete NEPA review associated with the subsequent license renewal period. FPL Views at 1, 5, 14. In CLI-22-2, we held that "the 2013 [Generic Environmental Impact Statement for License Renewal (GEIS)] did not address subsequent license renewal. As a result, the environmental review of the subsequent license renewal application at issue in this case is incomplete." CLI-22-2, 95 NRC at 27; *id.* at 31 ("We hold that the 2013 GEIS does not cover the subsequent license renewal period Therefore, the Staff may not exclusively rely on the 2013 GEIS and Table B-1 for the evaluation of environmental impacts of Category 1 issues."); *id.* at 35 ("Neither the original 1996 GEIS nor the revised 2013 GEIS analyzed the environmental impacts of subsequent license renewal periods."); *id.* at 36 ("We conclude that the Staff did not conduct an adequate NEPA analysis before issuing FPL licenses for the subsequent license renewal period.").

⁴ The current licensing bases include changes from license amendments, exemptions, and changes made under 10 C.F.R. § 50.59.

to the prior licenses.⁵ In addition, reconciling the licensing bases under reinstated licenses would be a time-consuming, complex process.⁶ As the Staff stated, maintaining the subsequently renewed licenses “is the simplest, most efficient way to continue requiring those enhanced aging management programs found desirable by Environmental Organizations and FPL.”⁷

With respect to the Environmental Organizations’ suggestion that we vacate the subsequently renewed licenses and reinstate the previous licenses but with the enhanced aging management program provisions included, we find that they have not provided sufficient legal authority or a safety justification for the Commission to further pursue that option.⁸ Environmental Organizations correctly identify that it is “ordinary practice” for courts to vacate agency actions taken in violation of NEPA.⁹ However, as the Staff points out, a decision by the Commission to reinstate the previous licenses would make the enhanced aging management program provisions no longer required.¹⁰ Environmental Organizations do not provide a basis for us to find otherwise.

FPL advocates that we balance the equities in determining the remedy here, as federal courts have done.¹¹ In FPL’s view, the result would be that the subsequently renewed licenses with end dates coextensive with the subsequent license renewal period should be in effect while the NRC completes its NEPA review. Even if the NRC has the authority to craft a remedy using an equitable analysis,¹² we decline to pursue such a remedy before we have fulfilled our NEPA duty

⁵ See FPL Views at 5-7; Staff Views at 6-11; Environmental Organizations Views at 5-6.

⁶ FPL Views at 8-11; Staff Response to Other Views at 4.

⁷ Staff Response to Other Views at 5.

⁸ See Environmental Organizations Response to Other Views at 1-3; FPL Response to Other Views at 7; NRC Staff Response to Other Views at 2-3. A license renewal may be conditioned or vacated after administrative or judicial review, in which case the operating license previously in effect would be reinstated. *AmerGen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-08-13, 67 NRC 396, 400 (2008); 10 C.F.R. § 54.31(c).

⁹ *Standing Rock Sioux Tribe v. U.S. Army Corps of Eng’rs*, 985 F.3d 1032, 1050-51 (D.C. Cir. 2021) (quoting *United Steel v. Mine Safety & Health Admin.*, 925 F.3d 1279, 1287 (D.C. Cir. 2019)).

¹⁰ See Staff Views at 10-11. The Staff identifies other problematic outcomes that would result from the reinstatement of the previous licenses, including obsolescence of the updated final safety analysis reports and impacts to the current licensing bases. See *id.* at 11-13.

¹¹ FPL Views at 11-16.

¹² While federal courts have discretion to leave an agency action in place while the decision is on remand, the court in *Oglala Sioux Tribe* noted that the NRC did not “identify any statute that authorizes it not to comply with NEPA on equitable grounds.” *Oglala Sioux Tribe v. NRC*, 896 F.3d 520, 536 (D.C. Cir. 2018). The court did not resolve “whether the absence of statutory authority is sufficient to reject the analogy to judicial remand-without-vacatur.” *Id.* And in our decision on remand, we did not address “the question, left expressly open by the court, of whether, or under what circumstances, an NRC presiding officer should perform an *Allied-Signal*-style equitable analysis

(Continued)

to fully evaluate the environmental impacts of the proposed action. Through NEPA, Congress tasked the NRC with evaluating the environmental impacts of a proposed major federal action before taking that action.¹³ Here, that means we must evaluate the environmental impacts of subsequent license renewal before approving issuance of a license that covers the period of subsequent license renewal.¹⁴ As FPL's licenses were still subject to modification due to pending agency litigation, it is within the NRC's authority to maintain the shortened end dates of the subsequently renewed licenses.¹⁵ We find that this remedy is the best way to fulfill our statutory duty while maintaining the enhanced aging management programs and safety enhancements of the subsequently renewed licenses favored by all parties to the proceeding. As stated in CLI-22-2, we separately directed the Staff to update the GEIS, and we recently directed the Staff to complete that effort in twenty-four months while seeking opportunities to accelerate the schedule.¹⁶

B. Applicability of 10 C.F.R. § 54.21(b)

One additional matter merits attention. The Staff raised an issue related to the applicability of 10 C.F.R. § 54.21(b). That regulation requires license renewal “applicants” to periodically update their applications. The Staff questioned whether FPL is an “applicant” under this regulation because the Staff’s review of the environmental impacts related to subsequent license renewal is still active.¹⁷ We hold that FPL does not need to update its application pursuant to 10

in the first instance upon finding a significant NEPA deficiency.” *Powertech (USA), Inc. (Dewey-Burdock In Situ Uranium Recovery Facility)*, CLI-19-1, 89 NRC 1, 10 (2019); see *Allied-Signal, Inc. v. NRC*, 988 F.2d 146 (D.C. Cir. 1993). Similarly, we find it unnecessary to do so in this case.

¹³ With respect to FPL’s argument that the “new and significant” information review undertaken for the Supplemental Environmental Impact Statement for Turkey Point Units 3 and 4 cured the deficiency in the 2013 GEIS, we find that such an analysis did not adequately address environmental impacts during the subsequent license renewal period. See FPL Views at 3-5. The “new and significant” analysis used the 2013 GEIS as its baseline and assumed that analysis covered the subsequent license renewal period. See “Generic Environmental Impact Statement for License Renewal of Nuclear Plants Regarding Subsequent License Renewal for Turkey Point Nuclear Generating Unit Nos. 3 and 4” (Final Report), NUREG-1437, Supplement 5, Second Renewal (Oct. 2019), at 1-3 (ML19290H346).

¹⁴ See *Oglala Sioux Tribe*, 896 F.3d at 532 (“[NEPA’s] requirement that a detailed environmental impact statement be made for a ‘proposed’ action makes clear that agencies must take the required hard look *before* taking that action.”).

¹⁵ See CLI-22-2, 95 NRC at 30 (citing *Oyster Creek*, CLI-08-13, 67 NRC at 400).

¹⁶ See *id.* at 37 & n.54; Staff Requirements — SECY-22-0024 — Rulemaking Plan for Renewing Nuclear Power Plant Operating Licenses — Environmental Review (RIN 3150-AK32; NRC-2018-0296) (Apr. 5, 2022) (ML22096A035).

¹⁷ NRC Staff Views at 9; see also FPL Response to Other Views at 9-10.

C.F.R. § 54.21(b) while the Staff completes the environmental review. Because Turkey Point is already operating under the subsequently renewed licenses, it would not serve any useful purpose to require FPL to update its application to identify changes to the current licensing bases. Our ruling in CLI-22-2 did not disturb the safety review.

III. CONCLUSION

For the reasons discussed above, we *affirm* our direction in CLI-22-2 regarding the status of the Turkey Point subsequently renewed licenses without further modification and *terminate* this proceeding.

IT IS SO ORDERED.

For the Commission

Russell E. Chazell
Assistant for Rulemaking and
Adjudications
Office of the Secretary

Dated at Rockville, Maryland,
this 3d day of June 2022.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Christopher T. Hanson, Chairman
Jeff Baran
David A. Wright

In the Matter of

**Docket Nos. 50-277-SLR
50-278-SLR**

**CONSTELLATION ENERGY
GENERATION, LLC
(F/K/A EXELON GENERATION
COMPANY, LLC)
(Peach Bottom Atomic Power
Station, Units 2 and 3)**

June 3, 2022

LICENSES RENEWALS

Renewed licenses become effective immediately upon issuance, but they may be set aside upon further administrative or judicial appeal. 10 C.F.R. § 54.31(c).

MOTIONS FOR RECONSIDERATION

Under 10 C.F.R. §§ 2.341(d) and 2.323(e), a motion for reconsideration must demonstrate “compelling circumstances, such as the existence of a clear and material error in a decision, which could not have been reasonably anticipated, that renders the decision invalid.”

NATIONAL ENVIRONMENTAL POLICY ACT

Under NEPA, the NRC must evaluate the environmental impacts of a proposed major federal action before taking that action.

MEMORANDUM AND ORDER

In CLI-22-4, we asked the participants to submit their views on the practical effects of two options — leaving in place the subsequently renewed licenses for Peach Bottom Atomic Power Station, Units 2 and 3, and reinstating the previous licenses.¹ The participants provided timely responses and answers.² Additionally, Constellation Energy Generation, LLC (Constellation, formerly known as Exelon Generation Company, LLC) requested reconsideration of the portion of CLI-22-4 that directed the NRC Staff to amend the expiration dates in the subsequently renewed licenses for Peach Bottom.³

I. BACKGROUND

The Staff issued the subsequently renewed licenses after completion of its safety and environmental reviews, and pursuant to 10 C.F.R. § 54.31(c), the licenses became immediately effective. We found in CLI-22-4 that the environmental review of the subsequent license renewal application in this case was incomplete.⁴ Since 2020, Constellation has been operating under the subsequently renewed licenses, which include safety enhancements compared to the previous licenses. To best reconcile Constellation's current licensing bases⁵ with the recognition that the agency's National Environmental Policy Act (NEPA) review was incomplete, we directed that the subsequently renewed licenses remain in place but with shortened terms to match the end dates of the previous licenses until completion of the NEPA analysis. After considering the views of the participants, we deny Constellation's petition for reconsideration and maintain the direction in CLI-22-4 without modification.

¹ CLI-22-4, 95 NRC 44 (2022).

² Beyond Nuclear's Response to Constellation Energy Generation, LLC's Petition for Partial Reconsideration of CLI-22-04 and Beyond Nuclear's Views in Response to CLI-22-04 (Mar. 17, 2022) (Beyond Nuclear Views); Response to Commission Request for Views in CLI-22-04 (Mar. 21, 2022) (Constellation Views); NRC Staff Views on the Practical Effects of (1) the Subsequent Renewed Licenses Continuing in Place and (2) the Previous Licenses Being Reinstated (Mar. 21, 2022) (Staff Views); Beyond Nuclear's Response to Constellation Energy Generation, LLC's and NRC Staff's Views on CLI-22-04 (Mar. 31, 2022) (Beyond Nuclear Response to Other Views); Constellation Response to the NRC Staff and Beyond Nuclear Views in Response to CLI-22-04 (Mar. 31, 2022) (Constellation Response to Other Views); NRC Staff's Response to Views on Practical Effects (Mar. 31, 2022) (Staff Response to Other Views).

³ Petition for Partial Reconsideration of CLI-22-04 (Mar. 7, 2022) (Reconsideration Petition).

⁴ CLI-22-4, 95 NRC at 45.

⁵ The current licensing bases include changes from license amendments, exemptions, and changes made under 10 C.F.R. § 50.59.

II. DISCUSSION

A. Petition for Reconsideration

Constellation submitted a partial petition for reconsideration pursuant to 10 C.F.R. §§ 2.341(d) and 2.323(e). Under these regulations, a motion for reconsideration must demonstrate “compelling circumstances, such as the existence of a clear and material error in a decision, which could not have been reasonably anticipated, that renders the decision invalid.”⁶

Constellation argues that the portion of CLI-22-4 that directs the Staff to amend the expiration dates in the Peach Bottom licenses should be overturned because it “constitutes a clear and material error,” “is arbitrary and capricious, and an abuse of discretion.”⁷ Constellation contends that CLI-22-4 “is not supported by an adequate explanation or reasoned analysis of the effects of this partial vacatur of the Peach Bottom licenses.”⁸ Constellation argues that the standards in *Oglala Sioux Tribe v. NRC* and *Allied-Signal, Inc. v. NRC* should have been applied.⁹ Further, Constellation charges that the decision violates the Administrative Procedure Act (APA) because it violates the timely renewal provisions in that statute.¹⁰ As discussed below, we find that Constellation does not demonstrate compelling circumstances; therefore, we deny the petition.

In *Oglala Sioux Tribe*, the D.C. Circuit reviewed the Commission’s decision to leave Powertech’s license in place “notwithstanding the Commission’s conclusion that there has been a significant deficiency in its NEPA compliance — unless an intervenor demonstrates irreparable harm.”¹¹ The court “expressly declined to decide whether the NRC may itself lawfully fashion remedies for NEPA violations based on an analysis of equitable factors in accordance with *Allied-Signal*.”¹² The court noted that the NRC “fail[ed] to identify any statute that authorizes it not to comply with NEPA on equitable grounds,”¹³ and in *Powertech* we explicitly did not decide “whether, or under what circumstances, an NRC presiding officer should perform an *Allied-Signal*-style equitable analysis in the first instance upon finding a significant NEPA deficiency.”¹⁴

⁶ 10 C.F.R. § 2.323(e).

⁷ Reconsideration Petition at 1, 2.

⁸ *Id.* at 2.

⁹ *Id.*

¹⁰ *Id.*

¹¹ *Oglala Sioux Tribe v. NRC*, 896 F.3d 520, 529-30 (D.C. Cir. 2018).

¹² *Powertech (USA), Inc. (Dewey-Burdock In Situ Uranium Recovery Facility)*, CLI-19-1, 89 NRC 1, 6 (2019); see *Allied-Signal, Inc. v. NRC*, 988 F.2d 146 (D.C. Cir. 1993).

¹³ *Oglala Sioux Tribe*, 896 F.3d at 536.

¹⁴ *Powertech*, CLI-19-1, 89 NRC at 10.

While the court left open whether we could perform an equitable analysis in some circumstances, it did not direct us to perform such an analysis. Constellation's claim that we violate the law by not performing such an analysis incorrectly equates the court's leaving open the question with the court's directing us to perform such an analysis. Constellation does not cite any authority that allows us to either disregard NEPA or exercise the equitable powers a court has when fulfilling our NEPA obligation in the first instance.¹⁵ Constellation does not cite anything to indicate that declining to undertake an *Allied-Signal*-type analysis is contrary to law. Quite simply, Constellation has not shown that our decision to follow NEPA is a clear violation of the law.¹⁶

Indeed, we do not believe that the agency's decision to follow the law in these circumstances could constitute legal error. When the Staff issued the subsequently renewed licenses, Constellation knew that the renewal was subject to legal challenge before the agency and, potentially, in the courts of appeals, and that all remedies, up to and including reinstatement of the previous licenses, were possible.¹⁷ Under our regulations, CLI-20-3 was always subject to modification as a consequence of the adjudicatory process, and that contingency has come to pass.

Similarly, Constellation's claim that our decision was in error because it violates the timely renewal provision in the APA is unpersuasive.¹⁸ Amending the end dates of the licenses did not affect the timely renewal provision in our regulation, 10 C.F.R. § 2.109, or in the APA. Constellation submitted a renewal application within the timeframe prescribed in our regulation, and as we have not yet finished the environmental review, the application is still pending for purposes of that regulation.

Finally, Constellation requested that we direct the Staff to refrain from amending the expiration dates of the licenses while its petition was pending.¹⁹ Constellation essentially requested a stay but did not address the relevant criteria: (1) whether the moving party has made a strong showing that it is likely to prevail

¹⁵ See CLI-19-1, 89 NRC at 6 n.26. We are not acting after a judicial remand, but rather, we are still in the process of fulfilling our NEPA obligations at the agency level before there has been judicial review.

¹⁶ See *Oglala Sioux Tribe*, 896 F.3d at 523 ("The statute does not permit an agency to act first and comply later."). The court also expressed skepticism regarding a federal agency's ability to undertake an *Allied-Signal*-type analysis once it has found a significant NEPA deficiency. The "harmless error" doctrine that the federal courts apply is compelled by section 706 of the Administrative Procedure Act; since the Commission is not a court, section 706 does not govern our choice of remedy for Staff errors. *Id.* at 533. Neither does NEPA "give the NRC authority to forgive 'harmless' violations of NEPA." *Id.* at 533, 536.

¹⁷ See 10 C.F.R. § 54.31(c).

¹⁸ See Reconsideration Petition at 2.

¹⁹ *Id.* at 6-7.

on the merits; (2) whether the party will be irreparably injured unless a stay is granted; (3) whether the granting of a stay would harm other parties; and (4) where the public interest lies.²⁰ Of these, irreparable harm to the movant is the most important factor.²¹ Constellation did not show that the modified license terms taking effect for a short time between the issuance of CLI-22-4 and the issuance of our decision today would cause irreparable harm, and therefore, we did not direct the Staff to delay amending the licenses.

B. Confirmation of Direction in CLI-22-4

All parties acknowledge that there are safety benefits associated with the Peach Bottom units operating under the subsequently renewed licenses compared to the prior licenses.²² In addition, reconciling the licensing bases under reinstated licenses would be a time-consuming, complex process.²³ As the Staff stated, maintaining the subsequently renewed licenses “is the simplest, most efficient way to continue requiring those enhanced aging management programs found desirable by both Beyond Nuclear and Constellation.”²⁴

With respect to Beyond Nuclear’s suggestion that we completely vacate the subsequently renewed licenses and reinstate the previous licenses but with the enhanced aging management program provisions included, we find that they have not provided sufficient legal authority or a safety justification for the Commission to further pursue that option.²⁵ Beyond Nuclear correctly identifies that it is “ordinary practice” for courts to vacate agency actions taken in violation of NEPA.²⁶ However, as the Staff points out, a decision by the Commission

²⁰ See *Va. Petroleum Jobbers Ass’n v. Fed. Power Comm’n*, 259 F.2d 921, 925 (D.C. Cir. 1958); see, e.g., 10 C.F.R. §§ 2.342, 2.1213.

²¹ *Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), CLI-77-27, 6 NRC 715, 716 (1977).

²² See Staff Views at 5-8; Beyond Nuclear Response to Other Views at 6; Constellation Response to Other Views at 1-2.

²³ See Staff Views at 2-10; Constellation Response to Other Views at 2.

²⁴ Staff Response to Other Views at 5.

²⁵ See Beyond Nuclear Views at 14-16; Beyond Nuclear Response to Other Views at 10-11; Staff Response to Other Views at 2-3. A license renewal may be conditioned or vacated after administrative or judicial review, in which case the operating license previously in effect would be reinstated. *AmerGen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-08-13, 67 NRC 396, 400 (2008); 10 C.F.R. § 54.31(c).

²⁶ *Standing Rock Sioux Tribe v. U.S. Army Corps of Eng’rs*, 985 F.3d 1032, 1050-51 (D.C. Cir. 2021) (quoting *United Steel v. Mine Safety & Health Admin.*, 925 F.3d 1279, 1287 (D.C. Cir. 2019)).

to reinstate the previous licenses would make the enhanced aging management program provisions no longer required.²⁷

Constellation advocates that we balance the equities in determining the remedy here, as federal courts have done.²⁸ In Constellation's view, the balancing would call for the subsequently renewed licenses with end dates coextensive with the subsequent license renewal period to be in effect while the NRC completes its NEPA review. Even if the NRC has the authority to craft an *Allied-Signal*-style equitable remedy,²⁹ we decline to pursue such a remedy before we have fulfilled our NEPA duty to fully evaluate the environmental impacts of the proposed action.³⁰ While our authority to perform an *Allied-Signal*-style equitable analysis is in question, our obligation to comply with NEPA is not. Through NEPA, Congress tasked the NRC with evaluating the environmental impacts of a proposed major federal action before taking that action.³¹ Here, that means we must evaluate the environmental impacts of subsequent license renewal before approving issuance of a license that covers the period of subsequent license

²⁷ See Staff Views at 8. The Staff identifies other problematic outcomes that would result from the reinstatement of the previous licenses, including obsolescence of the updated final safety analysis reports and impacts to the current licensing bases. See *id.* at 9-10.

²⁸ Reconsideration Petition at 3-4; Constellation Views at 2-7.

²⁹ While federal courts have discretion to leave an agency action in place while the decision is on remand, the court in *Oglala Sioux Tribe* noted that the NRC did not "identify any statute that authorizes it not to comply with NEPA on equitable grounds." *Oglala Sioux Tribe*, 896 F.3d at 536. The court did not resolve "whether the absence of statutory authority is sufficient to reject the analogy to judicial remand-without-vacatur." *Id.* And in our decision on remand, we did not address "the question, left expressly open by the court, of whether, or under what circumstances, an NRC presiding officer should perform an *Allied-Signal*-style equitable analysis in the first instance upon finding a significant NEPA deficiency." *Powertech*, CLI-19-1, 89 NRC at 10. Similarly, we find it unnecessary to do so in this case.

³⁰ To support its views in response to CLI-22-4, Constellation submitted an expert declaration on the potential disruptive financial effects of modifying the end dates in the subsequently renewed licenses. Constellation Views, Attach., Declaration of Bryan J. Michels (Mar. 21, 2022). Because we will not perform an *Allied-Signal*-style equitable analysis to determine the next steps after recognizing the NEPA deficiency, this declaration does not change our approach.

³¹ With respect to Constellation's argument that the "new and significant" information review undertaken for the Supplemental Environmental Impact Statement for Peach Bottom Atomic Power Station Units 2 and 3 cured the deficiency in the 2013 GEIS, we find that such an analysis did not adequately address environmental impacts during the subsequent license renewal period. See Constellation Response to Other Views at 4-6. The "new and significant" analysis used the 2013 GEIS as its baseline and assumed that analysis covered the subsequent license renewal period. "Generic Environmental Impact Statement for License Renewal of Nuclear Plants Regarding Subsequent License Renewal for Peach Bottom Atomic Power Station Units 2 and 3" (Final Report), NUREG-1437, Supplement 10, Second Renewal (Jan. 2020), at 1-3 (ML20023A937).

renewal.³² As Constellation’s licenses were still subject to modification due to pending agency litigation, it is within the NRC’s authority to maintain the shortened end dates of the subsequently renewed licenses. We find that this remedy is the best way to fulfill our statutory duty while maintaining the enhanced aging management programs and safety enhancements of the subsequently renewed licenses favored by all parties to the proceeding. As stated in CLI-22-4, we separately directed the Staff to update the GEIS, and we recently directed the Staff to complete that effort in twenty-four months while seeking opportunities to accelerate the schedule.³³

C. Applicability of 10 C.F.R. § 54.21(b)

While we have found that Constellation’s application is still pending for purposes of our timely renewal regulation, the Staff raised a related matter in its response — the applicability of 10 C.F.R. § 54.21(b). That regulation requires license renewal “applicants” to periodically update their applications. The Staff questioned whether Constellation — the current license holder of the Peach Bottom licenses — is an “applicant” under this regulation because the Staff’s review of the environmental impacts related to subsequent license renewal is still active.³⁴ We hold that Constellation does not need to update its application pursuant to 10 C.F.R. § 54.21(b) while the Staff completes the environmental review. Because Peach Bottom is already operating under the subsequently renewed licenses, it would not serve any useful purpose to require Constellation to update its application to identify changes to the current licensing bases. Our ruling in CLI-22-4 did not disturb the safety review.

III. CONCLUSION

For the reasons discussed above, we *deny* Constellation’s petition for reconsideration, *affirm* our direction in CLI-22-4 regarding the status of the Peach Bottom subsequently renewed licenses without further modification, and *terminate* this proceeding.

³² See *Oglala Sioux Tribe*, 896 F.3d at 532 (“[NEPA’s] requirement that a detailed environmental impact statement be made for a ‘proposed’ action makes clear that agencies must take the required hard look *before* taking that action.”).

³³ See CLI-22-4 at 46 & n.13; Staff Requirements — SECY-22-0024 — Rulemaking Plan for Renewing Nuclear Power Plant Operating Licenses — Environmental Review (RIN 3150-AK32; NRC-2018-0296) (Apr. 5, 2022) (ML22096A035).

³⁴ Staff Views at 7.

IT IS SO ORDERED.

For the Commission

Russell E. Chazell
Assistant for Rulemakings and
Adjudications
Office of the Secretary

Dated at Rockville, Maryland,
this 3d day of June 2022.

CASE NAME INDEX

CALVERT CLIFFS NUCLEAR POWER PLANT, LLC
 LICENSE TRANSFER; MEMORANDUM AND ORDER; Docket Nos. 50-317-LT, 50-318-LT, 72-8-LT; CLI-22-1, 95 NRC 1 (2022)

CONSTELLATION ENERGY GENERATION, LLC (F/K/A EXELON GENERATION COMPANY, LLC)
 SUBSEQUENT OPERATING LICENSE RENEWAL; MEMORANDUM AND ORDER; Docket Nos. 50-277-SLR, 50-278-SLR; CLI-22-7, 95 NRC 116 (2022)

DUKE ENERGY CAROLINAS, LLC
 SUBSEQUENT OPERATING LICENSE RENEWAL; MEMORANDUM AND ORDER; Docket Nos. 50-269-SLR, 50-270-SLR, 50-287-SLR; CLI-22-3, 95 NRC 40 (2022)
 SUBSEQUENT OPERATING LICENSE RENEWAL; MEMORANDUM AND ORDER (Denying Intervention and Terminating Proceeding); Docket Nos. 50-269-SLR, 50-270-SLR, 50-287-SLR (ASLBP No. 22-973-01-SLR-BD01); LBP-22-1, 95 NRC 49 (2022)

EXELON CORPORATION
 LICENSE TRANSFER; MEMORANDUM AND ORDER; Docket Nos. 50-373-LT, 50-374-LT, 72-70-LT, 50-461-LT, 72-1046-LT, 72-8-LT; CLI-22-1, 95 NRC 1 (2022)

EXELON FITZPATRICK, LLC
 LICENSE TRANSFER; MEMORANDUM AND ORDER; Docket Nos. 50-333-LT, 72-12-LT; CLI-22-1, 95 NRC 1 (2022)

EXELON GENERATION COMPANY, LLC
 LICENSE TRANSFER; MEMORANDUM AND ORDER; Docket Nos. 50-10-LT, 50-171-LT, 50-277-LT, 50-278-LT, 72-29-LT, 50-237-LT, 50-249-LT, 72-37-LT, 50-254-LT, 50-265-LT, 72-53-LT, 50-272-LT, 50-311-LT, 72-48-LT, 50-289-LT, 72-77-LT, 50-352-LT, 50-353-LT, 72-65-LT, STN 50-454-LT, STN 50-455-LT, 72-68-LT, STN 50-456-LT, STN 50-457-LT, 72-73-LT; CLI-22-1, 95 NRC 1 (2022)
 SUBSEQUENT OPERATING LICENSE RENEWAL; MEMORANDUM AND ORDER; Docket Nos. 50-277-SLR, 50-278-SLR; CLI-22-3, 95 NRC 40 (2022); CLI-22-4, 95 NRC 44 (2022)

FLORIDA POWER & LIGHT COMPANY
 SUBSEQUENT OPERATING LICENSE RENEWAL; MEMORANDUM AND ORDER; Docket Nos. 50-250-SLR, 50-251-SLR; CLI-22-2, 95 NRC 26 (2022); CLI-22-3, 95 NRC 40 (2022); CLI-22-6, 95 NRC 111 (2022)

NEXTERA ENERGY POINT BEACH, LLC
 SUBSEQUENT OPERATING LICENSE RENEWAL; MEMORANDUM AND ORDER; Docket Nos. 50-266-SLR, 50-301-SLR; CLI-22-3, 95 NRC 40 (2022); CLI-22-5, 95 NRC 97 (2022)

NINE MILE POINT NUCLEAR STATION, LLC
 LICENSE TRANSFER; MEMORANDUM AND ORDER; Docket Nos. 50-220-LT, 50-410-LT, 72-1036-LT; CLI-22-1, 95 NRC 1 (2022)

R.E. GINNA NUCLEAR POWER PLANT, LLC
 LICENSE TRANSFER; MEMORANDUM AND ORDER; Docket Nos. 50-244-LT, 72-67-LT; CLI-22-1, 95 NRC 1 (2022)

VIRGINIA ELECTRIC AND POWER COMPANY
 SUBSEQUENT OPERATING LICENSE RENEWAL; MEMORANDUM AND ORDER; Docket Nos. 50-338-SLR, 50-339-SLR; CLI-22-3, 95 NRC 40 (2022)

LEGAL CITATIONS INDEX CASES

- Agostini v. Felton*, 521 U.S. 203, 236 (1997)
court need not apply the law of the case doctrine if it is convinced that its prior decision is clearly erroneous and would work a manifest injustice; CLI-22-2, 95 NRC 26, 30 n.26 (2022)
- Allied-Signal, Inc. v. NRC*, 988 F.2d 146 (D.C. Cir. 1993)
Commission declines to pursue an equitable analysis remedy before fulfilling its NEPA duty in the first instance upon finding a significant NEPA deficiency; CLI-22-6, 95 NRC 111, 114 n.12 (2022)
court expressly declined to decide whether NRC may itself lawfully fashion remedies for NEPA violations based on an analysis of equitable factors; CLI-22-7, 95 NRC 116, 118 (2022)
- AmerGen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-08-13, 67 NRC 396, 400 (2008)
license renewal may be conditioned or vacated after administrative or judicial review, in which case the operating license previously in effect would be reinstated; CLI-22-6, 95 NRC 111, 113 n.8 (2022); CLI-22-7, 95 NRC 116, 120 n.25 (2022)
license renewal may be set aside or appropriately conditioned even after it has been issued, upon subsequent administrative or judicial review; CLI-22-2, 95 NRC 26, 30 n.25 (2022); CLI-22-4, 95 NRC 44, 46 n.11 (2022)
where licenses are still subject to modification due to pending agency litigation, it is within NRC's authority to maintain shortened end dates of the subsequently renewed licenses; CLI-22-6, 95 NRC 111, 114 (2022)
- AmerGen Energy Co., LLC* (Three Mile Island Nuclear Station, Unit 1), CLI-05-25, 62 NRC 572, 574 (2005)
because applicant did not propose to change either operating or possession authority, there was no direct license transfer; CLI-22-1, 95 NRC 1, 5 n.9 (2022)
- Andrew Siemaszko*, CLI-06-16, 63 NRC 708, 714 n.3 (2006)
in a Part 2, subpart B enforcement proceeding, a section 2.309(f)(1) admissible contention is not required for litigation to proceed relative to the hearing request of the subject of the agency enforcement order or civil penalty at issue; LBP-22-1, 95 NRC 49, 80 n.69 (2022)
- Arizona v. California*, 460 U.S. 605, 618 (1983)
court need not apply law of the case doctrine if it is convinced that its prior decision is clearly erroneous and would work a manifest injustice; CLI-22-2, 95 NRC 26, 30 n.26 (2022)
- Baltimore Gas & Elec. Co. v. NatRes. Def. Council, Inc.*, 462 U.S. 87, 97 (1983)
NEPA obligates an agency to consider every significant aspect of the environmental impact of a proposed action, and to inform the public that it has indeed considered environmental concerns in its decisionmaking process; CLI-22-2, 95 NRC 26, 33 n.38 (2022)
- Christensen v. Harris Cty.*, 529 U.S. 576, 588 (2000)
any amendments to a rule must also occur through notice-and-comment rulemaking; CLI-22-2, 95 NRC 26, 32 (2022)
where rule language is clear on its face, it is unnecessary to resort to other sources to discern its meaning; CLI-22-2, 95 NRC 26, 31 (2022)
- Commonwealth Edison Co.* (Zion Nuclear Power Station, Units 1 and 2), CLI-99-4, 49 NRC 185, 188, 190-91 (1999)
interest as a school board member and spokesperson for monitoring group does not give rise to standing absent a showing that the licensing action could jeopardize those interests; CLI-22-1, 95 NRC 1, 20 & n.121 (2022)

LEGAL CITATIONS INDEX

CASES

- Consolidated Edison Co. of New York* (Indian Point, Units 1 and 2), CLI-01-19, 54 NRC 109, 140 (2001)
NRC is not the forum in which to challenge a claimed violation of a state or local law; CLI-22-1, 95 NRC 1, 22-23 & n.135 (2022)
- Department of Transportation v. Public Citizen*, 541 U.S. 752, 754 (2004)
NRC complies with NEPA by disclosing the impacts of the once-through cooling system as approved by a state authority; CLI-22-5, 95 NRC 97, 105 (2022)
- Department of Transportation v. Public Citizen*, 541 U.S. 752, 767-68 (2004)
agency has no obligation to gather or consider environmental information if it has no statutory authority to act on that information; CLI-22-5, 95 NRC 97, 104 (2022)
- Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Unit 2), CLI-03-14, 58 NRC 207, 218 (2003)
NRC regulatory determination published as a rule is generally not subject to adjudicatory challenge; LBP-22-1, 95 NRC 49, 81 n.70 (2022)
- Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-05-24, 62 NRC 551, 559-60 (2005)
four factors are evaluated to determine whether a rule waiver is appropriate; LBP-22-1, 95 NRC 49, 81 (2022)
petitioners fail to satisfy factor that waiver of the regulation is necessary to reach a significant safety or environmental problem; LBP-22-1, 95 NRC 49, 84-85 (2022)
- Duke Energy Carolinas, LLC* (Oconee Nuclear Station, Units 1, 2, and 3), CLI-22-3, 95 NRC 40 (2022)
pending environmental contentions were dismissed and new hearing opportunity is to be provided on updated generic environmental information; CLI-22-5, 95 NRC 97, 99 n.2 (2022)
- Duke Energy Carolinas, LLC* (Oconee Nuclear Station, Units 1, 2, and 3), CLI-22-3, 95 NRC 40, 41 (2022)
NRC Staff is directed to revise the Generic Environmental Impact Statement for License Renewal; CLI-22-5, 95 NRC 97, 100 (2022)
- Duke Energy Carolinas, LLC* (Oconee Nuclear Station, Units 1, 2, and 3), LBP-22-1, 95 NRC 49 (2022)
Commission dismisses pending environmental contentions and motions and takes sua sponte review under 10 C.F.R. 2.341(a)(2) of the board's decision; CLI-22-3, 95 NRC 40, 42 (2022)
- Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 334 (1999)
contention admissibility requirements are intended to ensure that adjudicatory hearings are triggered only by substantive safety or environmental issues that raise a supported dispute; CLI-22-1, 95 NRC 1, 9 (2022)
petitioners may not seek an adjudicatory hearing to attack generic NRC requirements or regulations, or to express generalized grievances about NRC policies; LBP-22-1, 95 NRC 49, 81 n.70 (2022)
- El Paso Electric Co.* (Palo Verde Nuclear Generating Station, Units 1, 2, and 3), CLI-20-7, 92 NRC 225, 233 (2020)
petitioner in indirect license transfer proceeding must explain how the licensing action will harm its members or its interests; CLI-22-1, 95 NRC 1, 9, 10, 20 (2022)
proximity presumption is not applied in indirect license transfer proceeding because it involves no direct changes to the licensed owner or operator or to the operation or physical plant; CLI-22-1, 95 NRC 1, 9 (2022)
- Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), CLI-10-14, 71 NRC 449, 456 (2010)
NRC's review of a license renewal application includes a review of programs to manage the effects of aging on long-lived, passive structures and components; CLI-22-5, 95 NRC 97, (2022)
- Entergy Nuclear Operations, Inc.* (Indian Point Nuclear Generating Station, Units 1, 2, and 3 and ISFSI), CLI-21-1, 93 NRC 1, 10 (2021)
intervention petitioner must show an actual or threatened concrete and particularized injury to an interest within the zone of interests protected by the Atomic Energy Act; CLI-22-1, 95 NRC 1, 8 (2022)
intervention petitioner must show that the threatened injury would be caused by the proposed licensing action and is capable of being redressed by a favorable decision; CLI-22-1, 95 NRC 1, 8 (2022)

LEGAL CITATIONS INDEX

CASES

- Entergy Nuclear Operations, Inc.* (Palisades Nuclear Plant), CLI-15-23, 82 NRC 321, 328 (2015)
expert opinion that merely states a conclusion without providing a reasoned basis or explanation for that conclusion is inadequate because it deprives the board of the ability to make the necessary, reflective assessment of the opinion; LBP-22-1, 95 NRC 49, 90 n.87 (2022)
- Entergy Nuclear Operations, Inc.* (Palisades Nuclear Plant), CLI-15-23, 82 NRC 321, 329 (2015)
it is petitioners' responsibility, not the board's, to formulate contentions and to provide the necessary information to satisfy the basis requirement for contention admission; LBP-22-1, 95 NRC 49, 79 n.66 (2022)
petitioner bears the burden to satisfy each of the six contention admissibility criteria; LBP-22-1, 95 NRC 49, 78-79 (2022)
- Entergy Nuclear Operations, Inc., and Entergy Nuclear Palisades, LLC* (Palisades Nuclear Plant), CLI-08-19, 68 NRC 251, 260 (2008)
proximity presumption is not applied in indirect license transfer proceeding because it involves no direct changes to the licensed owner or operator or to the operation or physical plant; CLI-22-1, 95 NRC 1, 9, 20 (2022)
- Entergy Nuclear Operations, Inc., and Entergy Nuclear Palisades, LLC* (Palisades Nuclear Plant), CLI-08-19, 68 NRC 251, 267 (2008)
discretionary intervention is allowed only where at least one petitioner has established standing and offered an admissible contention, such that a hearing will be held; CLI-22-1, 95 NRC 1, 21 (2022)
- Entergy Nuclear Vermont Yankee, LLC, and Entergy Nuclear Operations, Inc.* (Vermont Yankee Nuclear Power Station), CLI-07-3, 65 NRC 13, 20 (2007)
adjudicatory challenge based on applicant's failure to deal appropriately with a Category 1 item constitutes an attack on an agency rule requiring a section 2.335(b) waiver; LBP-22-1, 95 NRC 49, 61-62 (2022)
- Entergy Nuclear Vermont Yankee, LLC, and Entergy Nuclear Operations, Inc.* (Vermont Yankee Nuclear Power Station), CLI-07-16, 65 NRC 371, 376-77, 385-89 (2007)
NRC has no statutory authority to review limitations or other requirements established under the Clean Water Act and must accept at face value its determination that a once-through cooling system is sufficiently protective of the environment; CLI-22-5, 95 NRC 97, 104-05 (2022)
- Entergy Nuclear Vermont Yankee, LLC, and Entergy Nuclear Operations, Inc.* (Vermont Yankee Nuclear Power Station), CLI-07-16, 65 NRC 371, 377 (2007)
license renewal applicant with a permitted once-through cooling system is not required to further evaluate the environmental impacts of that system or potential alternatives; CLI-22-5, 95 NRC 97, 103 (2022)
- Entergy Nuclear Vermont Yankee, LLC, and Entergy Nuclear Operations, Inc.* (Vermont Yankee Nuclear Power Station), CLI-07-16, 65 NRC 371, 387 n.77 (2007)
NRC's environmental review rests on the presumption that NRC cannot review and judge environmental permits issued under the Clean Water Act by the Environmental Protection Agency or an authorized state agency; CLI-22-5, 95 NRC 97, 104, 105 (2022)
- Entergy Nuclear Vermont Yankee, LLC, and Entergy Nuclear Operations, Inc.* (Vermont Yankee Nuclear Power Station), CLI-07-16, 65 NRC 371, 389 (2007)
permitting agency determines what cooling system a nuclear power facility may use and NRC factors the impacts resulting from use of that system into the NEPA cost-benefit analysis; CLI-22-5, 95 NRC 97, 104 (2022)
- Entergy Nuclear Vermont Yankee, LLC, and Entergy Nuclear Operations, Inc.* (Vermont Yankee Nuclear Power Station), CLI-16-12, 83 NRC 542, 558 (2016)
Commission authority to reconsider its actions is inherent in its authority to make them in the first instance; CLI-22-2, 95 NRC 26, 30 (2022)
- Exelon Generation Co., LLC* (Dresden Nuclear Power Station, Units 2 and 3), LBP-14-4, 79 NRC 319, 325-26 (2014), *appeal dismissed as moot*, CLI-16-6, 83 NRC 147 (2016)
in a Part 2, subpart B enforcement proceeding, a section 2.309(f)(1) admissible contention is not required for litigation to proceed relative to the hearing request of the subject of the agency enforcement order or civil penalty at issue; LBP-22-1, 95 NRC 49, 80 n.69 (2022)

LEGAL CITATIONS INDEX

CASES

- Exelon Generation Co., LLC* (Limerick Generating Station, Units 1 and 2), CLI-12-19, 76 NRC 377, 386 (2012)
 SAMAs are the functional equivalent of a Category 1 issue, removing them from litigation in case-by-case license renewal adjudications; LBP-22-1, 95 NRC 49, 80 n.69 (2022)
- Exelon Generation Co., LLC* (Limerick Generating Station, Units 1 and 2), CLI-13-7, 78 NRC 199, 206 (2013), *petition for review denied sub nom. NRDC v. NRC*, 823 F.3d 641 (D.C. Cir. 2016)
 absent a rule waiver, a contention that constitutes an impermissible challenge to a Commission regulation would be outside the scope of an adjudication; LBP-22-1, 95 NRC 49, 80 n.69 (2022)
- Exelon Generation Co., LLC* (Limerick Generating Station, Units 1 and 2), CLI-13-7, 78 NRC 199, 207, 208 (2013), *petition for review denied sub nom. NRDC v. NRC*, 823 F.3d 641 (D.C. Cir. 2016)
 special circumstances standard that justifies the need for rule waiver is stringent by design and imposes a substantial burden on participant seeking the waiver; LBP-22-1, 95 NRC 49, 85 (2022)
- Exelon Generation Co., LLC* (Limerick Generating Station, Units 1 and 2), CLI-13-7, 78 NRC 199, 207-08 (2013), *petition for review denied sub nom. NRDC v. NRC*, 823 F.3d 641 (D.C. Cir. 2016)
 four factors are evaluated to determine whether a rule waiver is appropriate; LBP-22-1, 95 NRC 49, 81 (2022)
- Exelon Generation Co., LLC* (Limerick Generating Station, Units 1 and 2), CLI-13-7, 78 NRC 199, 208 (2013), *petition for review denied sub nom. NRDC v. NRC*, 823 F.3d 641 (D.C. Cir. 2016)
 petitioners fail to satisfy *Millstone* factor that waiver of the regulation is necessary to reach a significant safety or environmental problem; LBP-22-1, 95 NRC 49, 84-85 (2022)
- Exelon Generation Co., LLC* (Limerick Generating Station, Units 1 and 2), CLI-13-7, 78 NRC 199, 211-12 (2013), *petition for review denied sub nom. NRDC v. NRC*, 823 F.3d 641 (D.C. Cir. 2016)
 section 51.53(c)(3)(ii)(L) affords the functional equivalent of the Category 1 issue preclusion established by section 51.53(c)(3)(i); LBP-22-1, 95 NRC 49, 63 n.20 (2022)
- Exelon Generation Co., LLC* (Limerick Generating Station, Units 1 and 2), CLI-13-7, 78 NRC 199, 216-17 (2013), *petition for review denied sub nom. NRDC v. NRC*, 823 F.3d 641 (D.C. Cir. 2016)
 board's determination regarding rule waiver request does not negate NRC Staff's responsibility to conduct its hard-look licensing review to consider whether any information provided by public comments as part of the environment review process merits further analysis as new and significant information; LBP-22-1, 95 NRC 49, 94 n.97 (2022)
- Exelon Generation Co., LLC* (Peach Bottom Atomic Power Station, Units 2 and 3), CLI-20-11, 92 NRC 335, 348-50 (2020)
 2013 GEIS does not cover the subsequent license renewal period; CLI-22-2, 95 NRC 26, 30-31 & n.27 (2022)
- Exelon Generation Co., LLC* (Peach Bottom Atomic Power Station, Units 2 and 3), LBP-19-5, 89 NRC 483, 490-91 (2019), *aff'd on other grounds*, CLI-20-11, 92 NRC 335 (2020)
 proximity presumption as principal element for establishing representational standing excuses petitioner otherwise meeting the requirements for standing from having to make a specific showing of injury in fact so long as that petitioner resides, works, or otherwise has regular contacts within a 50-mile radius of the reactor facility; LBP-22-1, 95 NRC 49, 77 (2022)
- Exelon Generation Co., LLC* (Peach Bottom Atomic Power Station, Units 2 and 3), LBP-19-5, 89 NRC 483, 491 (2019), *aff'd on other grounds*, CLI-20-11, 92 NRC 335 (2020)
 even if standing is uncontested, an independent board determination is required about whether requirements for establish standing have been fulfilled; LBP-22-1, 95 NRC 49, 77 (2022)
- Exelon Generation Co., LLC* (Three Mile Island Nuclear Station, Units 1 and 2), LBP-20-2, 91 NRC 10, 31 (2020), *aff'd*, CLI-20-10, 92 NRC 327 (2020)
 standing was denied where petitioner did not show injury in fact stemming from a proposed license amendment altering emergency planning requirements in light of facility having permanently ceased operations; CLI-22-1, 95 NRC 1, 20 & n.121 (2022)
- FirstEnergy Companies and TMI-2 Solutions, LLC* (Three Mile Island Nuclear Station, Unit 2), CLI-21-2, 93 NRC 70, 75-76 (2021)
 level of financial assurance required for license transferees is not equivalent to the extremely high assurance required for the safety of reactor design, construction, and operation; CLI-22-1, 95 NRC 1, 7 (2022)

LEGAL CITATIONS INDEX

CASES

- FirstEnergy Companies and TMI-2 Solutions, LLC* (Three Mile Island Nuclear Station, Unit 2), CLI-21-2, 93 NRC 70, 76 (2021)
NRC accepts financial assurances based on plausible assumptions and forecasts, even though the possibility is not insignificant that things will turn out less favorably than expected; CLI-22-1, 95 NRC 1, 7 (2022)
- FirstEnergy Companies and TMI-2 Solutions, LLC* (Three Mile Island Nuclear Station, Unit 2), CLI-21-2, 93 NRC 70, 86-87 (2021)
limited liability corporation is not considered inherently financially unsound; CLI-22-1, 95 NRC 1, 17 (2022)
- Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 7 (2001)
NRC's safety review of a license renewal application does not entail a full reassessment of safety issues previously addressed in the licensing of a plant, nor is it designed to review current operations; CLI-22-5, 95 NRC 97, 101 (2022)
NRC's safety review of a license renewal application focuses on those potential detrimental effects of aging that are not routinely addressed by ongoing regulatory oversight programs and the applicant's plans for managing those effects during the period of extended operation; CLI-22-5, 95 NRC 97, 101 (2022)
- Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 9 (2001)
ongoing operational issues are not reviewed in NRCs license renewal review because such issues are effectively addressed by ongoing agency oversight, review, and enforcement; CLI-22-5, 95 NRC 97, 101-02 (2022)
- Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 11-13 (2001)
adjudicatory challenge based on applicant's failure to deal appropriately with a Category 1 item constitutes an attack on an agency rule requiring a section 2.335(b) waiver; LBP-22-1, 95 NRC 49, 61-62 (2022)
- Florida Power & Light Co.* (Turkey Point Nuclear Generating Units 3 and 4), CLI-22-2, 95 NRC 26 (2022)
applicants for only initial license renewal may rely on the Generic Environmental Impact Statement for License Renewal in their environmental reports; CLI-22-5, 95 NRC 97, 100 (2022)
- Florida Power & Light Co.* (Turkey Point Nuclear Generating Units 3 and 4), LBP-19-3, 89 NRC 245, 258-59 (2019), *appeal dismissed and referred ruling aff'd*, CLI-20-3, 91 NRC 133 (2020)
proximity presumption as principal element for establishing representational standing excuses petitioner otherwise meeting requirements for standing from having to make a specific showing of injury in fact as long as that petitioner resides, works, or otherwise has regular contacts within a 50-mile radius of the reactor facility; LBP-22-1, 95 NRC 49, 77 (2022)
- Florida Power & Light Co.* (Turkey Point Nuclear Generating Units 3 and 4), LBP-19-8, 90 NRC 139, 170 (2019)
absent a rule waiver, a contention that constitutes challenge to a Commission regulation would be outside the scope of an adjudication; LBP-22-1, 95 NRC 49, 80 n.69 (2022)
- GPU Nuclear, Inc.* (Oyster Creek Nuclear Generating Station), CLI-00-6, 51 NRC 193, 202 (2000)
organization must show that one of its members has standing, identify that member by name and address, and show, preferably by affidavit, that the organization is authorized to request a hearing on behalf of that member; CLI-22-1, 95 NRC 1, 8 (2022)
organizational petitioners can demonstrate standing as a representative of its members; CLI-22-1, 95 NRC 1, 8 (2022)
- GPU Nuclear, Inc.* (Oyster Creek Nuclear Generating Station), CLI-00-6, 51 NRC 193, 202-03 (2000)
organization must show its members' standing by demonstrating that they may suffer an actual or threatened concrete and particularized injury to an interest within the zone of interests protected by the Atomic Energy Act, which would be caused by the proposed licensing action and is capable of being redressed by a favorable decision; CLI-22-1, 95 NRC 1, 8 (2022)
traditional standing would require that petitioner show that he lives, frequents, or owns property near the facility and could be harmed should the proposed license transfer cause decommissioning funds to run short; CLI-22-1, 95 NRC 1, 10 (2022)

LEGAL CITATIONS INDEX

CASES

- GPU Nuclear, Inc.* (Oyster Creek Nuclear Generating Station), CLI-00-6, 51 NRC 193, 207 (2000)
applicant's mere proffering of 5-year cost and revenue projections will not be sufficient in the face of plausible and adequately supported claims that those projections are inaccurate or otherwise do not provide adequate assurance of financial qualifications; CLI-22-1, 95 NRC 1, 12 (2022)
petitioner needs to posit a factually supported plausible scenario to raise an admissible contention; CLI-22-1, 95 NRC 1, 112 (2022)
- Gulf States Utilities Co.* (River Bend Station, Unit 1), CLI-94-10, 40 NRC 43, 48 (1994)
concerns regarding funding shortfalls can in some circumstances provide the basis for a showing of harm because NRC regulations recognize that underfunding can affect plant safety; CLI-22-1, 95 NRC 1, 10 (2022)
- Hein v. Freedom from Religion Foundation, Inc.*, 551 U.S. 587, 599 (2007)
taxpayer and ratepayer interests are not a basis for standing because the injury is not concrete and particularized; CLI-22-1, 95 NRC 1, 21 (2022)
- Hydro Resources, Inc.* (2929 Coors Road, Suite 101, Albuquerque, NM 87120), CLI-98-16, 48 NRC 119, 120-21 (1998)
NRC is not the forum in which to challenge a claimed violation of a state or local law; CLI-22-1, 95 NRC 1, 22-23 & n.135 (2022)
- Hydro Resources, Inc.* (2929 Coors Road, Suite 101, Albuquerque, NM 87120), CLI-99-22, 50 NRC 3, 14 (1999)
petitioner must present a seriously different picture of the environmental impact of the proposed project from what was previously envisioned; LBP-22-1, 95 NRC 49, 93 (2022)
- Kansas Gas and Electric Co.* (Wolf Creek Generating Station, Unit 1), CLI-99-19, 49 NRC 441, 459-60 n.14 (1999)
indirect transfers involve corporate restructuring or reorganizations that leave the licensee itself intact as a corporate entity and therefore involve no application for a new operating license; CLI-22-1, 95 NRC 1, 5 n.9 (2022)
- Kansas Gas and Electric Co. and Kansas City Power and Light Co.* (Wolf Creek Generating Station, Unit 1), ALAB-424, 6 NRC 122, 128 n.7 (1977)
ratepayer interest does not confer standing because the injury is not within the zone of interests of the Atomic Energy Act of 1954; CLI-22-1, 95 NRC 1, 20-21 & n.123 (2022)
- NextEra Energy Seabrook, LLC* (Seabrook Station, Unit 1), LBP-20-9, 92 NRC 58, 94-95 & n.191 (2020)
intervenor has the initial 'burden of going forward, which requires it to establish a prima facie case for claims asserted in the reformulated contention; LBP-22-1, 95 NRC 49, 82 (2022)
prima facie showing is one generally associated with meeting the burden of production or the burden of going forward during an evidentiary hearing; LBP-22-1, 95 NRC 49, 82 (2022)
- North Atlantic Energy Service Corp.* (Seabrook Station, Unit 1), CLI-99-6, 49 NRC 201, 220 (1999)
although 5-year total annual operating cost projections are required, they are not necessarily sufficient to provide reasonable assurance of applicant's financial qualifications; CLI-22-1, 95 NRC 1, 6 (2022)
- North Atlantic Energy Service Corp.* (Seabrook Station, Unit 1), CLI-99-6, 49 NRC 201, 221 (1999)
applicant is not required to provide absolutely certain predictions of future economic conditions; CLI-22-1, 95 NRC 1, 7 (2022)
- North Atlantic Energy Service Corp.* (Seabrook Station, Unit 1), CLI-99-6, 49 NRC 201, 222 (1999)
NRC accepts financial assurances based on plausible assumptions and forecasts, even though the possibility is not insignificant that things will turn out less favorably than expected; CLI-22-1, 95 NRC 1, 7 (2022)
- Oglala Sioux Tribe v. NRC*, 896 F.3d 520, 523 (D.C. Cir. 2018)
NEPA does not permit an agency to act first and comply later; CLI-22-7, 95 NRC 116, 119 n.16 (2022)
- Oglala Sioux Tribe v. NRC*, 896 F.3d 520, 529-30 (D.C. Cir. 2018)
court expressly declined to decide whether NRC may itself lawfully fashion remedies for NEPA violations based on an analysis of equitable factors; CLI-22-7, 95 NRC 116, 118 (2022)
- Oglala Sioux Tribe v. NRC*, 896 F.3d 520, 532 (D.C. Cir. 2018)
NEPA's requirement that a detailed environmental impact statement be made for a proposed action makes clear that agencies must take the required hard look before taking that action; CLI-22-6, 95 NRC 111, 114 n.14 (2022); CLI-22-7, 95 NRC 116, 122 n.32 (2022)

LEGAL CITATIONS INDEX

CASES

- NRC must evaluate the environmental impacts of subsequent license renewal before approving renewal; CLI-22-6, 95 NRC 111, 114 (2022)
- Oglala Sioux Tribe v. NRC*, 896 F.3d 520, 533 (D.C. Cir. 2018)
harmless error doctrine that federal courts apply is compelled by Administrative Procedure Act § 706, but since the Commission is not a court, this section does not govern its choice of remedy for Staff errors; CLI-22-7, 95 NRC 116, 119 n.16 (2022)
- Oglala Sioux Tribe v. NRC*, 896 F.3d 520, 533, 536 (D.C. Cir. 2018)
NEPA does not give NRC authority to forgive harmless violations of NEPA; CLI-22-7, 95 NRC 116, 119 n.16 (2022)
- Oglala Sioux Tribe v. NRC*, 896 F.3d 520, 536 (D.C. Cir. 2018)
court did not resolve whether absence of statutory authority is sufficient to reject the analogy to judicial remand-without-vacatur; CLI-22-6, 95 NRC 111, 113 n.12 (2022)
no statute authorizes NRC not to comply with NEPA on equitable grounds; CLI-22-6, 95 NRC 111, 113 n.12 (2022); CLI-22-7, 95 NRC 116, 118, 121 n.29 (2022)
- Pacific Gas and Electric Co.* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-653, 16 NRC 55, 72 (1981)
to constitute a prima facie showing, the substantial showing required for a section 2.335 waiver petition must be legally sufficient to establish a fact or case unless disproved; LBP-22-1, 95 NRC 49, 82 (2022)
- Pacific Gas and Electric Co.* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-15-21, 82 NRC 295, 301 (2015)
unless an appeal demonstrates an error of law or abuse of discretion, Commission will not disturb a licensing board's ruling on threshold decisions such as whether to grant a hearing request; CLI-22-5, 95 NRC 97, 100 (2022)
- Pacific Gas and Electric Co.* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-15-21, 82 NRC 295, 304-05 (2015)
reactor shutdown is an operational issue that is outside the scope of a license renewal proceeding; LBP-22-1, 95 NRC 49, 90 n.87 (2022)
- Pepper v. United States*, 562 U.S. 476, 506-07 (2011)
court need not apply the law of the case doctrine if it is convinced that its prior decision is clearly erroneous and would work a manifest injustice; CLI-22-2, 95 NRC 26, 30 n.26 (2022)
- Perez v. Mortg. Bankers Ass'n*, 575 U.S. 92, 104-05 (2015)
where rule language is clear on its face, it is unnecessary to resort to other sources to discern its meaning; CLI-22-2, 95 NRC 26, 31 (2022)
- Portland General Electric Co.* (Pebble Springs Nuclear Plant, Units 1 and 2), CLI-76-27, 4 NRC 610, 614 (1976)
ratepayer interest does not confer standing because the injury is not within the zone of interests of the Atomic Energy Act of 1954; CLI-22-1, 95 NRC 1, 20-21 & n.123 (2022)
- Powertech (USA), Inc.* (Dewey-Burdock *In Situ* Uranium Recovery Facility), CLI-19-1, 89 NRC 1, 6 (2019)
court expressly declined to decide whether NRC may itself lawfully fashion remedies for NEPA violations based on an analysis of equitable factors; CLI-22-7, 95 NRC 116, 118 (2022)
- Powertech (USA), Inc.* (Dewey-Burdock *In Situ* Uranium Recovery Facility), CLI-19-1, 89 NRC 1, 10 (2019)
Commission declines to pursue an equitable analysis remedy before fulfilling its NEPA duty in the first instance upon finding a significant NEPA deficiency; CLI-22-6, 95 NRC 111, 113-14 n.12 (2022)
NRC explicitly did not decide whether, or under what circumstances, an NRC presiding officer should perform an *Allied-Signal*-style equitable analysis in the first instance upon finding a significant NEPA deficiency; CLI-22-7, 95 NRC 116, 118, 121 n.29 (2022)
- PPL Bell Bend, LLC* (Bell Bend Nuclear Power Plant), CLI-10-7, 71 NRC 133, 138-39 (2010)
in some proceedings involving issuance of a construction permit or an operating license, proximity presumption grants that persons living in proximity to a reactor could be harmed by changes to the owners, operators, or physical plant; CLI-22-1, 95 NRC 1, 8-9 (2022)

LEGAL CITATIONS INDEX

CASES

- PPL Susquehanna LLC* (Susquehanna Steam Electric Station, Units 1 and 2), CLI-07-25, 66 NRC 101, 104-05 (2007)
NRC is not the forum in which to challenge a claimed violation of a state or local law; CLI-22-1, 95 NRC 1, 22-23 & n.135 (2022)
- Private Fuel Storage, LLC*. (Independent Spent Fuel Storage Installation), CLI-99-10, 49 NRC 318, 325 (1999)
failure to comply with any of the contention admission requirements constitutes grounds for rejecting a proposed contention; LBP-22-1, 95 NRC 49, 79 (2022)
- Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), ALAB-895, 28 NRC 7, 22 (1988)
to constitute a prima facie showing, the substantial showing required for a section 2.335 waiver petition must be legally sufficient to establish a fact or case unless disproved; LBP-22-1, 95 NRC 49, 82 (2022)
- Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), CLI-77-27, 6 NRC 715, 716 (1977)
irreparable harm to movant for a stay is the most important factor; CLI-22-7, 95 NRC 116, 120 (2022)
- Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), CLI-78-1, 7 NRC 1, 26-27 (1978)
permitting agency determines what cooling system a nuclear power facility may use and NRC factors the impacts resulting from use of that system into the NEPA cost-benefit; CLI-22-5, 95 NRC 97, 104 (2022)
- Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), CLI-89-20, 30 NRC 231, 245 (1989)
to make a successful showing regarding the *Millstone* factors for rule waiver, petitioner must meet extremely high standards showing the existence of compelling circumstances; LBP-22-1, 95 NRC 49, 85 (2022)
- Sierra Club v. FERC (Sabal Trail)*, 867 F.3d 1357, 1371-73 (D.C. Cir. 2017)
agency has no obligation to gather or consider environmental information if it has no statutory authority to act on that information; CLI-22-5, 95 NRC 97, 104 (2022)
- South Shore Hosp., Inc. v. Thompson*, 308 F.3d 91, 102 (1st Cir. 2002)
agencies may change positions and interpretations, as long as they explain their reasoning for doing so; CLI-22-2, 95 NRC 26, 30 n.26 (2022)
- Southern Nuclear Operating Co.* (Vogtle Electric Generating Plant, Unit 3), CLI-20-6, 91 NRC 225, 237-38 (2020)
to establish representational standing, an organization must show that at least one member has standing and has authorized the organization to represent the member and to request a hearing on the member's behalf; LBP-22-1, 95 NRC 49, 77 (2022)
- Standing Rock Sioux Tribe v. U.S. Army Corps of Eng'rs*, 985 F.3d 1032, 1050-51 (D.C. Cir. 2021)
it is ordinary practice for courts to vacate agency actions taken in violation of NEPA; CLI-22-6, 95 NRC 111, 113 (2022); CLI-22-7, 95 NRC 116, 120 (2022)
- Statement of Policy on Conduct of Adjudicatory Proceedings*, CLI-98-12, 48 NRC 18, 22 (1998)
it is petitioners' responsibility, not the board's, to formulate contentions and to provide the necessary information to satisfy the basis requirement for contention admission; LBP-22-1, 95 NRC 49, 79 n.66 (2022)
- Tennessee Valley Authority* (Watts Bar Nuclear Plant, Unit 2), LBP-10-12, 71 NRC 656, 662 n.9, *petition for interlocutory review denied*, CLI-10-29, 72 NRC 556 (2010)
to constitute a prima facie showing, the substantial showing required for a section 2.335 waiver petition must be legally sufficient to establish a fact or case unless disproved; LBP-22-1, 95 NRC 49, 81-82 (2022)
- Tennessee Valley Authority* (Watts Bar Nuclear Plant, Unit 2), LBP-10-12, 71 NRC 656, 670-71, *petition for interlocutory review denied*, CLI-10-29, 72 NRC 556 (2010)
claim supporting expert declaration that utility's past operational history without a nuclear facility means that denying an operating license would be environmentally preferable is insufficient to provide prima facie support for petitioner's section 2.335 waiver request; LBP-22-1, 95 NRC 49, 91 n.88 (2022)

LEGAL CITATIONS INDEX

CASES

- in determining whether a section 2.335 waiver petition makes a prima facie showing, whether provided by an expert or otherwise, its support must deal adequately with potentially relevant information; LBP-22-1, 95 NRC 49, 82 n.74 (2022)
- Tennessee Valley Authority* (Watts Bar Nuclear Plant, Units 1 and 2), ALAB-413, 5 NRC 1418, 1421 (1977)
- taxpayer interest does not confer standing because the injury is not within the zone of interests of the Atomic Energy Act of 1954; CLI-22-1, 95 NRC 1, 20-21 & n.123 (2022)
- Union Electric Co. d/b/a Ameren Missouri* (Callaway Plant, Unit 2), CLI-11-5, 74 NRC 141, 167-68 (2005)
- contention fails to acknowledge or analyze mitigation measures already implemented by applicant and provides only casual recommendations that fail to provide the requisite seriously different picture of the environmental impact necessary to frame an admissible issue; LBP-22-1, 95 NRC 49, 84 n.78 (2022)
- petitioner must present a seriously different picture of the environmental impact of the proposed project from what was previously envisioned; LBP-22-1, 95 NRC 49, 93 (2022)
- United Steel v. Mine Safety & Health Admin.*, 925 F.3d 1279, 1287 (D.C. Cir. 2019)
- it is ordinary practice for courts to vacate agency actions taken in violation of NEPA; CLI-22-6, 95 NRC 111, 113 (2022); CLI-22-7, 95 NRC 116, 120 (2022)
- USEC, Inc.* (American Centrifuge Plant), CLI-06-10, 63 NRC 451, 472 (2006)
- expert opinion that merely states a conclusion without providing a reasoned basis or explanation for that conclusion is inadequate because it deprives the board of the ability to make the necessary, reflective assessment of the opinion; LBP-22-1, 95 NRC 49, 90 n.87 (2022)
- Va. Petroleum Jobbers Ass'n v. Fed. Power Comm'n.*, 259 F.2d 921, 925 (D.C. Cir. 1958)
- stay request must address four criteria; CLI-22-7, 95 NRC 116, 119-20 (2022)
- Vermont Yankee Nuclear Power Corp. and AmerGen Vermont, LLC* (Vermont Yankee Nuclear Power Station), CLI-00-20, 52 NRC 151, 161 (2000)
- direct license transfer occurs when there will be a change in either possession or operating authority; CLI-22-1, 95 NRC 1, 5 n.9 (2022)
- Virginia Electric and Power Co.* (North Anna Power Station, Units 1 and 2), LBP-21-4, 93 NRC 179, 196-97 (2021)
- proximity presumption as principal element for establishing representational standing excuses petitioner otherwise meeting the requirements for standing from having to make a specific showing of injury in fact so long as that petitioner resides, works, or otherwise has regular contacts within a 50-mile radius of the reactor facility; LBP-22-1, 95 NRC 49, 77 (2022)
- Wisconsin Electric Power Co.* (Point Beach Nuclear Plant, Unit 1), ALAB-696, 16 NRC 1245, 1263 (1982)
- prior to having an admitted contention, there is no adjudicatory discovery available by which petitioner could obtain redacted information; LBP-22-1, 95 NRC 49, 91 n.89 (2022)

LEGAL CITATIONS INDEX REGULATIONS

- 10 C.F.R. 2.109
amending license end dates did not affect the timely renewal provision; CLI-22-7, 95 NRC 116, 119 (2022)
- 10 C.F.R. 2.309(a)
petitioners will be subject to general requirements for intervention on any refiled contentions; CLI-22-3, 95 NRC 40, 42 (2022)
- 10 C.F.R. 2.309(c)
intervenor will not be required to meet heightened pleading standards for newly filed or refiled contentions; CLI-22-3, 95 NRC 40, 42 (2022)
- 10 C.F.R. 2.309(d)
intervention petitioner in NRC licensing proceeding must demonstrate standing; CLI-22-1, 95 NRC 1, 8 (2022)
organization must show its members' standing by demonstrating that they may suffer an actual or threatened concrete and particularized injury to an interest within the zone of interests protected by the Atomic Energy Act, which would be caused by the proposed licensing action and is capable of being redressed by a favorable decision; CLI-22-1, 95 NRC 1, 8 (2022)
- 10 C.F.R. 2.309(d)(1)
to be granted a hearing, petitioner must demonstrate standing and propose at least one admissible contention; CLI-22-5, 95 NRC 97, 101 (2022)
to establish representational standing, organization must show that at least one member has standing and has authorized the organization to represent the member and to request a hearing on the member's behalf; LBP-22-1, 95 NRC 49, 77 (2022)
- 10 C.F.R. 2.309(d)(2)
even if standing is uncontested, an independent board determination is required about whether requirements for standing have been fulfilled; LBP-22-1, 95 NRC 49, 77 (2022)
- 10 C.F.R. 2.309(e)
discretionary intervention is allowed only where at least one petitioner has established standing and offered an admissible contention, such that a hearing will be held; CLI-22-1, 95 NRC 1, 21 (2022)
request for discretionary intervention to assist in the development of a sound record is denied; CLI-22-1, 95 NRC 1, 21 (2022)
- 10 C.F.R. 2.309(f)(1)
contention is admissible if it meets the six pleading standards; CLI-22-5, 95 NRC 97, 101 (2022)
to be granted a hearing, petitioner must demonstrate standing and propose at least one admissible contention; CLI-22-5, 95 NRC 97, 101 (2022)
- 10 C.F.R. 2.309(f)(1)(i)-(vi)
contentions must satisfy the six admissibility factors; LBP-22-1, 95 NRC 49, 78 (2022)
- 10 C.F.R. 2.309(f)(1)(ii)
admissible contention explains the issue to be litigated and provides supporting facts or expert opinion and specific sources or documents on which it intends to rely; CLI-22-1, 95 NRC 1, 9 (2022)
- 10 C.F.R. 2.309(f)(1)(iii)
absent a rule waiver, a contention that constitutes an impermissible challenge to a Commission regulation would be outside the scope of an adjudication; LBP-22-1, 95 NRC 49, 80 n.69 (2022)
admissible contention must fall within the scope of the proceeding and be material to the findings that NRC must make for the proposed licensing action; CLI-22-1, 95 NRC 1, 9 (2022)

LEGAL CITATIONS INDEX

REGULATIONS

- applicants for an initial license renewal may rely on their Clean Water Act certifications in lieu of an environmental analysis of system alternatives for the once-through cooling system; CLI-22-5, 95 NRC 97, 105 (2022)
- 10 C.F.R. 2.309(f)(1)(iv)
admissible contention must fall within the scope of the proceeding and be material to the findings that NRC must make for the proposed licensing action; CLI-22-1, 95 NRC 1, 9 (2022); CLI-22-5, 95 NRC 97, 101 (2022)
- 10 C.F.R. 2.309(f)(1)(v)
admissible contention explains the issue to be litigated and provides supporting facts or expert opinion and specific sources or documents on which it intends to rely; CLI-22-1, 95 NRC 1, 9 (2022)
contention that lacks support and does not demonstrate a genuine dispute with the application is inadmissible; CLI-22-5, 95 NRC 97, 106-07 (2022)
- 10 C.F.R. 2.309(f)(1)(v)-(vi)
contention must state a genuine dispute with the application that is supported by specific facts or expert opinion; CLI-22-5, 95 NRC 97, 101 (2022)
- 10 C.F.R. 2.309(f)(1)(vi)
contention does not raise a genuine dispute because it asserts a legal position that has been squarely rejected in controlling Commission decisions; LBP-22-1, 95 NRC 49, 58 (2022)
contention that fails to cite or address contested parts of the application is inadmissible; CLI-22-5, 95 NRC 97, 106 (2022)
contention that lacks support and does not demonstrate a genuine dispute with the application is inadmissible; CLI-22-5, 95 NRC 97, 106-07 (2022)
legal contention is inadmissible as failing to raise a genuine dispute over a material issue of law; LBP-22-1, 95 NRC 49, 79-80 (2022)
petitioner must identify each specific disputed or legally required omitted portions of the application and provide supporting reasons for petitioner's belief; CLI-22-1, 95 NRC 1, 9 (2022)
petitioner's individual arguments will be examined to determine whether they are not only plausible but adequately supported in law and fact; CLI-22-1, 95 NRC 1, 12 (2022)
- 10 C.F.R. 2.311(c)
petitioner whose hearing request has been wholly denied has a right to appeal; CLI-22-5, 95 NRC 97, 100 (2022)
- 10 C.F.R. 2.323(e)
motion for reconsideration must demonstrate compelling circumstances, such as existence of a clear and material error in a decision, which could not have been reasonably anticipated, that renders the decision invalid; CLI-22-7, 95 NRC 116, 118 (2022)
- 10 C.F.R. 2.335
attacks on Commission regulations are prohibited unless a waiver is granted upon a showing that special circumstances exist such that application of the rule would not serve the purpose for which the rule was enacted; CLI-22-1, 95 NRC 1, 19 n.112 (2022)
rule waiver provisions apply in any adjudicatory proceeding subject to Part 2 including in a Part 2, Subpart B enforcement proceeding; LBP-22-1, 95 NRC 49, 80 n.69 (2022)
- 10 C.F.R. 2.335(a)
applicants for an initial license renewal may rely on their Clean Water Act certifications in lieu of an environmental analysis of system alternatives for the once-through cooling system; CLI-22-5, 95 NRC 97, 105 (2022)
- 10 C.F.R. 2.335(b)
applicants for an initial license renewal may rely on their Clean Water Act certifications in lieu of an environmental analysis of system alternatives for the once-through cooling system; CLI-22-5, 95 NRC 97, 105 (2022)
contention challenging established NRC regulatory findings requires submission of a petition for a waiver; LBP-22-1, 95 NRC 49, 80 (2022)
hearing requestor may obtain a waiver of the applicability of a Commission regulation if special circumstances with respect to the subject matter exist in the immediate proceeding; LBP-22-1, 95 NRC 49, 81 (2022)

LEGAL CITATIONS INDEX

REGULATIONS

- request for waiver of NRC regulations must make a prima facie showing of special circumstances; LBP-22-1, 95 NRC 49, 58 (2022)
- 10 C.F.R. 2.335(c), (d)
petitioner must make a prima facie showing to allow a licensing board to certify the matter directly to the Commission, in the absence of which the board may not further consider the matter; LBP-22-1, 95 NRC 49, 81 (2022)
- 10 C.F.R. 2.341(d)
motion for reconsideration must demonstrate compelling circumstances, such as existence of a clear and material error in a decision, which could not have been reasonably anticipated, that renders the decision invalid; CLI-22-7, 95 NRC 116, 118 (2022)
- 10 C.F.R. 2.342, 2.1213
stay request must address four criteria; CLI-22-7, 95 NRC 116, 119-20 (2022)
- 10 C.F.R. 50.33(f)
except where applicant is an electric utility, license applicants must demonstrate their financial qualifications to safely operate the plant; CLI-22-1, 95 NRC 1, 6 (2022)
- 10 C.F.R. 50.33(f)(2)
applicant must submit estimates for its total annual operating costs for each of the first 5 years of operation, as well as the source of funds to cover these costs; CLI-22-1, 95 NRC 1, 6 (2022)
licensee must provide reasonable assurance of adequate funds to operate the facilities; CLI-22-1, 95 NRC 1, 10-11 (2022)
- 10 C.F.R. 50.33(f)(5)
licensee must provide reasonable assurance of adequate funds to decommission the facilities; CLI-22-1, 95 NRC 1, 10-11 (2022)
- 10 C.F.R. 50.59
current licensing bases include changes from license amendments, exemptions, and changes made under this regulation; CLI-22-6, 95 NRC 111, 112 n.4 (2022); CLI-22-7, 95 NRC 116, 117 n.5 (2022)
- 10 C.F.R. 50.61
general assertion that applicant should use coupon testing rather than calculations to demonstrate reactor pressure vessel integrity is inadmissible; CLI-22-5, 95 NRC 97, 107 (2022)
- 10 C.F.R. 50.75(c)
in its decommissioning funding status report, applicant may provide cost estimates based on the NRC formula cost amount calculated in accordance with this regulation or using a site-specific estimate based on a period of safe storage; CLI-22-1, 95 NRC 1, 7 (2022)
- 10 C.F.R. 50.75(e)(1)(i)
financial assurance for decommissioning is provided by money in the trust fund plus 2% annual real rate of return; CLI-22-1, 95 NRC 1, 7 (2022)
- 10 C.F.R. 50.80(a)
power reactor or ISFSI licensee must obtain NRC's prior written consent to transfer a license; CLI-22-1, 95 NRC 1, 6 n.16 (2022)
- 10 C.F.R. 50.80(b)(1)(i)
license transfer application must include the same information concerning applicant's financial qualifications to operate the plant as required for an initial application; CLI-22-1, 95 NRC 1, 6 (2022)
- 10 C.F.R. 50.80(c)
NRC will approve license transfer if it finds both the proposed transferee qualified to hold the license and the transfer otherwise consistent with applicable law, regulations, and Commission orders; CLI-22-1, 95 NRC 1, 6 (2022)
- 10 C.F.R. Part 50, Appendix A, Criterion 14
contention that reactor coolant pressure boundary has not been tested so as to have an extremely low probability of abnormal leakage, of rapidly propagating failure, and of gross rupture, is inadmissible; CLI-22-5, 95 NRC 97, 105 (2022)
- 10 C.F.R. 51.20(b)(2)
NRC will prepare an EIS to comply with the National Environmental Policy Act when renewing a nuclear power plant operating license; CLI-22-2, 95 NRC 26, 27 (2022)

LEGAL CITATIONS INDEX

REGULATIONS

- 10 C.F.R. 51.45
environmental report must describe impacts of the proposed action on the environment and discuss potential alternatives to the proposed action sufficient to enable NRC to meet its statutory obligations; CLI-22-5, 95 NRC 97, 102 (2022)
- 10 C.F.R. 51.53(a)
environmental report may incorporate by reference information contained in an NRC Staff-prepared final GEIS; CLI-22-2, 95 NRC 26, 32 (2022)
- 10 C.F.R. 51.53(c)
environmental report must describe impacts of the proposed action on the environment and discuss potential alternatives to the proposed action sufficient to enable NRC to meet its statutory obligations; CLI-22-5, 95 NRC 97, 102 (2022)
- 10 C.F.R. 51.53(c)(1)
regulation applies to each applicant for renewal of a license to operate a nuclear power plant under Part 54; CLI-22-2, 95 NRC 26, 32 (2022)
- 10 C.F.R. 51.53(c)(2)
contention that license renewal applicant fails to discuss environmental impacts of alternatives and any other matters described in 10 C.F.R. 51.45 is inadmissible; LBP-22-1, 95 NRC 49, 79 (2022)
regulation applies only to applicants seeking an initial renewed license; LBP-22-1, 95 NRC 49, 79 (2022)
regulation includes requirements for the environmental report that must be submitted by any applicant for renewal of a license to operate a nuclear power plant under Part 54; CLI-22-2, 95 NRC 26, 32 (2022)
- 10 C.F.R. 51.53(c)(3)
applicants for only initial license renewal may rely on the Generic Environmental Impact Statement for License Renewal in their environmental reports; CLI-22-5, 95 NRC 97, 100 (2022)
regulation does not apply to subsequent license renewal applicants; CLI-22-2, 95 NRC 26, 30-31 & n.27 (2022)
regulation narrows the scope of license renewal applicants to which it applies and speaks only to those applicants seeking an initial renewed license and holding an operating license, construction permit, or combined license as of June 30, 1995; CLI-22-2, 95 NRC 26, 32 (2022)
regulation only applies to an initial license renewal applicant's preparation of an environmental report; CLI-22-2, 95 NRC 26, 27 (2022); CLI-22-3, 95 NRC 40, 41 (2022); CLI-22-4, 95 NRC 44, 44 (2022)
- 10 C.F.R. 51.53(c)(3)(i)
environmental report for the operating license renewal stage is not required to contain analyses of the environmental impacts of the license renewal issues identified as Category 1 in Appendix B to Subpart A of Part 51; LBP-22-1, 95 NRC 49, 61 (2022)
- 10 C.F.R. 51.53(c)(3)(ii)(B)
applicants for an initial license renewal may rely on their Clean Water Act certifications in lieu of an environmental analysis of system alternatives for the once-through cooling system; CLI-22-5, 95 NRC 97, 105 (2022)
contention is inadmissible due to a statutory limitation on NRCs authority to regulate cooling systems that have been properly permitted under the Clean Water Act; CLI-22-5, 95 NRC 97, 105 (2022)
license renewal contention regarding adequacy of a previously considered SAMA cannot be litigated absent a section 2.335(b) waiver; LBP-22-1, 95 NRC 49, 63 (2022)
- 10 C.F.R. 51.71(d)
environmental impact statement for the operating license renewal stage is not required to contain analyses of the environmental impacts of the license renewal issues identified as Category 1 issues in Appendix B to Subpart A of Part 51; LBP-22-1, 95 NRC 49, 61 (2022)
NRC Staff, when preparing any draft SEIS under section 51.95(c), is to rely on conclusions as amplified by the supporting information in the GEIS or issues designated as Category 1 in Appendix B to Subpart A of Part 51; CLI-22-2, 95 NRC 26, 31 (2022)
- 10 C.F.R. 51.73
applicants will be afforded an opportunity to comment on the upcoming revision to the GEIS and the associated rulemaking through the normal agency processes; CLI-22-3, 95 NRC 40, 42 & n.7 (2022)
board's determination regarding rule waiver request does not negate NRC Staff's responsibility to conduct its hard look licensing review to consider whether any information provided by public comments as part

LEGAL CITATIONS INDEX

REGULATIONS

- of the environment review process merits further analysis as new and significant information; LBP-22-1, 95 NRC 49, 94 n.97 (2022)
- 10 C.F.R. 51.95(c)(1)
environmental impact statement for the operating license renewal stage is not required to contain analyses of the environmental impacts of issues identified as Category 1 in Appendix B to Subpart A of Part 51; LBP-22-1, 95 NRC 49, 61 (2022)
- 10 C.F.R. 51.95(c)(4)
NRC Staff, adjudicatory officers, and the Commission are to integrate the conclusions in the generic environmental impact statement for issues designated as Category 1 with information developed for those Category 2 issues applicable to the plant under § 51.53(c)(3)(ii) and any new and significant information; CLI-22-2, 95 NRC 26, 31-32 n.30 (2022)
- 10 C.F.R. Part 51, Subpart A, app. B. Table B-1
NRC Staff may rely on Table B-1 to evaluate environmental impacts of Category 1 issues; CLI-22-2, 95 NRC 26, 27 (2022)
NRC's findings on the scope and magnitude of environmental impacts that NEPA requires to be addressed are summarized; LBP-22-1, 95 NRC 49, 61 (2022)
single significance level for Category 1 impacts does not apply to collective offsite radiological impacts from the fuel cycle; CLI-22-2, 95 NRC 26, 28 (2022)
- 10 C.F.R. Part 51, subpart A, Appendix B. Table B-1 n.3
impacts that do not exceed permissible levels in NRC's regulations are considered small as the term is used in this table; LBP-22-1, 95 NRC 49, 62 (2022)
- 10 C.F.R. 54.21(a)(1)-(2)
NRC's review of a license renewal application includes review of programs to manage effects of aging on long-lived, passive structures and components; CLI-22-5, 95 NRC 97, 101 (2022)
- 10 C.F.R. 54.21(a)(3)
for long-lived, passive structures and components, license renewal applicant must demonstrate that the effects of aging will be adequately managed so that the intended functions will be maintained for the period of extended operation; CLI-22-5, 95 NRC 97, 101 (2022)
- 10 C.F.R. 54.21(b)
license renewal applicants must periodically update their applications; CLI-22-6, 95 NRC 111, 114 (2022); CLI-22-7, 95 NRC 116, 122 (2022)
subsequent license renewal applicant does not need to update its application while NRC Staff completes the environmental review; CLI-22-6, 95 NRC 111, 114-15 (2022); CLI-22-7, 95 NRC 116, 122 (2022)
- 10 C.F.R. 54.23
environmental contents of an operating license renewal application are described in this regulation; LBP-22-1, 95 NRC 49, 61 (2022)
environmental report must describe impacts of the proposed action on the environment and discuss potential alternatives to the proposed action sufficient to enable NRC to meet its statutory obligations; CLI-22-5, 95 NRC 97, 102 (2022)
- 10 C.F.R. 54.31(c)
license renewal is subject to legal challenge before NRC and, potentially, in courts of appeals, and all remedies, up to and including reinstatement of the previous licenses, are possible; CLI-22-7, 95 NRC 116, 119 (2022)
license renewal may be conditioned or vacated after administrative or judicial review, in which case the operating license previously in effect would be reinstated; CLI-22-6, 95 NRC 111, 113 n.8 (2022); CLI-22-7, 95 NRC 116, 120 n.25 (2022)
renewed licenses became immediately effective upon issuance; CLI-22-4, 95 NRC 44, 46 (2022); CLI-22-6, 95 NRC 111, 112 (2022); CLI-22-7, 95 NRC 116, 117 (2022)
- 10 C.F.R. 72.50(a)
power reactor or ISFSI licensee must obtain NRC's prior written consent to transfer a license; CLI-22-1, 95 NRC 1, 6 n.16 (2022)
- 10 C.F.R. 140.21
licensee must provide annual proof of guarantee of payment of premiums, such as a surety bond or letter of credit; CLI-22-1, 95 NRC 1, 15 (2022)

LEGAL CITATIONS INDEX

REGULATIONS

18 C.F.R. 35.44

Federal Energy Regulatory Commission and state law prohibit regulated utilities from subsidizing affiliates; CLI-22-1, 95 NRC 1, 17 (2022)

40 C.F.R. 1502.1

to provide a meaningful opportunity for public comment, the agency must adequately describe its intentions to the public; CLI-22-2, 95 NRC 26, 33 n.39 (2022)

LEGAL CITATIONS INDEX STATUTES

- Administrative Procedure Act, 706
harmless error doctrine that the federal courts apply is compelled by this section, but since the Commission is not a court, this section does not govern its choice of remedy for Staff errors;
CLI-22-7, 95 NRC 116, 119 n.16 (2022)
- Atomic Energy Act, 184, 42 U.S.C. § 2234
no power reactor or ISFSI license can be transferred without NRC's prior written consent; CLI-22-1, 95 NRC 1, 6 & n.16 (2022)
- Electricity Generation Customer Choice and Competition Act, 66 Pa. Cons. Stat. § 2804(4)(iii)(F) (2019)
exception to statutory caps on electric utility rates is provided where an increase is needed to cover utility's historic decommissioning liability; CLI-22-1, 95 NRC 1, 22 (2022)
utility may collect tariffs for the costs of decommissioning nuclear generation; CLI-22-1, 95 NRC 1, 22 n.132 (2022)
- Federal Water Pollution Control Act, 316(a), (b), 33 U.S.C. § 1326(a), (b)
once-through cooling system is properly permitted under the Act in lieu of an environmental analysis of the cooling system's thermal, impingement, and entrainment impacts; CLI-22-5, 95 NRC 97, 103 (2022)
- Federal Water Pollution Control Act, 511(c)(2)(B), 33 U.S.C. § 1371(c)(2)(B)
nothing in NEPA shall be deemed to authorize any agency to impose, as a condition precedent to issuance of any license or permit, any effluent limitation other than any such limitation established pursuant to the Clean Water Act; CLI-22-5, 95 NRC 97, 105 (2022)
- National Environmental Policy Act of 1969, 102, 42 U.S.C. § 4332
environmental report must describe impacts of the proposed action on the environment and discuss potential alternatives to the proposed action sufficient to enable NRC to meet its statutory obligations; CLI-22-5, 95 NRC 97, 102 (2022)

**LEGAL CITATIONS INDEX
OTHERS**

83 Ill. Admin. Code 452.125(b)
Federal Energy Regulatory Commission and state law prohibit regulated utilities from subsidizing
affiliates; CLI-22-1, 95 NRC 1, 17 (2022)

**LEGAL CITATIONS INDEX
OTHERS**

SUBJECT INDEX

ACCIDENTS

See Design Basis Accident

ADMINISTRATIVE PROCEDURE ACT

harmless error doctrine that federal courts apply is compelled by § 706, but since the Commission is not a court, this section does not govern its choice of remedy for Staff errors; CLI-22-7, 95 NRC 116 (2022)

AGING MANAGEMENT

challenge to the basis for current and past operations rather than applicants plans for managing aging during the period of extended operation is inadmissible; CLI-22-5, 95 NRC 97 (2022)

for long-lived, passive structures and components, license renewal applicant must demonstrate that the effects of aging will be adequately managed so that the intended functions will be maintained for the period of extended operation; CLI-22-5, 95 NRC 97 (2022)

maintaining subsequently renewed licenses is the simplest, most efficient way to continue requiring enhanced aging management programs; CLI-22-6, 95 NRC 111 (2022)

NRC's review of a license renewal application includes a review of programs to manage the effects of aging on long-lived, passive structures and components; CLI-22-5, 95 NRC 97 (2022)

AMENDMENT OF REGULATIONS

any amendments to a rule must also occur through notice-and-comment rulemaking; CLI-22-2, 95 NRC 26 (2022)

APPEALS

license renewal is subject to legal challenge before NRC and, potentially, in courts of appeals, and all remedies, up to and including reinstatement of the previous licenses, are possible; CLI-22-7, 95 NRC 116 (2022)

petitioner whose hearing request has been wholly denied has a right to appeal; CLI-22-5, 95 NRC 97 (2022)

APPELLATE REVIEW

license renewal may be conditioned or vacated after administrative or judicial review, in which case the operating license previously in effect would be reinstated; CLI-22-6, 95 NRC 111 (2022)

unless an appeal demonstrates an error of law or abuse of discretion, Commission will not disturb a licensing board's ruling on threshold decisions such as whether to grant a hearing request; CLI-22-5, 95 NRC 97 (2022)

APPROVAL OF LICENSE

NRC must evaluate the environmental impacts of subsequent license renewal before approving renewal; CLI-22-6, 95 NRC 111 (2022)

BENEFIT-COST ANALYSIS

permitting agency determines what cooling system a nuclear power facility may use and NRC factors the impacts resulting from use of that system into the NEPA analysis; CLI-22-5, 95 NRC 97 (2022)

CERTIFICATE OF COMPLIANCE

applicants for an initial license renewal may rely on their Clean Water Act certifications in lieu of an environmental analysis of system alternatives for the once-through cooling system; CLI-22-5, 95 NRC 97 (2022)

CERTIFICATION

petitioner must make a prima facie showing to allow a licensing board to certify the matter directly to the Commission, in the absence of which the board may not further consider the matter; LBP-22-1, 95 NRC 49 (2022)

SUBJECT INDEX

CLEAN WATER ACT

NRC has no authority to consider alternative cooling systems as that would improperly second-guess the cooling system approved by the permitting agency; CLI-22-5, 95 NRC 97 (2022)
once-through cooling system is properly permitted under the Federal Water Pollution Control Act in lieu of an environmental analysis of the cooling system's thermal, impingement, and entrainment impacts; CLI-22-5, 95 NRC 97 (2022)

COMPLIANCE

no statute authorizes NRC not to comply with NEPA on equitable grounds; CLI-22-6, 95 NRC 111 (2022)
NRC complies with NEPA by disclosing the impacts of the once-through cooling system as approved by a state authority; CLI-22-5, 95 NRC 97 (2022)
See also Certificate of Compliance

CONFIDENTIAL INFORMATION

prior to having an admitted contention, there is no adjudicatory discovery available by which petitioner could obtain redacted information; LBP-22-1, 95 NRC 49 (2022)

CONSENT

no power reactor or ISFSI license can be transferred without NRC's prior written consent; CLI-22-1, 95 NRC 1 (2022)

CONSIDERATION OF ALTERNATIVES

applicants for an initial license renewal may rely on their Clean Water Act certifications in lieu of an environmental analysis of system alternatives for the once-through cooling system; CLI-22-5, 95 NRC 97 (2022)
contention challenging environmental report analysis of solar power as an alternative to license renewal is dismissed; CLI-22-5, 95 NRC 97 (2022)
contention that license renewal applicant fails to discuss environmental impacts of alternatives and any other matters described in 10 C.F.R. 51.45 is inadmissible; LBP-22-1, 95 NRC 49 (2022)
environmental report must describe impacts of the proposed action on the environment and discuss potential alternatives to the proposed action sufficient to enable NRC to meet its statutory obligations; CLI-22-5, 95 NRC 97 (2022)
license renewal applicant with a permitted once-through cooling system is not required to further evaluate the environmental impacts of that system or potential alternatives; CLI-22-5, 95 NRC 97 (2022)

CONTENTIONS

admissible contention is not required for litigation to proceed relative to the hearing request of the subject of the agency enforcement order or civil penalty at issue; LBP-22-1, 95 NRC 49 (2022)

CONTENTIONS, ADMISSIBILITY

adjudicatory challenge based on applicant's failure to deal appropriately with a Category 1 item constitutes an attack on an agency rule requiring a section 2.335(b) waiver; LBP-22-1, 95 NRC 49 (2022)
admissible contention explains the issue to be litigated and provides supporting facts or expert opinion and specific sources or documents on which it intends to rely; CLI-22-1, 95 NRC 1 (2022)
admissible contention must fall within the scope of the proceeding and be material to the findings that NRC must make for the proposed licensing action; CLI-22-1, 95 NRC 1 (2022)
admission of a contention, by itself, does not satisfy the burden of going forward; LBP-22-1, 95 NRC 49 (2022)
applicant's mere proffering of 5-year cost and revenue projections will not be sufficient in the face of plausible and adequately supported claims that those projections are inaccurate or otherwise do not provide adequate assurance of financial qualifications; CLI-22-1, 95 NRC 1 (2022)
attacks on Commission regulations are prohibited unless a waiver is granted upon a showing that special circumstances exist such that application of the rule would not serve the purpose for which the rule was enacted; CLI-22-1, 95 NRC 1 (2022)
challenge to the basis for current and past operations rather than applicants plans for managing aging during the period of extended operation is inadmissible; CLI-22-5, 95 NRC 97 (2022)
concerns regarding funding shortfalls can in some circumstances provide the basis for a showing of harm because NRC regulations recognize that underfunding can affect plant safety; CLI-22-1, 95 NRC 1 (2022)

SUBJECT INDEX

contention challenging environmental report analysis of solar power as an alternative to license renewal is dismissed; CLI-22-5, 95 NRC 97 (2022)

contention challenging established NRC regulatory findings requires submission of a petition for a waiver; LBP-22-1, 95 NRC 49 (2022)

contention does not raise a genuine dispute because it asserts a legal position that has been squarely rejected in controlling Commission decisions; LBP-22-1, 95 NRC 49 (2022)

contention fails to acknowledge or analyze mitigation measures already implemented by applicant and provides only casual recommendations that fail to provide the requisite seriously different picture of the environmental impact necessary to frame an admissible issue; LBP-22-1, 95 NRC 49 (2022)

contention is admissible if it meets the six pleading standards; CLI-22-5, 95 NRC 97 (2022)

contention must state a genuine dispute with the application that is supported by specific facts or expert opinion; CLI-22-5, 95 NRC 97 (2022)

contention that continued operation violates 10 C.F.R. Part 50, Appendix A, Criterion 14 because the reactor coolant pressure boundary has not been tested is inadmissible; CLI-22-5, 95 NRC 97 (2022)

contention that fails to cite or address contested parts of the application is inadmissible; CLI-22-5, 95 NRC 97 (2022)

contention that lacks support and does not demonstrate a genuine dispute with the application is inadmissible; CLI-22-5, 95 NRC 97 (2022)

contention that license renewal applicant fails to discuss environmental impacts of alternatives and any other matters described in 10 C.F.R. 51.45 is inadmissible; LBP-22-1, 95 NRC 49 (2022)

contention that license renewal applicant's environmental report fails to consider replacement of the once-through cooling system with cooling towers as a means of mitigating environmental impacts is inadmissible; CLI-22-5, 95 NRC 97 (2022)

contention that license transfer would allow non-regulated entity to collect a tariff from ratepayers is inadmissible; CLI-22-1, 95 NRC 1 (2022)

contention that license transfer would violate the negotiated settlement is inadmissible; CLI-22-1, 95 NRC 1 (2022)

dispute raised in a contention must be material to the findings NRC must make regarding the underlying licensing action; CLI-22-5, 95 NRC 97 (2022)

failure to comply with any of the contention admission requirements constitutes grounds for rejecting a proposed contention; LBP-22-1, 95 NRC 49 (2022)

general assertion that applicant should use coupon testing rather than calculations to demonstrate reactor pressure vessel integrity is inadmissible; CLI-22-5, 95 NRC 97 (2022)

intervenor has the initial burden of going forward, which requires it to establish a prima facie case for claims asserted in the reformulated contention; LBP-22-1, 95 NRC 49 (2022)

intervenor will not be required to meet heightened pleading standards for newly filed or refiled contentions in subsequent operating license renewal proceedings; CLI-22-3, 95 NRC 40 (2022)

it is petitioners' responsibility, not the board's, to formulate contentions and to provide the necessary information to satisfy the basis requirement for contention admission; LBP-22-1, 95 NRC 49 (2022)

legal contention is inadmissible as failing to raise a genuine dispute over a material issue of law; LBP-22-1, 95 NRC 49 (2022)

license renewal contention regarding adequacy of a previously considered SAMA cannot be litigated absent a section 2.335(b) waiver; LBP-22-1, 95 NRC 49 (2022)

NRC is not the forum in which to challenge a claimed violation of a state or local law; CLI-22-1, 95 NRC 1 (2022)

NRC regulatory determination published as a rule is generally not subject to adjudicatory challenge; LBP-22-1, 95 NRC 49 (2022)

pending environmental contentions were dismissed and new hearing opportunity is to be provided on updated environmental information; CLI-22-5, 95 NRC 97 (2022)

petitioner bears the burden to satisfy each of the six contention admissibility criteria; LBP-22-1, 95 NRC 49 (2022)

petitioner must identify each specific disputed or legally required omitted portions of the application and provide supporting reasons for petitioner's belief; CLI-22-1, 95 NRC 1 (2022)

petitioner must present a seriously different picture of the environmental impact of the proposed project from what was previously envisioned; LBP-22-1, 95 NRC 49 (2022)

SUBJECT INDEX

petitioner needs to posit a factually supported plausible scenario to raise an admissible contention; CLI-22-1, 95 NRC 1 (2022)

petitioner's individual arguments will be examined to determine whether they are not only plausible but adequately supported in law and fact; CLI-22-1, 95 NRC 1 (2022)

petitioners fail to satisfy *Millstone* factor that waiver of the regulation is necessary to reach a significant safety or environmental problem; LBP-22-1, 95 NRC 49 (2022)

petitioners may not seek an adjudicatory hearing to attack generic NRC requirements or regulations, or to express generalized grievances about NRC policies; LBP-22-1, 95 NRC 49 (2022)

petitioners must satisfy the six admissibility factors; LBP-22-1, 95 NRC 49 (2022)

reactor shutdown is an operational issue that is outside the scope of a license renewal proceeding; LBP-22-1, 95 NRC 49 (2022)

requirements are intended to ensure that adjudicatory hearings are triggered only by substantive safety or environmental issues that raise a supported dispute; CLI-22-1, 95 NRC 1 (2022)

SAMAs are the functional equivalent of a Category 1 issue, removing them from litigation in case-by-case license renewal adjudications; LBP-22-1, 95 NRC 49 (2022)

section 51.53(c)(3)(ii)(L) affords the functional equivalent of the Category 1 issue preclusion established by section 51.53(c)(3)(i); LBP-22-1, 95 NRC 49 (2022)

COOLING SYSTEMS

applicants for an initial license renewal may rely on their Clean Water Act certifications in lieu of an environmental analysis of system alternatives for the once-through cooling system; CLI-22-5, 95 NRC 97 (2022)

Clean Water Act deprives NRC of authority to consider alternative cooling systems as that would improperly second-guess the permitting agency's approved system; CLI-22-5, 95 NRC 97 (2022)

contention that license renewal applicant's environmental report fails to consider replacement of the once-through cooling system with cooling towers as a means of mitigating environmental impacts is inadmissible; CLI-22-5, 95 NRC 97 (2022)

license renewal applicant with a permitted once-through cooling system is not required to further evaluate the environmental impacts of that system or potential alternatives; CLI-22-5, 95 NRC 97 (2022)

NRC complies with NEPA by disclosing the impacts of the once-through cooling system as approved by a state authority; CLI-22-5, 95 NRC 97 (2022)

once-through cooling system is properly permitted under the Federal Water Pollution Control Act in lieu of an environmental analysis of the cooling system's thermal, impingement, and entrainment impacts; CLI-22-5, 95 NRC 97 (2022)

CORPORATIONS

limited liability corporation is not considered inherently financially unsound; CLI-22-1, 95 NRC 1 (2022)

COSTS

although five-year total annual operating cost projections are required, they are not necessarily sufficient to provide reasonable assurance of applicant's financial qualifications; CLI-22-1, 95 NRC 1 (2022)

applicant must submit estimates for its total annual operating costs for each of the first 5 years of operation, as well as the source of funds to cover these costs; CLI-22-1, 95 NRC 1 (2022)

See also Benefit-Cost Analysis; Decommissioning Costs

CURRENT LICENSING BASIS

challenge to the basis for current and past operations rather than applicants plans for managing aging during the period of extended operation is inadmissible; CLI-22-5, 95 NRC 97 (2022)

changes from license amendments, exemptions, and changes made under 10 C.F.R. 50.59 are included; CLI-22-6, 95 NRC 111 (2022); CLI-22-7, 95 NRC 116 (2022)

DECOMMISSIONING COSTS

in its decommissioning funding status report, applicant may provide cost estimates based on the NRC formula cost amount calculated in accordance with 10 C.F.R. 50.75(c) or using a site-specific estimate based on a period of safe storage; CLI-22-1, 95 NRC 1 (2022)

DECOMMISSIONING FUNDING

exception to statutory caps on electric utility rates is provided where an increase is needed to cover utility's historic decommissioning liability; CLI-22-1, 95 NRC 1 (2022)

SUBJECT INDEX

DECOMMISSIONING FUNDING PLANS

financial assurance for decommissioning is provided by money in the trust fund plus 2% annual real rate of return; CLI-22-1, 95 NRC 1 (2022)
in its decommissioning funding status report, applicant may provide cost estimates based on the NRC formula cost amount calculated in accordance with 10 C.F.R. 50.75(c) or using a site-specific estimate based on a period of safe storage; CLI-22-1, 95 NRC 1 (2022)

DEFICIENCIES

Commission declines to pursue an equitable analysis remedy before fulfilling its NEPA duty in the first instance upon finding a significant NEPA deficiency; CLI-22-6, 95 NRC 111 (2022)

DENIAL OF LICENSE

license renewal may be set aside or appropriately conditioned even after it has been issued, upon subsequent administrative or judicial review; CLI-22-2, 95 NRC 26 (2022); CLI-22-4, 95 NRC 44 (2022)

DESIGN BASIS ACCIDENT

environmental impacts of design-basis accidents are of small significance to all plants; LBP-22-1, 95 NRC 49 (2022)

DISCOVERY

prior to having an admitted contention, there is no adjudicatory discovery available by which petitioner could obtain redacted information; LBP-22-1, 95 NRC 49 (2022)

EARTHQUAKES

NRC's reactor design criteria and standards are intended to ensure the ability to withstand environmental hazards, such as earthquakes and flooding, without loss of capacity to perform their safety functions; LBP-22-1, 95 NRC 49 (2022)

ECONOMIC ISSUES

applicant is not required to provide absolutely certain predictions of future economic conditions; CLI-22-1, 95 NRC 1 (2022)

See also Costs; Financial Assurance

ELECTRIC UTILITY

contention that license transfer would allow non-regulated entity to collect a tariff from ratepayers is inadmissible; CLI-22-1, 95 NRC 1 (2022)

except where applicant is an electric utility, license applicants must demonstrate their financial qualifications to safely operate the plant; CLI-22-1, 95 NRC 1 (2022)

exception to statutory caps on electric utility rates is provided where an increase is needed to cover utility's historic decommissioning liability; CLI-22-1, 95 NRC 1 (2022)

ENFORCEMENT PROCEEDINGS

admissible contention is not required for litigation to proceed relative to the hearing request of the subject of the agency enforcement order or civil penalty at issue; LBP-22-1, 95 NRC 49 (2022)

ENVIRONMENTAL EFFECTS

impacts of design-basis accidents are of small significance to all plants; LBP-22-1, 95 NRC 49 (2022)
impacts that do not exceed permissible levels in NRC's regulations are considered small as the term is used in table B-1; LBP-22-1, 95 NRC 49 (2022)

petitioner must present a seriously different picture of the environmental impact of the proposed project from what was previously envisioned; LBP-22-1, 95 NRC 49 (2022)

single significance level for Category 1 impacts does not apply to collective offsite radiological impacts from the fuel cycle; CLI-22-2, 95 NRC 26 (2022)

ENVIRONMENTAL IMPACT STATEMENT

NEPA's requirement that a detailed EIS be made for a proposed action makes clear that agencies must take the required hard look before taking that action; CLI-22-6, 95 NRC 111 (2022); CLI-22-7, 95 NRC 116 (2022)

NRC cannot require members of the public to parse language in a regulatory analysis or glossary to discern that the agency is making a major shift in the scope of an EIS and rulemaking; CLI-22-2, 95 NRC 26 (2022)

NRC complies with NEPA by disclosing the impacts of the once-through cooling system as approved by a state authority; CLI-22-5, 95 NRC 97 (2022)

SUBJECT INDEX

NRC must evaluate the environmental impacts of subsequent license renewal before approving renewal; CLI-22-6, 95 NRC 111 (2022)

NRC Staff may not exclusively rely on the 2013 GEIS and Table B-1 for the evaluation of environmental impacts of Category 1 issues for subsequent license renewal; CLI-22-2, 95 NRC 26 (2022)

NRC Staffs EIS for operating license renewal is not required to contain analyses of the environmental impacts of the license renewal issues identified as Category 1 issues in Appendix B to Subpart A of Part 51; LBP-22-1, 95 NRC 49 (2022)

NRC will prepare an EIS to comply with the National Environmental Policy Act when renewing a nuclear power plant operating license; CLI-22-2, 95 NRC 26 (2022)

NRC's findings on the scope and magnitude of environmental impacts that NEPA requires to be addressed are summarized in 10 C.F.R. Part 51, Subpart A, app. B. Table B-1; LBP-22-1, 95 NRC 49 (2022)

See also Generic Environmental Impact Statement; Supplemental Environmental Impact Statement

ENVIRONMENTAL ISSUES

pending environmental contentions were dismissed and new hearing opportunity is to be provided on updated environmental information; CLI-22-5, 95 NRC 97 (2022)

ENVIRONMENTAL REPORT

applicant may submit a revised ER providing information on environmental impacts during the subsequent license renewal period; CLI-22-3, 95 NRC 40 (2022)

application may incorporate by reference information contained in an NRC staff-prepared final GEIS; CLI-22-2, 95 NRC 26 (2022)

contention challenging ER analysis of solar power as an alternative to license renewal is dismissed; CLI-22-5, 95 NRC 97 (2022)

contention that license renewal applicant's ER fails to consider replacement of the once-through cooling system with cooling towers as a means of mitigating environmental impacts is inadmissible; CLI-22-5, 95 NRC 97 (2022)

environmental contents of an operating license renewal application are described in section 54.23; LBP-22-1, 95 NRC 49 (2022)

operating license renewal applicant must describe impacts of the proposed action on the environment and discuss potential alternatives to the proposed action sufficient to enable NRC to meet its statutory obligations; CLI-22-5, 95 NRC 97 (2022)

operating license renewal ER is not required to contain analyses of the environmental impacts of the license renewal issues identified as Category 1 issues in Appendix B to Subpart A of Part 51; LBP-22-1, 95 NRC 49 (2022)

section 51.53(c)(2) provides requirements for the environmental report that must be submitted by any operating license renewal applicant under Part 54; CLI-22-2, 95 NRC 26 (2022)

section 51.53(c)(3) applies to an only initial license renewal applicant's preparation of an ER; CLI-22-2, 95 NRC 26 (2022); CLI-22-3, 95 NRC 40 (2022); CLI-22-4, 95 NRC 44 (2022)

ENVIRONMENTAL REVIEW

agency has no obligation to gather or consider environmental information if it has no statutory authority to act on that information; CLI-22-5, 95 NRC 97 (2022)

board's determination regarding rule waiver request does not negate NRC Staff's responsibility to conduct its hard-look licensing review to consider whether any information provided by public comments as part of the environment review process merits further analysis as new and significant information; LBP-22-1, 95 NRC 49 (2022)

NEPA obligates an agency to consider every significant aspect of the environmental impact of a proposed action, and to inform the public that it has indeed considered environmental concerns in its decisionmaking process; CLI-22-2, 95 NRC 26 (2022)

NRC Staff is directed to review and update the 2013 GEIS so that it covers operation during the subsequent license renewal period and then take appropriate action with respect to pending subsequent license renewal applications; CLI-22-3, 95 NRC 40 (2022)

NRC's environmental review rests on the presumption that NRC cannot review and judge environmental permits issued under the Clean Water Act by the Environmental Protection Agency or an authorized state agency; CLI-22-5, 95 NRC 97 (2022)

SUBJECT INDEX

subsequent license renewal applicant does not need to update its application while NRC Staff completes the environmental review; CLI-22-6, 95 NRC 111 (2022); CLI-22-7, 95 NRC 116 (2022)
where NRC's environmental review was incomplete, Commission directed that subsequently renewed licenses remain in place with shortened terms to match the end dates of the previous licenses until completion of the NEPA analysis; CLI-22-6, 95 NRC 111 (2022)

EQUITY

Commission declines to pursue an equitable analysis remedy before fulfilling its NEPA duty in the first instance upon finding a significant NEPA deficiency; CLI-22-6, 95 NRC 111 (2022)
court expressly declined to decide whether NRC may itself lawfully fashion remedies for NEPA violations based on an analysis of equitable factors; CLI-22-7, 95 NRC 116 (2022)
no statute authorizes NRC not to comply with NEPA on equitable grounds; CLI-22-6, 95 NRC 111 (2022)

ERROR

harmless error doctrine that federal courts apply is compelled by Administrative Procedure Act § 706, but since the Commission is not a court, this section does not govern its choice of remedy for Staff errors; CLI-22-7, 95 NRC 116 (2022)

FINANCIAL ASSURANCE

although five-year total annual operating cost projections are required, they are not necessarily sufficient to provide reasonable assurance of applicant's financial qualifications; CLI-22-1, 95 NRC 1 (2022)
assurance of decommissioning funding is provided by money in the trust fund plus 2% annual real rate of return; CLI-22-1, 95 NRC 1 (2022)
in its decommissioning funding status report, applicant may provide cost estimates based on the NRC formula cost amount calculated in accordance with 10 C.F.R. 50.75(c) or using a site-specific estimate based on a period of safe storage; CLI-22-1, 95 NRC 1 (2022)
level of assurance required for license transferees is not equivalent to the extremely high assurance required for the safety of reactor design, construction, and operation; CLI-22-1, 95 NRC 1 (2022)
licensee must provide reasonable assurance of adequate funds to operate the facilities; CLI-22-1, 95 NRC 1 (2022)
NRC accepts financial assurances based on plausible assumptions and forecasts, even though the possibility is not insignificant that things will turn out less favorably than expected; CLI-22-1, 95 NRC 1 (2022)

FINANCIAL QUALIFICATIONS

although 5-year total annual operating cost projections are required, they are not necessarily sufficient to provide reasonable assurance of applicant's qualifications; CLI-22-1, 95 NRC 1 (2022)
applicant must submit estimates for its total annual operating costs for each of the first 5 years of operation, as well as the source of funds to cover these costs; CLI-22-1, 95 NRC 1 (2022)
applicant's mere proffering of 5-year cost and revenue projections will not be sufficient in the face of plausible and adequately supported claims that those projections are inaccurate or otherwise do not provide adequate assurance of qualifications; CLI-22-1, 95 NRC 1 (2022)
concerns regarding funding shortfalls can in some circumstances provide the basis for a showing of harm because NRC regulations recognize that underfunding can affect plant safety; CLI-22-1, 95 NRC 1 (2022)
except where applicant is an electric utility, license applicants must demonstrate their financial qualifications to safely operate the plant; CLI-22-1, 95 NRC 1 (2022)
license transfer application must include the same information on applicant's financial qualifications to operate the plant as required for an initial application; CLI-22-1, 95 NRC 1 (2022)
licensee must provide annual proof of guarantee of payment of premiums, such as a surety bond or letter of credit; CLI-22-1, 95 NRC 1 (2022)
limited liability corporation is not considered inherently financially unsound; CLI-22-1, 95 NRC 1 (2022)

FLOOD PROTECTION

NRC will not make a decision or any recommendations on the basis of information presented in the GEIS regarding seismic risk and flooding at nuclear power plants; LBP-22-1, 95 NRC 49 (2022)

SUBJECT INDEX

FLOODS

NRC's reactor design criteria and standards are intended to ensure the ability to withstand environmental hazards, such as earthquakes and flooding, without loss of capacity to perform their safety functions; LBP-22-1, 95 NRC 49 (2022)

FUEL CYCLE RULE

single significance level for Category 1 impacts does not apply to collective offsite radiological impacts from the fuel cycle; CLI-22-2, 95 NRC 26 (2022)

GENERIC ENVIRONMENTAL IMPACT STATEMENT

2013 GEIS does not cover the subsequent license renewal period; CLI-22-2, 95 NRC 26 (2022);

CLI-22-3, 95 NRC 40 (2022); CLI-22-4, 95 NRC 44 (2022); CLI-22-5, 95 NRC 97 (2022)

applicants will be afforded an opportunity to comment on the upcoming revision to the GEIS and the associated rulemaking through the normal agency processes; CLI-22-3, 95 NRC 40 (2022)
environmental report may incorporate by reference information contained in an NRC Staff-prepared final GEIS; CLI-22-2, 95 NRC 26 (2022)

NRC Staff is directed to review and update the 2013 GEIS so that it covers operation during the subsequent license renewal period and then take appropriate action with respect to pending subsequent license renewal applications; CLI-22-3, 95 NRC 40 (2022); CLI-22-5, 95 NRC 97 (2022)

NRC will not make a decision or any recommendations on the basis of information presented in the GEIS regarding seismic risk and flooding at nuclear power plants; LBP-22-1, 95 NRC 49 (2022)
public will have an opportunity to comment during development of the site-specific environmental impact statements; CLI-22-3, 95 NRC 40 (2022)

IMMEDIATE EFFECTIVENESS

subsequently renewed licenses became immediately effective upon issuance; CLI-22-4, 95 NRC 44 (2022); CLI-22-6, 95 NRC 111 (2022); CLI-22-7, 95 NRC 116 (2022)

INCORPORATION BY REFERENCE

environmental report may incorporate by reference information contained in an NRC Staff-prepared final GEIS; CLI-22-2, 95 NRC 26 (2022)

INJURY IN FACT

intervention petitioner must show an actual or threatened concrete and particularized injury to an interest within the zone of interests protected by the Atomic Energy Act; CLI-22-1, 95 NRC 1 (2022)

intervention petitioner must show that the threatened injury would be caused by the proposed licensing action and is capable of being redressed by a favorable decision; CLI-22-1, 95 NRC 1 (2022)

INTEREST

being a school board member and spokesperson for monitoring group does not give rise to standing absent a showing that the licensing action could jeopardize those interests; CLI-22-1, 95 NRC 1 (2022)

ratepayer interest does not confer standing because the injury is not within the zone of interests of the Atomic Energy Act of 1954; CLI-22-1, 95 NRC 1 (2022)

taxpayer interest does not confer standing because the injury is not within the zone of interests of the Atomic Energy Act of 1954; CLI-22-1, 95 NRC 1 (2022)

INTERVENTION

admission of a contention, by itself, does not satisfy the burden of going forward; LBP-22-1, 95 NRC 49 (2022)

petitioners will be subject to general requirements for intervention on any refiled contentions in subsequent operating license renewal proceedings; CLI-22-3, 95 NRC 40 (2022)

to be granted a hearing, petitioner must demonstrate standing and propose at least one admissible contention; CLI-22-5, 95 NRC 97 (2022)

INTERVENTION RULINGS

failure to comply with any of the contention admission requirements constitutes grounds for rejecting a proposed contention; LBP-22-1, 95 NRC 49 (2022)

petitioner whose hearing request has been wholly denied has a right to appeal; CLI-22-5, 95 NRC 97 (2022)

unless an appeal demonstrates an error of law or abuse of discretion, Commission will not disturb a licensing board's ruling on threshold decisions such as whether to grant a hearing request; CLI-22-5, 95 NRC 97 (2022)

SUBJECT INDEX

INTERVENTION, DISCRETIONARY

discretionary intervention is allowed only where at least one petitioner has established standing and offered an admissible contention, such that a hearing will be held; CLI-22-1, 95 NRC 1 (2022)
petitioners request to assist in the development of a sound record is denied; CLI-22-1, 95 NRC 1 (2022)

IRREPARABLE INJURY

most important factor for grant of a stay is irreparable harm to movant; CLI-22-7, 95 NRC 116 (2022)

LAW OF THE CASE

court need not apply this doctrine if it is convinced that its prior decision is clearly erroneous and would work a manifest injustice; CLI-22-2, 95 NRC 26 (2022)

LICENSE APPLICATIONS

except where applicant is an electric utility, license applicants must demonstrate their financial qualifications to safely operate the plant; CLI-22-1, 95 NRC 1 (2022)

See also License Transfer Applications; Operating License Applications; Subsequent Operating License Renewal Application

LICENSE CONDITIONS

operating license previously in effect would be reinstated if license renewal is vacated after administrative or judicial review; CLI-22-6, 95 NRC 111 (2022); CLI-22-7, 95 NRC 116 (2022)

license renewal may be set aside or appropriately conditioned even after it has been issued, upon subsequent administrative or judicial review; CLI-22-4, 95 NRC 44 (2022); CLI-22-6, 95 NRC 111 (2022); CLI-22-7, 95 NRC 116 (2022)

LICENSE TRANSFER APPLICATIONS

same information on applicant's financial qualifications to operate the plant as required for an initial application must be included; CLI-22-1, 95 NRC 1 (2022)

LICENSE TRANSFER PROCEEDINGS

contention that license transfer would allow non-regulated entity to collect a tariff from ratepayers is inadmissible; CLI-22-1, 95 NRC 1 (2022)

contention that license transfer would violate the negotiated settlement is inadmissible; CLI-22-1, 95 NRC 1 (2022)

petitioner in indirect license transfer proceeding must explain how the licensing action will harm its members or its interests; CLI-22-1, 95 NRC 1 (2022)

proximity presumption is not applied in indirect license transfer proceeding because it involves no direct changes to the licensed owner or operator or to the operation or physical plant; CLI-22-1, 95 NRC 1 (2022)

traditional standing would require that petitioner show that he lives, frequents, or owns property near the facility and could be harmed should the proposed license transfer cause decommissioning funds to run short; CLI-22-1, 95 NRC 1 (2022)

LICENSE TRANSFERS

applicant is not required to provide absolutely certain predictions of future economic conditions; CLI-22-1, 95 NRC 1 (2022)

applicant must submit estimates for its total annual operating costs for each of the first 5 years of operation, as well as the source of funds to cover these costs; CLI-22-1, 95 NRC 1 (2022)

because applicant did not propose to change either operating or possession authority, there was no direct license transfer; CLI-22-1, 95 NRC 1 (2022)

direct transfer occurs when there will be a change in either possession or operating authority; CLI-22-1, 95 NRC 1 (2022)

except where applicant is an electric utility, license applicants must demonstrate their financial qualifications to safely operate the plant; CLI-22-1, 95 NRC 1 (2022)

exception to statutory caps on electric utility rates is provided where an increase is needed to cover utility's historic decommissioning liability; CLI-22-1, 95 NRC 1 (2022)

indirect transfers involve corporate restructuring or reorganizations that leave the licensee itself intact as a corporate entity and therefore involve no application for a new operating license; CLI-22-1, 95 NRC 1 (2022)

level of financial assurance required for transferees is not equivalent to the extremely high assurance required for the safety of reactor design, construction, and operation; CLI-22-1, 95 NRC 1 (2022)

SUBJECT INDEX

licensee must provide reasonable assurance of adequate funds to operate the facilities; CLI-22-1, 95 NRC 1 (2022)

no power reactor or ISFSI license can be transferred without NRC's prior written consent; CLI-22-1, 95 NRC 1 (2022)

NRC will approve a transfer if it finds both the proposed transferee qualified to hold the license and the transfer otherwise consistent with applicable law, regulations, and Commission orders; CLI-22-1, 95 NRC 1 (2022)

MOTIONS FOR RECONSIDERATION

motions must demonstrate compelling circumstances, such as existence of a clear and material error in a decision, which could not have been reasonably anticipated, that renders the decision invalid; CLI-22-7, 95 NRC 116 (2022)

NATIONAL ENVIRONMENTAL POLICY ACT

agency must consider every significant aspect of the environmental impact of a proposed action and inform the public that it has indeed considered environmental concerns in its decisionmaking process; CLI-22-2, 95 NRC 26 (2022)

Commission declines to pursue an equitable analysis remedy before fulfilling its NEPA duty in the first instance upon finding a significant NEPA deficiency; CLI-22-6, 95 NRC 111 (2022)

court expressly declined to decide whether NRC may itself lawfully fashion remedies for NEPA violations based on an analysis of equitable factors; CLI-22-7, 95 NRC 116 (2022)

environmental report must describe impacts of the proposed action on the environment and discuss potential alternatives to the proposed action sufficient to enable NRC to meet its statutory obligations; CLI-22-5, 95 NRC 97 (2022)

it is ordinary practice for courts to vacate agency actions taken in violation of NEPA; CLI-22-6, 95 NRC 111 (2022); CLI-22-7, 95 NRC 116 (2022)

NEPA does not give NRC authority to forgive harmless violations of NEPA; CLI-22-7, 95 NRC 116 (2022)

NEPA does not permit an agency to act first and comply later; CLI-22-7, 95 NRC 116 (2022)

NEPA's requirement that a detailed environmental impact statement be made for a proposed action makes clear that agencies must take the required hard look before taking that action; CLI-22-6, 95 NRC 111 (2022); CLI-22-7, 95 NRC 116 (2022)

no statute authorizes NRC not to comply with NEPA on equitable grounds; CLI-22-6, 95 NRC 111 (2022)

nothing in NEPA shall be deemed to authorize any agency to impose, as a condition precedent to issuance of any license or permit, any effluent limitation other than any such limitation established pursuant to the Clean Water Act; CLI-22-5, 95 NRC 97 (2022)

NRC complies with NEPA by disclosing the impacts of the once-through cooling system as approved by a state authority; CLI-22-5, 95 NRC 97 (2022)

NOTICE AND COMMENT

any amendments to a rule must also occur through notice-and-comment rulemaking; CLI-22-2, 95 NRC 26 (2022)

applicants will be afforded an opportunity to comment on the upcoming revision to the GEIS and the associated rulemaking through the normal agency processes; CLI-22-3, 95 NRC 40 (2022)

public will have an opportunity to comment during development of the site-specific environmental impact statements; CLI-22-3, 95 NRC 40 (2022)

to provide a meaningful opportunity for public comment, the agency must adequately describe its intentions to the public; CLI-22-2, 95 NRC 26 (2022)

See also Public Comment

NRC POLICY

petitioners may not seek an adjudicatory hearing to attack generic NRC requirements or regulations, or to express generalized grievances about NRC policies; LBP-22-1, 95 NRC 49 (2022)

NRC STAFF REVIEW

applicant does not need to update its application while NRC Staff's review of environmental impacts related to subsequent license renewal is still active; CLI-22-7, 95 NRC 116 (2022)

board's determination regarding rule waiver request does not negate NRC Staff's responsibility to conduct its hard-look licensing review to consider whether any information provided by public comments as part

SUBJECT INDEX

of the environment review process merits further analysis as new and significant information; LBP-22-1, 95 NRC 49 (2022)

harmless error doctrine that federal courts apply is compelled by Administrative Procedure Act § 706, but since the Commission is not a court, this section does not govern its choice of remedy for Staff errors; CLI-22-7, 95 NRC 116 (2022)

NEPA's requirement that a detailed environmental impact statement be made for a proposed action makes clear that agencies must take the required hard look before taking that action; CLI-22-7, 95 NRC 116 (2022)

NRC Staff is directed to review and update the 2013 GEIS so that it covers operation during the subsequent license renewal period and then take appropriate action with respect to pending subsequent license renewal applications; CLI-22-3, 95 NRC 40 (2022)

NRC's environmental review rests on the presumption that NRC cannot review and judge environmental permits issued under the Clean Water Act by the Environmental Protection Agency or an authorized state agency; CLI-22-5, 95 NRC 97 (2022)

ongoing operational issues are not reviewed in NRCs review for license renewal because such issues are effectively addressed by ongoing agency oversight, review, and enforcement; CLI-22-5, 95 NRC 97 (2022)

review of a license renewal application includes a review of programs to manage the effects of aging on long-lived, passive structures and components; CLI-22-5, 95 NRC 97 (2022)

safety review of a license renewal application does not entail a full reassessment of safety issues previously addressed in the licensing of a plant, nor is it designed to review current operations; CLI-22-5, 95 NRC 97 (2022)

safety review of a license renewal application focuses on those potential detrimental effects of aging that are not routinely addressed by ongoing regulatory oversight programs and the applicant's plans for managing those effects during the period of extended operation; CLI-22-5, 95 NRC 97 (2022)

subsequent license renewal applicant does not need to update its application while NRC Staff completes the environmental review; CLI-22-6, 95 NRC 111 (2022)

where NRC's environmental review was incomplete, Commission directed that subsequently renewed licenses remain in place with shortened terms to match the end dates of the previous licenses until completion of the NEPA analysis; CLI-22-6, 95 NRC 111 (2022)

NUCLEAR REGULATORY COMMISSION, AUTHORITY

agencies may change positions and interpretations as long as they explain their reasoning for doing so; CLI-22-2, 95 NRC 26 (2022)

agency has no obligation to gather or consider environmental information if it has no statutory authority to act on that information; CLI-22-5, 95 NRC 97 (2022)

Clean Water Act deprives NRC of authority to consider alternative cooling systems as that would improperly second-guess the cooling system approved by the permitting agency; CLI-22-5, 95 NRC 97 (2022)

Commission authority to reconsider its actions is inherent in its authority to make them in the first instance; CLI-22-2, 95 NRC 26 (2022)

NEPA does not give NRC authority to forgive harmless violations of NEPA; CLI-22-7, 95 NRC 116 (2022)

NEPA does not permit an agency to act first and comply later; CLI-22-7, 95 NRC 116 (2022)

nothing in NEPA shall be deemed to authorize any agency to impose, as a condition precedent to issuance of any license or permit, any effluent limitation other than any such limitation established pursuant to the Clean Water Act; CLI-22-5, 95 NRC 97 (2022)

where licenses are still subject to modification due to pending agency litigation, it is within NRC's authority to maintain shortened end dates of the subsequently renewed licenses; CLI-22-6, 95 NRC 111 (2022)

OPERATING LICENSE AMENDMENTS

license renewal may be set aside or appropriately conditioned even after it has been issued, upon subsequent administrative or judicial review; CLI-22-2, 95 NRC 26 (2022)

SUBJECT INDEX

OPERATING LICENSE APPLICATIONS

indirect transfers involve corporate restructuring or reorganizations that leave the licensee itself intact as a corporate entity and therefore involve no application for a new operating license; CLI-22-1, 95 NRC 1 (2022)

See also Subsequent Operating License Renewal Application

OPERATING LICENSE RENEWAL

applicants for an initial license renewal may rely on their Clean Water Act certifications in lieu of an environmental analysis of system alternatives for the once-through cooling system; CLI-22-5, 95 NRC 97 (2022)

applicants must periodically update their applications; CLI-22-6, 95 NRC 111 (2022); CLI-22-7, 95 NRC 116 (2022)

environmental contents of an OLR application are described in section 54.23; LBP-22-1, 95 NRC 49 (2022)

environmental impact statement for this stage is not required to contain analyses of the environmental impacts of the license renewal issues identified as Category 1 issues in Appendix B to Subpart A of Part 51; LBP-22-1, 95 NRC 49 (2022)

environmental report must describe impacts of the proposed action on the environment and discuss potential alternatives to the proposed action sufficient to enable NRC to meet its statutory obligations; CLI-22-5, 95 NRC 97 (2022)

for long-lived, passive structures and components, license renewal applicant must demonstrate that the effects of aging will be adequately managed so that the intended functions will be maintained for the period of extended operation; CLI-22-5, 95 NRC 97 (2022)

license renewal is subject to legal challenge before NRC and, potentially, in courts of appeals, and all remedies, up to and including reinstatement of the previous licenses, are possible; CLI-22-7, 95 NRC 116 (2022)

license renewal may be conditioned or vacated after administrative or judicial review, in which case the operating license previously in effect would be reinstated; CLI-22-6, 95 NRC 111 (2022); CLI-22-7, 95 NRC 116 (2022)

license renewal may be set aside or appropriately conditioned even after it has been issued, upon subsequent administrative or judicial review; CLI-22-2, 95 NRC 26 (2022)

NRC must evaluate the environmental impacts of subsequent license renewal before approving renewal; CLI-22-6, 95 NRC 111 (2022)

NRC will prepare an EIS to comply with the National Environmental Policy Act when renewing a nuclear power plant operating license; CLI-22-2, 95 NRC 26 (2022)

NRC's review of an application includes a review of programs to manage the effects of aging on long-lived, passive structures and components; CLI-22-5, 95 NRC 97 (2022)

NRC's safety review does not entail a full reassessment of safety issues previously addressed in the licensing of a plant, nor is it designed to review current operations; CLI-22-5, 95 NRC 97 (2022)

NRC's safety review focuses on those potential detrimental effects of aging that are not routinely addressed by ongoing regulatory oversight programs and the applicant's plans for managing those effects during the period of extended operation; CLI-22-5, 95 NRC 97 (2022)

ongoing operational issues are not reviewed in NRC's review because such issues are effectively addressed by ongoing agency oversight, review, and enforcement; CLI-22-5, 95 NRC 97 (2022)

renewed licenses became immediately effective upon issuance; CLI-22-4, 95 NRC 44 (2022); CLI-22-6, 95 NRC 111 (2022); CLI-22-7, 95 NRC 116 (2022)

section 51.53(c)(2) applies only to applicants seeking an initial renewed license; LBP-22-1, 95 NRC 49 (2022)

section 51.53(c)(2) provides requirements for the environmental report that must be submitted by any operating license renewal applicant under Part 54; CLI-22-2, 95 NRC 26 (2022)

section 51.53(c)(3) narrows the scope of license renewal applicants to which it applies and speaks only to applicants seeking an initial renewed license and holding an operating license, construction permit, or combined license as of June 30, 1995; CLI-22-2, 95 NRC 26 (2022)

section 51.53(c)(3) only applies to only an initial license renewal applicant's preparation of an environmental report; CLI-22-2, 95 NRC 26 (2022); CLI-22-3, 95 NRC 40 (2022)

See also Subsequent Operating License Renewal

SUBJECT INDEX

OPERATING LICENSE RENEWAL PROCEEDINGS

contention regarding adequacy of a previously considered severe accident mitigation alternative cannot be litigated absent a section 2.335(b) waiver; LBP-22-1, 95 NRC 49 (2022)

contention that license renewal applicant's environmental report fails to consider replacement of the once-through cooling system with cooling towers as a means of mitigating environmental impacts is inadmissible; CLI-22-5, 95 NRC 97 (2022)

NRC will not make a decision or any recommendations on the basis of information presented in the GEIS regarding seismic risk and flooding at nuclear power plants; LBP-22-1, 95 NRC 49 (2022)
reactor shutdown is an operational issue that is outside the scope of a license renewal proceeding; LBP-22-1, 95 NRC 49 (2022)

SAMAs are the functional equivalent of a Category 1 issue, removing them from litigation in case-by-case license renewal adjudications; LBP-22-1, 95 NRC 49 (2022)

section 51.53(c)(3)(ii)(L) affords the functional equivalent of the Category 1 issue preclusion established by section 51.53(c)(3)(i); LBP-22-1, 95 NRC 49 (2022)

section 51.53(c)(3) applies to only an initial license renewal applicant's preparation of an environmental report; CLI-22-4, 95 NRC 44 (2022)

See also Subsequent Operating License Renewal Proceedings

PENDENCY OF PROCEEDINGS

where licenses are still subject to modification due to pending agency litigation, it is within NRC's authority to maintain shortened end dates of the subsequently renewed licenses; CLI-22-6, 95 NRC 111 (2022)

PERMITS

license renewal applicant with a permitted once-through cooling system is not required to further evaluate the environmental impacts of that system or potential alternatives; CLI-22-5, 95 NRC 97 (2022)

PRIMA FACIE SHOWING

claim supporting expert declaration that utility's past operational history without a nuclear facility means that denying an operating license would be environmentally preferable is insufficient to provide support for petitioner's section 2.335 waiver request; LBP-22-1, 95 NRC 49 (2022)

intervenor has the initial burden of going forward, which requires it to establish a prima facie case for claims asserted in the reformulated contention; LBP-22-1, 95 NRC 49 (2022)

request for waiver of NRC regulations must make a prima facie showing of special circumstances; LBP-22-1, 95 NRC 49 (2022)

showing is generally associated with meeting the burden of production or the burden of going forward during an evidentiary hearing; LBP-22-1, 95 NRC 49 (2022)

showing required for a section 2.335 waiver petition must be legally sufficient to establish a fact or case unless disproved; LBP-22-1, 95 NRC 49 (2022)

PROOF

licensee must provide annual proof of guarantee of payment of premiums, such as a surety bond or letter of credit; CLI-22-1, 95 NRC 1 (2022)

PROXIMITY PRESUMPTION

in some proceedings involving issuance of a construction permit or an operating license, proximity presumption grants that persons living in proximity to a reactor could be harmed by changes to the owners, operators, or physical plant; CLI-22-1, 95 NRC 1 (2022)

petitioner otherwise meeting requirements for standing is excused from having to make a specific showing of injury in fact so long as that petitioner resides, works, or otherwise has regular contacts within a 50-mile radius of the reactor facility; LBP-22-1, 95 NRC 49 (2022)

proximity presumption is not applied in indirect license transfer proceeding because it involves no direct changes to the licensed owner or operator or to the operation or physical plant; CLI-22-1, 95 NRC 1 (2022)

PUBLIC COMMENT

board's determination regarding rule waiver request does not negate NRC Staff's responsibility to conduct its hard-look licensing review to consider whether any information provided by public comments as part of the environment review process merits further analysis as new and significant information; LBP-22-1, 95 NRC 49 (2022)

SUBJECT INDEX

- public will have an opportunity to comment during development of the site-specific environmental impact statements; CLI-22-3, 95 NRC 40 (2022)
- RATEMAKING PROCESS**
exception to statutory caps on electric utility rates is provided where an increase is needed to cover utility's historic decommissioning liability; CLI-22-1, 95 NRC 1 (2022)
- REACTOR COOLANT**
contention that continued operation violates 10 C.F.R. Part 50, Appendix A, Criterion 14 because the reactor coolant pressure boundary has not been tested is inadmissible; CLI-22-5, 95 NRC 97 (2022)
See also Cooling Systems
- REACTOR DESIGN**
criteria and standards are intended to ensure the ability to withstand environmental hazards, such as earthquakes and flooding, without loss of capacity to perform their safety functions; LBP-22-1, 95 NRC 49 (2022)
safety-related structures, systems, and components must be designed to take into account the most severe natural phenomena historically reported for the site and surrounding area; LBP-22-1, 95 NRC 49 (2022)
- REACTOR PRESSURE VESSEL**
general assertion that applicant should use coupon testing rather than calculations to demonstrate reactor pressure vessel integrity is inadmissible; CLI-22-5, 95 NRC 97 (2022)
- RECONSIDERATION**
Commission authority to reconsider its actions is inherent in its authority to make them in the first instance; CLI-22-2, 95 NRC 26 (2022)
See also Motions for Reconsideration
- REDRESSABILITY**
intervention petitioner must show that the threatened injury would be caused by the proposed licensing action and is capable of being redressed by a favorable decision; CLI-22-1, 95 NRC 1 (2022)
- REGULATIONS**
attacks on Commission regulations are prohibited unless a waiver is granted upon a showing that special circumstances exist such that application of the rule would not serve the purpose for which the rule was enacted; CLI-22-1, 95 NRC 1 (2022)
See also Amendment of Regulations; Rules of Practice; Waiver of Rule
- REGULATIONS, INTERPRETATION**
agencies may change positions and interpretations as long as they explain their reasoning for doing so; CLI-22-2, 95 NRC 26 (2022)
NRC cannot require members of the public to parse language in a regulatory analysis or glossary to discern that the agency is making a major shift in the scope of an EIS and rulemaking; CLI-22-2, 95 NRC 26 (2022)
section 51.53(c)(2) applies only to an initial renewed license; CLI-22-2, 95 NRC 26 (2022); LBP-22-1, 95 NRC 49 (2022)
section 51.53(c)(3) does not apply to subsequent license renewal applicants; CLI-22-2, 95 NRC 26 (2022)
section 51.53(c)(3) narrows the scope of license renewal applicants to which it applies and speaks only to applicants seeking an initial renewed license and holding an operating license, construction permit, or combined license as of June 30, 1995; CLI-22-2, 95 NRC 26 (2022)
section 51.53(c)(3) only applies to an initial license renewal applicant's preparation of an environmental report; CLI-22-3, 95 NRC 40 (2022); CLI-22-4, 95 NRC 44 (2022)
section 51.53(c)(3)(ii)(L) affords the functional equivalent of the Category 1 issue preclusion established by section 51.53(c)(3)(i); LBP-22-1, 95 NRC 49 (2022)
where rule language is clear on its face, it is unnecessary to resort to other sources to discern its meaning; CLI-22-2, 95 NRC 26 (2022)
- REMAND**
court did not resolve whether absence of statutory authority is sufficient to reject the analogy to judicial remand-without-vacatur; CLI-22-6, 95 NRC 111 (2022)
- REVIEW**
See Appellate Review; Environmental Review; NRC Staff Review; Safety Review; Standard of Review

SUBJECT INDEX

REVIEW, SUA SPONTE

Commission dismisses pending environmental contentions and motions and takes sua sponte review under 10 C.F.R. 2.341(a)(2) of the board's decision; CLI-22-3, 95 NRC 40 (2022)

RULEMAKING

NRC cannot require members of the public to parse language in a regulatory analysis or glossary to discern that the agency is making a major shift in the scope of an EIS and rulemaking; CLI-22-2, 95 NRC 26 (2022)

RULES OF PRACTICE

admissible contention explains the issue to be litigated, provides supporting facts or expert opinion and specific sources or documents on which it intends to rely; CLI-22-1, 95 NRC 1 (2022)

admissible contention must fall within the scope of the proceeding and be material to the findings that NRC must make for the proposed licensing action; CLI-22-1, 95 NRC 1 (2022)

contention admissibility requirements are intended to ensure that adjudicatory hearings are triggered only by substantive safety or environmental issues that raise a supported dispute; CLI-22-1, 95 NRC 1 (2022)

contentions must satisfy the six admissibility factors; CLI-22-5, 95 NRC 97 (2022); LBP-22-1, 95 NRC 49 (2022)

intervention petitioner in NRC licensing proceeding must demonstrate standing; CLI-22-1, 95 NRC 1 (2022)

motion for reconsideration must demonstrate compelling circumstances, such as existence of a clear and material error in a decision, which could not have been reasonably anticipated, that renders the decision invalid; CLI-22-7, 95 NRC 116 (2022)

petitioner must identify each specific disputed or legally required omitted portions of the application and provide supporting reasons for petitioner's belief; CLI-22-1, 95 NRC 1 (2022)

request for waiver of NRC regulations must make a prima facie showing of special circumstances; LBP-22-1, 95 NRC 49 (2022)

rule waiver provisions apply in any adjudicatory proceeding subject to Part 2 including in a Part 2, Subpart B enforcement proceeding; LBP-22-1, 95 NRC 49 (2022)

stay request must address four criteria; CLI-22-7, 95 NRC 116 (2022)

to be granted a hearing, petitioner must demonstrate standing and propose at least one admissible contention; CLI-22-5, 95 NRC 97 (2022)

to establish representational standing organization must show that at least one member has standing and has authorized the organization to represent the member and to request a hearing on the member's behalf; LBP-22-1, 95 NRC 49 (2022)

SAFETY ISSUES

NRC's reactor design criteria and standards are intended to ensure the ability to withstand environmental hazards, such as earthquakes and flooding, without loss of capacity to perform their safety functions; LBP-22-1, 95 NRC 49 (2022)

safety-related structures, systems, and components must be designed to take into account the most severe natural phenomena historically reported for the site and surrounding area; LBP-22-1, 95 NRC 49 (2022)

SAFETY REVIEW

NRC's review of a license renewal application does not entail a full reassessment of safety issues previously addressed in the licensing of a plant, nor is it designed to review current operations; CLI-22-5, 95 NRC 97 (2022)

NRC's review of a license renewal application focuses on those potential detrimental effects of aging that are not routinely addressed by ongoing regulatory oversight programs and the applicant's plans for managing those effects during the period of extended operation; CLI-22-5, 95 NRC 97 (2022)

SEISMIC RISK

NRC will not make a decision or any recommendations on the basis of information presented in the GEIS regarding seismic risk and flooding at nuclear power plants; LBP-22-1, 95 NRC 49 (2022)

SETTLEMENT AGREEMENTS

contention that license transfer would violate the negotiated settlement is inadmissible; CLI-22-1, 95 NRC 1 (2022)

SUBJECT INDEX

SEVERE ACCIDENT MITIGATION ALTERNATIVES

license renewal contention regarding adequacy of a previously considered SAMA cannot be litigated absent a section 2.335(b) waiver; LBP-22-1, 95 NRC 49 (2022)

SAMAs are the functional equivalent of a Category 1 issue, removing them from litigation in case-by-case license renewal adjudications; LBP-22-1, 95 NRC 49 (2022)

SHUTDOWN

reactor shutdown is an operational issue that is outside the scope of a license renewal proceeding; LBP-22-1, 95 NRC 49 (2022)

SOLAR POWER

contention challenging environmental report analysis of solar power as an alternative to license renewal is dismissed; CLI-22-5, 95 NRC 97 (2022)

SPECIAL CIRCUMSTANCES

request for waiver of NRC regulations must make a prima facie showing of special circumstances; LBP-22-1, 95 NRC 49 (2022)

standard that justifies the need for rule waiver is stringent by design and imposes a substantial burden on the participant seeking the waiver; LBP-22-1, 95 NRC 49 (2022)

SPENT FUEL STORAGE

in its decommissioning funding status report, applicant may provide cost estimates based on the NRC formula cost amount calculated in accordance with 10 C.F.R. 50.75(c) or using a site-specific estimate based on a period of safe storage; CLI-22-1, 95 NRC 1 (2022)

STANDARD OF REVIEW

unless an appeal demonstrates an error of law or abuse of discretion, Commission will not disturb a licensing board's ruling on threshold decisions such as whether to grant a hearing request; CLI-22-5, 95 NRC 97 (2022)

STANDING TO INTERVENE

even if standing is uncontested, an independent board determination is required about whether requirements for establishing standing have been fulfilled; LBP-22-1, 95 NRC 49 (2022)

in some proceedings involving issuance of a construction permit or an operating license, proximity presumption grants that persons living in proximity to a reactor could be harmed by changes to the owners, operators, or physical plant; CLI-22-1, 95 NRC 1 (2022)

interest as a school board member and spokesperson for monitoring group does not give rise to standing absent a showing that the licensing action could jeopardize those interests; CLI-22-1, 95 NRC 1 (2022)

petitioner failed to show injury in fact stemming from a proposed license amendment altering emergency planning requirements in light of facility having permanently ceased operations; CLI-22-1, 95 NRC 1 (2022)

petitioner in indirect license transfer proceeding must explain how the licensing action will harm its members or its interests; CLI-22-1, 95 NRC 1 (2022)

petitioner in NRC licensing proceeding must demonstrate standing; CLI-22-1, 95 NRC 1 (2022)

petitioner must show an actual or threatened concrete and particularized injury to an interest within the zone of interests protected by the Atomic Energy Act; CLI-22-1, 95 NRC 1 (2022)

proximity presumption is not applied in indirect license transfer proceeding because it involves no direct changes to the licensed owner or operator or to the operation or physical plant; CLI-22-1, 95 NRC 1 (2022)

ratepayer interest does not confer standing because the injury is not within the zone of interests of the Atomic Energy Act of 1954; CLI-22-1, 95 NRC 1 (2022)

taxpayer interest does not confer standing because the injury is not within the zone of interests of the Atomic Energy Act of 1954; CLI-22-1, 95 NRC 1 (2022)

traditional standing would require that petitioner show that he lives, frequents, or owns property near the facility and could be harmed should the proposed license transfer cause decommissioning funds to run short; CLI-22-1, 95 NRC 1 (2022)

STANDING TO INTERVENE, ORGANIZATIONAL

organizational petitioners can demonstrate standing as a representative of its members; CLI-22-1, 95 NRC 1 (2022)

SUBJECT INDEX

STANDING TO INTERVENE, REPRESENTATIONAL

organization must show its members' standing by demonstrating that they may suffer an actual or threatened concrete and particularized injury to an interest within the zone of interests protected by the Atomic Energy Act, which would be caused by the proposed licensing action and is capable of being redressed by a favorable decision; CLI-22-1, 95 NRC 1 (2022)

organization must show that at least one member has standing and has authorized the organization to represent the member and to request a hearing on the member's behalf; LBP-22-1, 95 NRC 49 (2022)

organization must show that one of its members has standing, must identify that member by name and address, and must show, preferably by affidavit, that the organization is authorized to request a hearing on behalf of that member; CLI-22-1, 95 NRC 1 (2022)

organizational petitioners can demonstrate standing as a representative of its members; CLI-22-1, 95 NRC 1 (2022)

proximity presumption as principal element for establishing representational standing excuses petitioner otherwise meeting the requirements for standing from having to make a specific showing of injury in fact so long as that petitioner resides, works, or otherwise has regular contacts within a 50-mile radius of the reactor facility; LBP-22-1, 95 NRC 49 (2022)

STATE STATUTES

NRC is not the forum in which to challenge a claimed violation of a state or local law; CLI-22-1, 95 NRC 1 (2022)

STAY

irreparable harm to movant for a stay is the most important factor; CLI-22-7, 95 NRC 116 (2022)

request must address four criteria; CLI-22-7, 95 NRC 116 (2022)

STRUCTURAL INTEGRITY

general assertion that applicant should use coupon testing rather than calculations to demonstrate reactor pressure vessel integrity is inadmissible; CLI-22-5, 95 NRC 97 (2022)

SUBSEQUENT OPERATING LICENSE RENEWAL

2013 Generic Environmental Impact Statement does not cover the subsequent license renewal period; CLI-22-2, 95 NRC 26 (2022); CLI-22-3, 95 NRC 40 (2022); CLI-22-4, 95 NRC 44 (2022)

amending license end dates did not affect the timely renewal provision; CLI-22-7, 95 NRC 116 (2022)

applicant does not need to update its application while NRC Staff completes the environmental review; CLI-22-6, 95 NRC 111 (2022)

applicants for only initial license renewal may rely on the Generic Environmental Impact Statement for License Renewal in their environmental reports; CLI-22-5, 95 NRC 97 (2022)

Commission declines to pursue an equitable analysis remedy before fulfilling its NEPA duty in the first instance upon finding a significant NEPA deficiency; CLI-22-6, 95 NRC 111 (2022)

license renewal may be set aside or appropriately conditioned even after it has been issued, upon subsequent administrative or judicial review; CLI-22-4, 95 NRC 44 (2022)

maintaining subsequently renewed licenses is the simplest, most efficient way to continue requiring enhanced aging management programs; CLI-22-6, 95 NRC 111 (2022)

NRC Staff is directed to revise the Generic Environmental Impact Statement for License Renewal; CLI-22-5, 95 NRC 97 (2022)

NRC Staff may not exclusively rely on the 2013 GEIS and Table B-1 for the evaluation of environmental impacts of Category 1 issues for subsequent license renewal; CLI-22-2, 95 NRC 26 (2022)

NRC Staff, adjudicatory officers, and the Commission are to integrate the conclusions in the generic environmental impact statement for issues designated as Category 1 with information developed for those Category 2 issues applicable to the plant under section 51.53(c)(3)(ii) and any new and significant information; CLI-22-2, 95 NRC 26 (2022)

section 51.53(c)(3) does not apply to subsequent license renewal applicants; CLI-22-2, 95 NRC 26 (2022)

where licenses are still subject to modification due to pending agency litigation, it is within NRC's authority to maintain shortened end dates of the subsequently renewed licenses; CLI-22-6, 95 NRC 111 (2022)

where NRC's environmental review was incomplete, Commission directed that subsequently renewed licenses remain in place with shortened terms to match the end dates of the previous licenses until completion of the NEPA analysis; CLI-22-6, 95 NRC 111 (2022)

SUBJECT INDEX

SUBSEQUENT OPERATING LICENSE RENEWAL APPLICATION

applicant does not need to update its application while NRC Staff's review of environmental impacts related to subsequent license renewal is still active; CLI-22-7, 95 NRC 116 (2022)
applicant may submit a revised environmental report providing information on environmental impacts during the subsequent license renewal period; CLI-22-3, 95 NRC 40 (2022)
NRC Staff is directed to review and update the 2013 GEIS so that it covers operation during the subsequent license renewal period and then take appropriate action with respect to pending subsequent license renewal applications; CLI-22-3, 95 NRC 40 (2022)

SUBSEQUENT OPERATING LICENSE RENEWAL PROCEEDINGS

after each site-specific review is complete, a new notice of opportunity for hearing, limited to contentions based on new information in the site-specific environmental impact statement, will be issued; CLI-22-3, 95 NRC 40 (2022)
challenge to the basis for current and past operations rather than applicants plans for managing aging during the period of extended operation is inadmissible; CLI-22-5, 95 NRC 97 (2022)
Commission dismisses pending environmental contentions and motions and takes sua sponte review under 10 C.F.R. 2.341(a)(2) of the board's decision; CLI-22-3, 95 NRC 40 (2022); CLI-22-5, 95 NRC 97 (2022)
direction is provided for open proceedings; CLI-22-3, 95 NRC 40 (2022)
intervenor will not be required to meet heightened pleading standards for newly filed or refiled contentions; CLI-22-3, 95 NRC 40 (2022)

SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT

NRC Staff, adjudicatory officers, and the Commission are to integrate the conclusions in the generic environmental impact statement for issues designated as Category 1 with information developed for those Category 2 issues applicable to the plant under § 51.53(c)(3)(ii) and any new and significant information; CLI-22-2, 95 NRC 26 (2022)
NRC Staff, when preparing any draft SEIS under section 51.95(c), is to rely on conclusions as amplified by the supporting information in the GEIS or issues designated as Category 1 in appendix B to subpart A of this part; CLI-22-2, 95 NRC 26 (2022)

TERMINATION OF LICENSE

where licenses are still subject to modification due to pending agency litigation, it is within NRC's authority to maintain shortened end dates of the subsequently renewed licenses; CLI-22-6, 95 NRC 111 (2022)

TESTING

contention that continued operation violates 10 C.F.R. Part 50, Appendix A, Criterion 14 because the reactor coolant pressure boundary has not been tested is inadmissible; CLI-22-5, 95 NRC 97 (2022)
general assertion that applicant should use coupon testing rather than calculations to demonstrate reactor pressure vessel integrity is inadmissible; CLI-22-5, 95 NRC 97 (2022)

VACATION OF LICENSE

it is ordinary practice for courts to vacate agency actions taken in violation of NEPA; CLI-22-6, 95 NRC 111 (2022); CLI-22-7, 95 NRC 116 (2022)
license renewal may be conditioned or vacated after administrative or judicial review, in which case the operating license previously in effect would be reinstated; CLI-22-6, 95 NRC 111 (2022); CLI-22-7, 95 NRC 116 (2022)

VACATUR

court did not resolve whether absence of statutory authority is sufficient to reject the analogy to judicial remand-without-vacatur; CLI-22-6, 95 NRC 111 (2022)

VIOLATIONS

court expressly declined to decide whether NRC may itself lawfully fashion remedies for NEPA violations based on an analysis of equitable factors; CLI-22-7, 95 NRC 116 (2022)
it is ordinary practice for courts to vacate agency actions taken in violation of NEPA; CLI-22-6, 95 NRC 111 (2022); CLI-22-7, 95 NRC 116 (2022)
NEPA does not give NRC authority to forgive harmless violations of NEPA; CLI-22-7, 95 NRC 116 (2022)

SUBJECT INDEX

WAIVER OF RULE

adjudicatory challenge based on an applicant's failure to deal appropriately with a Category 1 item constitutes an attack on an agency rule requiring a section 2.335(b) waiver; LBP-22-1, 95 NRC 49 (2022)

attacks on Commission regulations are prohibited unless a waiver is granted upon a showing that special circumstances exist such that application of the rule would not serve the purpose for which the rule was enacted; CLI-22-1, 95 NRC 1 (2022)

board's determination regarding rule waiver request does not negate NRC Staff's responsibility to conduct its hard-look licensing review to consider whether any information provided by public comments as part of the environment review process merits further analysis as new and significant information; LBP-22-1, 95 NRC 49 (2022)

claim supporting expert declaration that utility's past operational history without a nuclear facility means that denying an operating license would be environmentally preferable is insufficient to provide prima facie support for petitioner's section 2.335 waiver request; LBP-22-1, 95 NRC 49 (2022)

contention challenging established NRC regulatory findings requires submission of a petition for a waiver; LBP-22-1, 95 NRC 49 (2022)

four factors are evaluated to determine whether a rule waiver is appropriate; LBP-22-1, 95 NRC 49 (2022)

in determining whether a section 2.335 waiver petition makes a prima facie showing, whether provided by an expert or otherwise, its support must deal adequately with potentially relevant information; LBP-22-1, 95 NRC 49 (2022)

petitioners fail to satisfy *Millstone* factor that waiver of the regulation is necessary to reach a significant safety or environmental problem; LBP-22-1, 95 NRC 49 (2022)

prima facie showing required for a section 2.335 waiver petition must be legally sufficient to establish a fact or case unless disproved; LBP-22-1, 95 NRC 49 (2022)

request for waiver of NRC regulations must make a prima facie showing of special circumstances; LBP-22-1, 95 NRC 49 (2022)

rule waiver provisions apply in any adjudicatory proceeding subject to Part 2 including in a Part 2, Subpart B enforcement proceeding; LBP-22-1, 95 NRC 49 (2022)

special circumstances standard that justifies the need for rule waiver is stringent by design and imposes a substantial burden on the participant seeking the waiver; LBP-22-1, 95 NRC 49 (2022)

to make a successful showing regarding the *Millstone* factors, petitioner must meet extremely high standards showing the existence of compelling circumstances; LBP-22-1, 95 NRC 49 (2022)

WITNESSES, EXPERT

expert opinion that merely states a conclusion without providing a reasoned basis or explanation for that conclusion is inadequate because it deprives the board of the ability to make the necessary, reflective assessment of the opinion; LBP-22-1, 95 NRC 49 (2022)

FACILITY INDEX

BRAIDWOOD STATION, Units 1 and 2 and Associated Independent Spent Fuel Storage Installation;
Docket Nos. STN 50-456-LT, STN 50-457-LT, 72-73-LT
LICENSE TRANSFER; February 14, 2022; MEMORANDUM AND ORDER; CLI-22-1, 95 NRC 1
(2022)

BYRON STATION, Units 1 and 2 and Associated Independent Spent Fuel Storage Installation; Docket Nos.
Docket Nos. STN 50-454-LT, STN 50-455-LT, 72-68-LT
LICENSE TRANSFER; February 14, 2022; MEMORANDUM AND ORDER; CLI-22-1, 95 NRC 1
(2022)

CALVERT CLIFFS NUCLEAR POWER PLANT, Units 1 and 2 and Associated Independent Spent Fuel
Storage Installation; Docket Nos. 50-317-LT, 50-318-LT, 72-8-LT
LICENSE TRANSFER; February 14, 2022; MEMORANDUM AND ORDER; CLI-22-1, 95 NRC 1
(2022)

CLINTON POWER STATION, Unit 1 and Associated Independent Spent Fuel Storage Installation; Docket
Nos. 50-461-LT, 72-1046-LT
LICENSE TRANSFER; February 14, 2022; MEMORANDUM AND ORDER; CLI-22-1, 95 NRC 1
(2022)

DRESDEN NUCLEAR POWER STATION, Units 1, 2, and 3 and Associated Independent Spent Fuel
Storage Installation; Docket Nos. 50-10-LT, 50-237-LT, 50-249-LT, 72-37-LT
LICENSE TRANSFER; February 14, 2022; MEMORANDUM AND ORDER; CLI-22-1, 95 NRC 1
(2022)

JAMES A. FITZPATRICK NUCLEAR POWER PLANT and Associated Independent Spent Fuel Storage
Installation; Docket Nos. 50-333-LT, 72-12-LT
LICENSE TRANSFER; February 14, 2022; MEMORANDUM AND ORDER; CLI-22-1, 95 NRC 1
(2022)

LASALLE COUNTY STATION, Units 1 and 2 and Associated Independent Spent Fuel Storage Installation;
Docket Nos. 50-373-LT, 50-374-LT, 72-70-LT
LICENSE TRANSFER; February 14, 2022; MEMORANDUM AND ORDER; CLI-22-1, 95 NRC 1
(2022)

LIMERICK GENERATING STATION, Units 1 and 2 and Associated Independent Spent Fuel Storage
Installation; Docket Nos. 50-352-LT, 50-353-LT, 72-65-LT
LICENSE TRANSFER; February 14, 2022; MEMORANDUM AND ORDER; CLI-22-1, 95 NRC 1
(2022)

NINE MILE POINT NUCLEAR STATION, Units 1 and 2 and Associated Independent Spent Fuel Storage
Installation; Docket Nos. 50-220-LT, 50-410-LT, 72-1036-LT
LICENSE TRANSFER; February 14, 2022; MEMORANDUM AND ORDER; CLI-22-1, 95 NRC 1
(2022)

NORTH ANNA POWER STATION, Units 1 and 2; Docket Nos. 50-338-SLR, 50-339-SLR
SUBSEQUENT OPERATING LICENSE RENEWAL; February 24, 2022; MEMORANDUM AND
ORDER; CLI-22-3, 95 NRC 40 (2022)

OCONEE NUCLEAR STATION, Units 1, 2, and 3; Docket Nos. 50-269-SLR, 50-270-SLR, 50-287-SLR
SUBSEQUENT OPERATING LICENSE RENEWAL; February 11, 2022; MEMORANDUM AND
ORDER (Denying Intervention and Terminating Proceeding); LBP-22-1, 95 NRC 49 (2022)
SUBSEQUENT OPERATING LICENSE RENEWAL; February 24, 2022; MEMORANDUM AND
ORDER; CLI-22-3, 95 NRC 40 (2022)

FACILITY INDEX

PEACH BOTTOM ATOMIC POWER STATION, Units 1, 2, and 3 and Associated Independent Spent Fuel Storage Installation; Docket Nos. 50-171-LT, 50-277-LT, 50-278-LT, 72-29-LT
LICENSE TRANSFER; February 14, 2022; MEMORANDUM AND ORDER; CLI-22-1, 95 NRC 1 (2022)

PEACH BOTTOM ATOMIC POWER STATION, Units 2 and 3; Docket Nos. 50-277-SLR, 50-278-SLR
SUBSEQUENT OPERATING LICENSE RENEWAL; February 24, 2022; MEMORANDUM AND ORDER; CLI-22-3, 95 NRC 40 (2022); CLI-22-4, 95 NRC 44 (2022)
SUBSEQUENT OPERATING LICENSE RENEWAL; June 3, 2022; MEMORANDUM AND ORDER; CLI-22-7, 95 NRC 116 (2022)

POINT BEACH NUCLEAR PLANT, Units 1 and 2; Docket Nos. 50-266-SLR, 50-301-SLR
SUBSEQUENT OPERATING LICENSE RENEWAL; February 24, 2022; MEMORANDUM AND ORDER; CLI-22-3, 95 NRC 40 (2022)
SUBSEQUENT OPERATING LICENSE RENEWAL; March 23, 2022; MEMORANDUM AND ORDER; CLI-22-5, 95 NRC 97 (2022)

QUAD CITIES NUCLEAR POWER STATION, Units 1 and 2 and Associated Independent Spent Fuel Storage Installation; Docket Nos. 50-254-LT, 50-265-LT, 72-53-LT
LICENSE TRANSFER; February 14, 2022; MEMORANDUM AND ORDER; CLI-22-1, 95 NRC 1 (2022)

R.E. Ginna Nuclear Power Plant and Associated Independent Spent Fuel Storage Installation; Docket Nos. 50-244-LT, 72-67-LT
LICENSE TRANSFER; February 14, 2022; MEMORANDUM AND ORDER; CLI-22-1, 95 NRC 1 (2022)

SALEM NUCLEAR GENERATING STATION, Units 1 and 2 and Associated Independent Spent Fuel Storage Installation; Docket Nos. 50-272-LT, 50-311-LT, 72-48-LT
LICENSE TRANSFER; February 14, 2022; MEMORANDUM AND ORDER; CLI-22-1, 95 NRC 1 (2022)

THREE MILE ISLAND NUCLEAR STATION, Unit 1 and Associated Independent Spent Fuel Storage Installation; Docket Nos. 50-289-LT, 72-77-LT
LICENSE TRANSFER; February 14, 2022; MEMORANDUM AND ORDER; CLI-22-1, 95 NRC 1 (2022)

TURKEY POINT NUCLEAR GENERATING Units 3 and 4; Docket Nos. 50-250-SLR, 50-251-SLR
SUBSEQUENT OPERATING LICENSE RENEWAL; February 24, 2022; MEMORANDUM AND ORDER; CLI-22-2, 95 NRC 26 (2022); CLI-22-3, 95 NRC 40 (2022)
SUBSEQUENT OPERATING LICENSE RENEWAL; June 3, 2022; MEMORANDUM AND ORDER; CLI-22-6, 95 NRC 111 (2022)