

U.S. Nuclear Regulatory Commission
Written Record of Support of Proposed Amendments to 10 CFR 51.22 in Accordance with
Executive Order 14300 and SRM-SECY-24-0046

Action

The U.S. Nuclear Regulatory Commission (NRC) is proposing to expand the list of categorical exclusions in Title 10 of the *Code of Federal Regulations* (10 CFR) 51.22, "Establishing categorical exclusions," to include additional categories of actions that normally do not significantly affect the quality of the human environment. The NRC has developed this written record to substantiate its determination to expand the list in 10 CFR 51.22.

Background

On May 23, 2025, President Donald J. Trump signed Executive Order (E.O.) 14300, "Ordering the Reform of the Nuclear Regulatory Commission." In Section 5, "Reforming and Modernizing the NRC's Regulations," the E.O. requires the NRC to undertake a review and wholesale revision of its regulations and guidance documents as guided by the policies set forth in Section 2 of the E.O. Furthermore, Section 5(c) of the E.O. requires the NRC to "[r]evis[e], in consultation with the Council on Environmental Quality, NRC regulations governing NRC's compliance with the National Environmental Policy Act to reflect the Congress's 2023 amendments to that statute and the policies articulated in sections 2 and 5 of E.O. 14154 of January 20, 2025 (Unleashing American Energy)." In addition, this rule addresses Presidential directives in E.O. 14154, "Unleashing American Energy," Executive Order 14192, "Unleashing Prosperity Through Deregulation," Executive Order 14270, "Zero-Based Regulatory Budgeting to Unleash American Energy;" in consideration of amendments made to the National Environmental Policy Act by the Fiscal Responsibility Act of 2023 (FRA) and the One Big Beautiful Bill Act, Pub. L. No. 119-21, 139 Stat. 72 (2025) (OBBBA), the U.S. Supreme Court's recent decision in *Seven County Infrastructure Coalition v. Eagle County, Colorado*, 145 S. Ct. 1497 (2025), Staff Requirements Memorandum (SRM)-SECY-25-0007, "SRM-SECY-25-0007, "Withdrawing the Environmental Justice Policy Statement and Environmental Justice Strategy," dated April 10, 2025 ((Agencywide Documents Access and Management System (ADAMS) Accession No.ML25100A106), and SRM-SECY-24-0046, "Implementation of the Fiscal Responsibility Act of 2023 National Environmental Policy Act Amendments," dated July 28, 2025 (ML25209A050).

EO 14154, "Unleashing American Energy," instructs agencies, consistent with applicable law, to "prioritize efficiency and certainty over any other objectives...that do not align with the policy goals set forth in section 2 of this order or that could otherwise add delays and ambiguity to the permitting process." Additionally in Staff Requirements Memorandum (SRM)-SECY-24-0046, "Implementation of the Fiscal Responsibility Act of 2003National Environmental Policy Act Amendments, dated July 28, 2025 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML24078A013), the Commission directed the staff to consider establishing categorical exclusions for actions beyond those currently listed in 10 CFR 51.22, including but not limited to subsequent license renewals, power uprate license amendments, microreactor licensing, advanced demonstration projects, site envelopes for specific reactor technologies, and site decommissioning.

In accordance with E.O. 14154, E.O. 14300, and SRM-SECY-24-0046, the NRC is proposing to amend its regulations in 10 CFR Part 51, "Implementation of the National Environmental Policy

Act: Proposed Rule" (Docket ID NRC-2025-0478; RIN 3150-AL38), referred to from here as the Part 51 proposed rule), including 10 CFR 51.22. As part of the rulemaking, the NRC is proposing to revise 10 CFR 51.22 to include an additional 11 categories of actions that normally do not significantly affect the quality of the human environment (42 U.S.C. § 4336e(1)). The NRC has developed this written record containing information to substantiate its determination to expand the list of categorical exclusions.

General Overview of Categorical Exclusions

There are three levels of National Environmental Policy Act (NEPA) analyses:

1. environmental assessments
2. environmental impact statements
3. categorical exclusions

If a Federal agency believes that the environmental impacts of a proposed action are not likely to be significant, the agency may prepare the first type of NEPA analyses, an environmental assessment (EA). An EA is a concise document that provides sufficient evidence and analysis for determining whether to make a finding of no significant impact (FONSI) or to prepare a more detailed analysis in an environmental impact statement (EIS). If a Federal agency believes that the environmental impacts of a proposed action may be significant (for example, because an EA did not result in a FONSI), the agency will prepare the second type of NEPA analyses, an EIS. An EIS is a detailed written statement of the reasonably foreseeable environmental impacts of a proposed action and reasonable range of alternatives to the proposed action.

By contrast, the third type of NEPA analyses, a categorical exclusion, describes a category of actions an agency has determined normally does not significantly affect the quality of the human environment, consistent with its NEPA implementing procedures. Once a Federal agency has established a categorical exclusion, the agency is not required to prepare an EA or EIS for any action that falls within the scope of the categorical exclusion unless the agency finds, for any particular action, that there are extraordinary circumstances that would preclude use of the categorical exclusion. Extraordinary circumstances are those in which a normally excluded action has the potential to have a significant environmental effect. Categorical exclusions are a core feature of NEPA practice to facilitate efficient and effective reviews in accordance with Congress's intent. Categorical exclusions are an essential tool for reducing the regulatory burden for a category of actions that the NRC has determined normally does not significantly affect the quality of the human environment.

NRC Categorical Exclusion Regulations

The NRC's categorical exclusion regulations are found in 10 CFR 51.22. On March 12, 1984 (49 FR 9352), the NRC published 10 CFR Part 51, including Section 51.22, which included the NRC's first list of 18 categorical exclusions in 10 CFR 51.22(c). Section 51.22 was amended on April 19, 2010 (75 FR 20248) and expanded to 25 categorical exclusions. On March 30, 2026 (91 FR 15519), the NRC reorganized and amended its list of categorical exclusions to clarify the scope of existing categories, improve consistency in their application, and add new categories of actions. The reorganization lists the categorical exclusions in four separate paragraphs based

on threshold criteria used to more clearly and consistently identify the categories of actions being excluded.

When the NRC relies on a categorical exclusion, then NRC first determines whether the proposed agency action meets the scope and applicable criteria for the categorical exclusion, and whether extraordinary circumstances are present that would preclude the use of that categorical exclusion.

Basis for Proposed Amendment of Categorical Exclusion Regulation

As stated earlier, E.O. 14300 section 5(c) directs the NRC to revise its regulations consistent with “the policies articulated in sections 2 and 5 of Executive Order 14154.” E.O. 14154 instructs agencies, consistent with applicable law, to “prioritize efficiency and certainty over any other objectives ... that do not align with the policy goals set forth in section 2 of this order or that could otherwise add delays and ambiguity to the permitting process.” In SRM-SECY-24-0046, the Commission directed the staff to consider establishing categorical exclusions for actions beyond those currently listed in 10 CFR 51.22. In accordance with E.O. 14300 and SRM-SECY-24-0046, the NRC is proposing to revise 10 CFR 51.22.

As part of the Part 51 rulemaking, the NRC is proposing to revise the definition of effects in 10 CFR Part 51 (or impacts, which are used interchangeably for the purposes of 10 CFR Part 51 consistent with general NEPA practice) to align with the definition of effects in the Council of Environmental Quality’s (CEQ’s) September 29, 2025 guidance document, “Agency NEPA Procedures Template,” and in response to recent efforts to streamline NEPA and the NRC’s permitting processes. Specifically, the NRC is redefining the scope of the environmental effects to those effects from the proposed agency action that are within the agency’s substantive authority to take action to address (e.g., by denying or conditioning a license). The CEQ’s recommended definition of “effects” explains that a “but for” causal relationship is insufficient to make an agency responsible for a particular effect under NEPA as recently interpreted by the U.S. Supreme Court in *Seven County Infrastructure Coalition v. Eagle County, Colorado*, 145 S. Ct. 1497 (2025). The definition also excludes “effects that the agency has no ability to prevent due to the limits of its regulatory authority,” consistent with the U.S. Supreme Court’s holding in *Public Citizen* and reaffirmed in *Seven County*. This proposed definition is also consistent with the Commission’s consideration in 2022 that “[u]nder NEPA, ‘[a]n agency has no obligation to gather or consider environmental information if it has no statutory authority to act on that information.’” *NextEra Energy Point Beach, LLC* (Point Beach Nuclear Plant Units 1 and 2), CLI-22-5, 95 NRC 97, 104–05 (2022) (quoting *Sierra Club v. FERC* (Sabal Trail), 867 F.3d 1357, 1371–73 (D.C. Cir. 2017)).

As previously described, the NRC’s regulatory authority is generally limited to matters with a reasonable nexus to radiological health and safety or the common defense and security, except concerning Atomic Energy Act (AEA) § 11e.(2) byproduct material. (72 FR 57416; Oct. 9, 2007, and 76 FR 56961; Sept. 15, 2011). This interpretation has been reviewed and upheld repeatedly by the courts. In 1969, the U.S. Court of Appeals for the First Circuit reviewed this issue in *New Hampshire v. the Atomic Energy Commission [AEC]*, 406 F.2d 170 (1st Cir. 1969), cert. denied, 395 U.S. 962 (1969). The First Circuit, after noting that the scope of the terms “public health and safety” were not specifically defined in the statute, reviewed the legislative history. *Id.* at 173–75 (citing as examples “[AEA] Sections 53(b), 63(b), 69, 81, 103(d), 104(d), 161(b), an 161(i).”). Based upon its review, the First Circuit concluded that the AEC’s (the NRC’s predecessor

agency) regulatory authority was limited to the scrutiny of and protection against radiation hazards. The U.S. Court of Appeals for the District of Columbia Circuit similarly agreed that the AEA limits the NRC's consideration of health and safety to the special hazards of radioactivity. *People Against Nuclear Energy v. Nuclear Regulatory Commission*, 678 F.2d 222 (D.C. Cir. 1982), rev'd on other grounds, *Metropolitan Edison Company v. People Against Nuclear Energy*, 460 U.S. 766 (1983). It is important to note that while the Uranium Mill Tailings Radiation Control Act of 1978 (UMTRCA) amended the AEA to give the NRC the authority "to protect the public health and safety and the environment from radiological and nonradiological hazards associated with the processing and with the possession of such material" with respect to certain byproduct material (§ 84.a.(1) of the AEA), the NRC's authority over nonradiological hazards is limited to those hazards specifically associated with the processing and possession of byproduct material.

Therefore, under this proposed rule the NRC's evaluation of reasonably foreseeable effects of the proposed agency action and reasonable range of alternatives (e.g., the no-action alternative) would focus on those radiological effects that the NRC has the substantive statutory authority to regulate (e.g., radiological impacts and, in some cases, the impact of chemical hazards of radiological materials), as described in the definition of "effects" in 10 CFR 51.4. This means that while certain activities may have a close-causal relationship with the proposed agency action, the NRC may not have legal authority to prevent or mitigate the effects and therefore will not consider those effects in its NEPA reviews. For example, although the NRC has the statutory authority to issue a construction permit, it does not have the authority to mitigate the nonradiological impacts—such as dust, noise, non-radiological water and air quality impacts, non-radiological ecological impacts, etc., during construction. The exception to this narrowed NEPA scope would be NEPA reviews for actions related to AEA § 11e.(2) byproduct materials (e.g., mill tailings), for which the NRC has additional regulatory authority to protect the public health and safety and the environment from radiological and nonradiological hazards associated with the processing and with the possession of such material.

In identifying new categorical exclusions, the NRC considered the following: (1) the new definition of "effects" defined as "changes to the human environment from the proposed action or alternatives that are reasonably foreseeable and have a reasonably close causal relationship to the proposed action or alternatives" within the CEQ's September 29, 2025 guidance document, which limits the scope of the effects NRC should consider under NEPA to those effects that the NRC has the substantive statutory authority to mitigate and (2) the definition of a categorical exclusion in NEPA Section 111(1), which states, "category of actions that a Federal agency has determined normally does not significantly affect the quality of the human environment within the meaning of [NEPA] section 102(2)(C)." This proposed rule is based upon a review of NRC past EA/FONSIs, generic environmental impact statements, and site-specific environmental impact statements for subsequent license renewals, power uprate license amendments, construction permits, and site decommissioning to develop new categorical exclusions and to define parameters and criteria that bounds the applicability of the categorical exclusion. Additionally, the NRC relied on the expertise, experience, and judgment of its professional staff to develop new categorical exclusions. Tables under Section "Environmental Assessments and Findings of No Significant Impact Substantiating Categorical Exclusions" below provide examples of EAs/FONSIs that support the development of certain new categorical exclusions. Additionally, a table is provided under Section "NRC Subject Matter Experts" below that identifies NRC staff that provided expertise and judgment in developing categorical exclusions.

The NRC is proposing to add the following categorical exclusions:

1. *Approvals related to long-term surveillance plans (LTSP) provided that criteria in Appendix A in part 40 of this chapter for Title II sites or 40 CFR 192 for Title I sites are met.* The Atomic Energy Act of 1954, as amended, contains the statutory requirements for transfer of the title and custody of byproduct material and any land used for the disposal of such byproduct material from a uranium mill licensee to either federal or state control, before termination of the licensee-specific license. These requirements are codified in 10 CFR Part 40, at Section 40.27, “General license for custody and long-term care of residual radioactive material disposal sites,” and 10 CFR Section 40.28, “General license for custody and long-term care of uranium or thorium byproduct materials disposal sites.”

The Uranium Mill Tailing Radiation Control Act (UMTRCA) of 1978, as amended, assigned responsibility for remediating sites to the U.S. Department of Energy (referred to as Title I of UMTRCA sites) where uranium ore milling had ceased as of 1978. Title II of UMTRCA sites are sites where uranium ore was being processed under an active license as of 1978 and the site licensee is responsible for remediation. The U.S. Department of Energy assumes responsibility for each UMTRCA disposal site under a general NRC license for long-term surveillance. For Title I of UMTRCA sites, the general license under 10 CFR 40.27 takes effect when the NRC concurs with the Department of Energy's determination of completion of remedial action at the disposal site and accepts a site LTSP. For Title II of UMTRCA sites, the general license under 10 CFR 40.28 takes effect when the NRC terminates, or concurs in an Agreement State's termination of, the current specific license and the Commission has accepted the LTSP. UMTRCA Title I sites are remediated to standards established by the U.S. Environmental Protection Agency in Title 40 CFR 192, “Health and Environmental Protection Standards for Uranium and Thorium Mill Tailings.” UMTRCA Title II sites are remediated to the standards in 10 CFR Part 40, Appendix A.

The NRC has determined that impacts from activities conducted in implementing the LTSP are normally not significant. Long-term surveillance plans document a general licensee's plan for long-term care, including inspection, monitoring, maintenance, and emergency measures necessary to protect public health and safety. Monitoring and maintenance activities that have the potential to have impacts such as drilling of new monitoring wells will have occurred during remediation of the site. Implementation of LTSPs is intended to prevent the release of NRC regulated material and to prevent significant individual or cumulative occupational radiation exposure after the sites have been remediated to appropriate standards. Based on the expertise and judgment of its professional staff, the NRC has determined that the NRC's approval of LTSPs would not normally be significant, given that remediation activities of the site would have occurred prior to the approval of an LTSP and the activities to be conducted under an LTSP would consist of annual inspections and minor maintenance activities that in general would not involve construction activities, excavation, or physical changes to the site. For example, in 2023 the NRC completed an EA for an LTSP (ADAMS Accession No. ML23236A452), which concluded with a FONSI (88 FR 74211; October 30, 2023) given that the proposed agency action would not involve construction activities, excavation, or physical changes to the site or physical environment

and the activities would consist of annual inspections and minor maintenance activities. These actions would be categorically excluded by proposed 10 CFR 51.22(f)(1).

2. *Approvals of partial site releases or license termination plans, except for facilities and sites that possess Atomic Energy Act Section 11e.(2) byproduct material, provided that the NRC has determined that the radiological criteria for unrestricted use in 10 CFR 20.1402 are met.* To be eligible for approval of a partial site release or license termination plan, facilities must meet the radiological criteria for unrestricted use in 10 CFR 20.1402, “*Radiological criteria for unrestricted use.*” A site is considered acceptable for unrestricted use if the residual radioactivity that is distinguishable from background radiation results in a total effective dose equivalent to an average member of the critical group that does not exceed 25 mrem (0.25 mSv) per year, including that from groundwater sources of drinking water, and the residual radioactivity has been reduced to levels that are as low as reasonably achievable (ALARA). Compliance with the radiological criteria for unrestricted use specified in 10 CFR 20.1402 ensures adequate protection of the public and the environment from any radioactivity remaining in the facility or site and reflects a determination by the NRC that no further remediation would be cost-beneficial. Consistent with the new proposed definition of effects, once this determination has been made, there are no further environmental effects under NEPA within the scope of the NRC’s substantive statutory authority to prevent or mitigate that could be considered significant. Between 2009 and 2025, the NRC completed approximately 4 EAs related to partial site release approvals and compliance with radiological criteria for unrestricted criteria was demonstrated. Each of the four EAs resulted in a FONSI and a determination that no EIS was required. Between 2000 and 2025, the NRC completed approximately 10 EAs related to license termination plan approvals. Each of these 10 EAs resulted in a FONSI and a determination that no EIS was required. Based on the completed EAs/FONSIs, new proposed definition of effects, and expertise and judgment of its professional staff, approvals of partial site releases and license termination plans where radiological criteria for unrestricted use in 10 CFR 20.1402 is met would not normally significantly affect the quality of the human environment since compliance with the radiological criteria for unrestricted use specified in 10 CFR 20.1402 ensures adequate protection of the public and the environment from any radioactivity remaining in the facility or site. Therefore, the action of approving partial site releases and license termination plans that meet the radiological criteria for unrestricted use in 10 CFR 20.1402 does not normally significantly affect the quality of the human environment. These actions would be categorically excluded by proposed 10 CFR 51.22(f)(2).
3. *Issuance of standard design certifications and manufacturing licenses under 10 CFR Part 52 or 10 CFR Part 53 provided that the severe accident mitigation design alternatives do not provide cost beneficial risk improvements.* The NRC has previously concluded that issuance of standard design certifications and manufacturing licenses under 10 CFR 52, “Licenses, Certifications, and Approvals for Nuclear Power Plants” have no significant environmental impact (72 FR 49352; August 28, 2007). Issuance of standard design certifications and manufacturing licenses do not authorize construction or operation of a nuclear power facility. In 2007 and 2026, the NRC amended 10CFR 51.32 to explicitly state that there is no significant environmental impact associated with issuance of a standard design certification or a manufacturing license under 10 CFR Part 52 or 10 CFR Part 53 (72 FR 49352 and 91

FR 15696). This is, essentially, the legal equivalent of a categorical exclusion (72 FR 49352) and as part of this rulemaking, the NRC is proposing to categorically exclude issuance of standard design certifications and manufacturing licenses under 10 CFR Part 52 and 10 CFR Part 53. However, severe accident mitigation design alternatives (SAMDA) must be addressed at the design certification or manufacturing license stage. SAMDAs are alternative design features for preventing and mitigating severe accidents, which may be considered for incorporation into the proposed design. The SAMDA analysis is that element of the severe accident mitigation alternatives analysis dealing with design and hardware issues. At the design certification stage or manufacturing license stage, the NRC's review is directed at determining if there are any cost beneficial SAMDAs that should be incorporated into the design. It is most cost effective to incorporate SAMDAs into the design at the design certification stage or manufacturing license stage. Retrofitting a SAMDA into a design certification or manufactured reactor once site-specific design and engineering for a nuclear power facility have been completed would increase the cost of implementing a SAMDA. The retrofitting costs continue to increase in ensuing stages of facility construction and operation. For these reasons, the NRC determined that the environmental review for design certifications or manufacturing licenses should address SAMDAs. Therefore, the NRC concludes issuance of standard design certifications and manufacturing licenses under 10 CFR Part 52 or 10 CFR Part 53 do not normally significantly affect the quality of the human environment, provided that the SAMDA evaluation does not identify cost beneficial risk improvements. These actions would be categorically excluded by proposed 10 CFR 51.22(f)(3).

4. *Changes to standard design certifications and manufacturing licenses under 10 CFR Part 52 or 10 CFR Part 53 provided that no new severe accident mitigation design alternatives to reasonably incorporate into the design are identified and previously considered severe accident mitigation design alternatives remain rejected.* The NRC has previously concluded that amendments to standard design certifications and manufacturing licenses under 10 CFR 52 have no significant environmental impact (72 FR 49352). In connection with a proposed amendment to a manufacturing license or standard design certification, the NRC determined that the environmental review should only address whether the design change which is subject of a proposed amendment either renders a SAMDA previously identified and rejected to become cost beneficial, or results in the identification of new SAMDAs that may be reasonably incorporated into the design certification or manufacturing license. Subpart H to 10 CFR Part 53 (91 FR 15696) provides the requirements for standard design certifications and manufacturing licenses and is equivalent to and includes existing licensing, certification, and approval processes currently covered under 10 CFR Part 50. Therefore, the NRC concludes that changes to a standard design certification and manufacturing licenses under 10 CFR Part 52 or 10 CFR Part 53 of this chapter do not normally significantly affect the quality of the human environment, provided that no new severe accident mitigation design alternatives to reasonably incorporate into the design are identified and previously considered severe accident mitigation design alternatives remain rejected. These actions would be categorically excluded by proposed 10 CFR 51.22(f)(4).
5. *Approvals under 10 CFR 20.2002 provided that there is no significant change in the types or significant increase in the amounts of any radiological effluents that may be released offsite, no significant increase in public or occupational radiation exposure, and no significant*

increase in the potential for or consequences from radiological accidents. The regulation under 10 CFR 20.2002, "Method for obtaining approval of proposed disposal procedures," allows for alternative disposal methods that are different from those already defined in the regulations. Byproduct materials, or wastes, are produced in using radioactive materials and in generating electricity from nuclear power. Wastes range from highly radioactive components from the core of nuclear reactors to waste that has very low concentrations of residual radioactivity and poses minimal risk to human health. This waste, referred to as low-level waste, is generally defined as consisting of radioactive wastes other than high-level waste, spent fuel, transuranic wastes, or certain types of byproduct material, including uranium mill tailings from uranium recovery operations. Low-level waste includes items that have become contaminated with radioactive material or have become radioactive through exposure to neutron radiation. This waste typically consists of contaminated protective shoe covers and clothing, rags, mops, filters, reactor water treatment residues, equipment and tools, luminous dials, medical tubes, swabs, injection needles, syringes, and laboratory animal carcasses and tissues. The level of radioactivity in low-level waste can range from just above background levels found in nature to much higher levels, in certain cases, such as parts from inside the reactor vessel of a nuclear power plant. It may include not only radioactive waste from the nuclear fuel cycle but also naturally occurring materials, such as uranium extracted from water onto ion exchange resins.

The regulation under 10 CFR 20.2002 provides a pathway for licensees and applicants to obtain approval to dispose of licensed material, often very low-level waste, not already specifically defined in the regulations, such as disposal on a licensee's site, on offsite private property, or hazardous or local solid waste disposal facilities that are permitted under the Resource Conservation and Recovery Act. The term "very low-level waste" does not have a statutory or regulatory definition, but generally means wastes that contain some residual radioactivity, including naturally occurring radionuclides, which can be safely disposed of in hazardous or municipal solid waste landfills. Such waste is invariably a fraction of the limits for Class A low-level waste contained in 10 CFR Part 61, "Licensing Requirements for Land Disposal of Radioactive Waste." Request approvals under 10 CFR 20.2002 require that doses are maintained ALARA and within the dose limits in 10 CFR Part 20. Between 2010 and 2024, the NRC has completed approximately 10 EAs associated with the approval of 10 CFR 20.2002 requests, each resulting in a FONSI and determination that no EIS was required. The EAs have concluded that 10 CFR 20.2002 requests do not result in an increase in the probability or consequences of accidents, in significant changes to the types or amounts of effluents released offsite, or in a significant increase to occupational or public dose. Consistent with the new proposed definition of effects, once this determination has been made, there are no further environmental effects under NEPA within the scope of the NRC's substantive statutory authority to prevent or mitigate that could be considered significant. Therefore, the NRC concludes 10 CFR 20.2002 approvals do not normally significantly affect the quality of the human environment, provided that there is no significant change in the types or significant increase in the amounts of any radiological effluents that may be released offsite, no significant increase in public or occupational radiation exposure, and no significant increase in the potential for or consequences from radiological accidents. These approvals would be categorically excluded by proposed 10 CFR 51.22(g).

6. *Actions related to changes to reactor power levels provided that there is no significant change in the types or significant increase in the amounts of any effluents that may be released offsite, no significant increase in public or occupational radiation exposure, no significant increase in the potential for or consequences from radiological accidents, and no significant increase in radioactive solid waste.* When the NRC licenses a commercial nuclear power plant, it sets limits on the maximum heat output, or power level, for the reactor core. A power uprate is an increase of a commercial nuclear power plant's power level. Plant modifications are often needed to increase the power output of a reactor. There are three types of uprates: (1) measurement uncertainty recapture power uprates, (2) stretch power uprates, and (3) extended power uprates. Measurement uncertainty recapture power uprates increase the licensed power level by less than 2 percent. Stretch power uprates are typically between 2 percent and 7 percent, with the actual increase depending on a plant design's specific operating margin. Extended power uprates increase power levels as high as 20 percent. Between 2010 and 2024, the NRC has completed approximately 10 EAs for license amendments related to extended power uprates, with each resulting in a FONSI and a determination that no EIS was required. The EAs have concluded that extended power uprates do not significantly increase the probability or consequences of accidents, change the types or amounts of effluents released offsite, increase occupational or public dose, or increase radioactive solid waste. Consistent with the new proposed definition of effects, once this determination has been made, there are no further environmental effects under NEPA within the scope of the NRC's substantive statutory authority to prevent or mitigate that could be considered significant. Therefore, the NRC concludes actions related to the changes to reactor power levels do not normally significantly affect the quality of the human environment. These actions would be categorically excluded by proposed 10 CFR 51.22(h).

7. *Actions under 10 CFR Part 50, 10 CFR Part 52, or 10 CFR Part 53 related to a limited work authorization construction permit, operating license, early site permit, or combined license for nuclear power or non-power reactors provided that the facility and site meet or are bounded by and will continue to meet or be bounded by the environmental plant parameter and site parameter envelopes in 10 CFR 51, Subpart A, Appendix C, Table C-1 and no new and significant information has been identified for any of the issues identified as Category 1 and listed in Table C-1, such that it would change the conclusions listed in the table and further described in NUREG-2249.* In NUREG-2249, "Generic Environmental Impact Statement for Licensing of New Nuclear Reactors" (NR GEIS), the NRC addresses the impacts of building and operating new nuclear reactors in the United States. In the NR GEIS, the NRC staff assumes a new reactor may be built anywhere in the U.S. and uses a technology-neutral approach that identifies and analyzes environmental issues, common to building and operating a nuclear reactor, for which a generic determination that impacts would not be environmentally significant is possible as long as specific reasonable and practicable values and assumptions are met. Values and assumptions regarding the design of the plant are termed the plant parameter envelope (PPE) and values and assumptions regarding site conditions are termed the site parameter envelope (SPE). The PPE consists of bounding values or parameters for reactor design features regardless of the site. To accommodate the broad range of siting possibilities, staff developed SPEs that provide limiting values and assumptions related to the site.

The NR GEIS presents generic analyses that evaluate the possible impacts of a reactor that fits within the bounds of the PPE on a site that fits within the bounds of the SPE for those issues for which a generic conclusion was possible (referred to as Category 1 issues). Each Category 1 issue corresponds to a specific type of environmental impact from building or operating of a nuclear reactor. Category 1 issues include one or more PPE/SPE parameters with associated values and assumptions; these values and assumptions are set to define an impact significance level of SMALL. Category 2 issues are environmental issues for which a meaningful generic analysis of environmental impacts is not possible because the issue requires consideration of project specific information.

The environmental impact conclusions of the NR GEIS are codified in 10 CFR Part 51, Subpart A, Appendix C, "Environmental Effect of Issuing a Permit or License for a New Nuclear Reactor." The Part 51 proposed rule would retain codified environmental impact conclusions in Appendix C to Subpart A of 10 CFR Part 51 within the scope of the NRC's regulatory authority for these licensees (i.e., radiological impacts on health and safety and the common defense). Codified conclusions for environmental effects that are beyond the NRC's substantive statutory authority would be removed from this section and table. Twenty-seven (27) Category 1 issues remain in Table C-1 in the proposed 10 CFR Part 51 rule with respect to water resources, terrestrial ecology, aquatic ecology, environmental hazards-radiological environment, radiological waste management, postulated accidents, fuel cycle, transportation of fuel and waste, and decommissioning. For each of these Category 1 issues, the impacts are SMALL. As discussed in Element 7 in Section IV, "Discussion," of the Part 51 proposed rule, the NRC has determined that a SMALL impact in the NR GEIS means that the effect is not significant. Therefore, if the relevant values and assumptions in the PPE and SPE are met for the Category 1 issues in Table C-1 in the proposed 10 CFR Part 51 rule and there is no new and significant information that would change the conclusions in NUREG-2249, the impacts are not significant.

The NR GEIS supports licensing actions for any new reactor, including research and test reactors. Therefore, the NR GEIS and its findings, codified in 10 CFR Part 51, can be applied to power and non-power reactors (i.e., research and test reactors). Furthermore, the scope of the NR GEIS and findings includes limited work authorizations, early site permits, construction permits, operating licenses, or combined licenses. Therefore, if the relevant values and assumptions in the PPE and SPE are met in Table C-1 and there is no new and significant information, the NRC concludes actions related to limited work authorizations, early site permits, construction permits, operating licenses, or combined licenses do not normally significantly affect the quality of the human environment. These actions would be categorically excluded by proposed 10 CFR 51.22(i).

8. *Actions related to renewed licenses under 10 CFR Part 54 provided that (1) no new and significant information has been identified for any of the issues identified as Category 1 and listed in Table B-1 of Appendix B of 10 CFR 51, such that it would change the conclusions listed in the table and further described in NUREG-1437, Revision 2; (2) inadvertent radionuclide releases to groundwater have not resulted in radionuclide concentrations onsite or offsite that exceed drinking water maximum contaminant levels and there are no current or ongoing inadvertent releases under investigation; and (3) for plants with cooling ponds, cooling pond water quality is maintained such that the maximum contaminant levels for*

radionuclides in drinking water have not been exceeded. Revision 2 to NUREG-1437, “Generic Environmental Impact Statement for License Renewal of Nuclear Plants” (LR GEIS) documents a systematic approach that the NRC uses to evaluate the environmental impacts of renewing the operating licenses of commercial nuclear power plants. The LR GEIS provides the technical basis for Table B-1, in Appendix B to Subpart A, in 10 CFR Part 51. The LR GEIS defines which impacts would essentially be the same at all nuclear power plants or a subset of plants (i.e., generic or Category 1 issues) and which impacts could be different at different plants and would require a plant-specific analysis to determine the impacts (Category 2 issues).

A Category 1 issue is an issue that meets the following criteria: (1) the environmental impacts associated with the issue have been determined to apply either to all plants or, for some issues, to plants having a specific type of cooling system or other specified plant or site characteristic, (2) a single significance level (i.e., SMALL, MODERATE, or LARGE) has been assigned to the impacts (except for certain issues discussed below in more detail), and (3) mitigation of adverse impacts associated with the issue has been considered in the analysis, and it has been determined that additional plant-specific mitigation measures are likely not to be sufficiently beneficial to warrant implementation. A Category 2 issue is defined as an issue where one or more of Category 1 criteria cannot be met, and therefore, additional plant-specific review is required. If there is no new and significant information for a Category 1 issue, the licensee and applicant and NRC can rely on that Category 1 generic finding and analysis in the LR GEIS. Category 1 issues identified and described in the LR GEIS may be applied to any application for initial license renewal (LR) or first subsequent license renewal (SLR) for operating nuclear power plants covered by the revised LR GEIS and have been determined to have a SMALL impact for all plants or a subset of plants.

Table B-1 in Appendix B to Subpart A, in 10 CFR Part 51 summarizes the Commission's findings on the scope and magnitude of environmental impacts of renewing the operating license for a nuclear power plant. The Part 51 proposed rule would retain codified environmental impact conclusions in Appendix B to Subpart A within the scope of the NRC's regulatory authority (i.e., radiological impacts on health and safety and the common defense). Codified conclusions for environmental effects that are beyond the NRC's substantive statutory authority would be removed from this section and table. Table B-1 in the Part 51 proposed rule identifies 18 Category 1 issues across various resources (terrestrial, aquatic, human health, waste management, postulated accidents, uranium fuel cycle, and termination of nuclear power operations and decommissioning) and for 15 of these issues, a SMALL impact is concluded. As discussed in Element 7 in Section IV, “Discussion,” of the Part 51 proposed rule, the NRC has determined for the LR GEIS that a SMALL impact means there is no significant effect.

Table B-1 identifies two Category 1 issues that do not have a significance impact level assigned to the impact. With respect to the Category 1 issue, Offsite Radiological Impacts – Collective Impacts from Other than the Disposal of Spent Fuel and High-Level Waste, a single significance level has not previously been assigned to the impacts. The focus of this issue is the collective radiological doses to and health impacts on the general public resulting from uranium fuel cycle facilities over the license renewal term. No standards exist that can be used to reach a conclusion as to the significance of the magnitude of the

collective radiological effects. There are no regulatory limits applicable to collective doses to the general public from fuel cycle facilities. All regulatory limits are based on individual doses. The practice of estimating health effects on the basis of collective doses may not be meaningful. Nevertheless, the Commission determined that some judgement as to the regulatory NEPA implication of this issue should be made and it makes no sense to repeat the same judgment in every case (61 FR 28478; June 5, 1996). While the Commission has not assigned a single level of significance for the collective impacts of the uranium fuel cycle, the Commission has concluded that these impacts are acceptable in that these impacts would not be sufficiently large to require the NEPA conclusion, for any plant, that the option of extended operation under 10 CFR Part 54, "Requirements for Renewal of Operating Licenses for Nuclear Power Plants," should be eliminated. All fuel cycle facilities are designed and operated to meet the applicable regulatory limits. As reflected in the definition of SMALL where "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," adherence to applicable NRC dose limits would ensure that impacts are SMALL for this issue and therefore not significant.

With respect to the Category 1 issue, "Offsite Radiological Impacts of Spent Nuclear Fuel and High-Level Waste Disposal," a single significance level has not been assigned to the impact. The ultimate disposal of spent fuel in a potential future geologic repository is a separate and independent licensing action that is outside the regulatory scope of license renewal. In 1996, the Commission determined that offsite radiological impacts of spent nuclear fuel and high-level waste disposal would be a Category 1 issue with no impact level assigned (61 FR 28467, 28495). The Commission analyzed the U.S. Environmental Protection Agency (EPA) generic repository standards and dose limits in existence at the time and concluded that offsite radiological impacts warranted a Category 1 determination (61 FR 28467, 28478). In 2013, when the Commission amended Table B-1—along with other 10 CFR Part 51 regulations—it stated that upon finalization of the Waste Confidence rule and accompanying technical analyses (NUREG-2157), the NRC would make any necessary conforming amendments to Table B-1 (78 FR 37282, 37293). NUREG-2157 did not include high-level waste disposal in the analysis of impacts but addressed the technical feasibility of a repository and concludes that a geologic repository for spent fuel is technically feasible and the same analysis applies to the feasibility of geologic disposal for high-level waste. In 2014, the Commission amended Table B-1 to reclassify this issue as a Category 1 issue with no impact level assigned, to refer to the radiation standards for Yucca Mountain, and concluded offsite radiological impacts of spent fuel and high-level waste disposal would not be sufficiently large to require the NEPA conclusion, for any plant, that the option of extended operation under 10 CFR Part 54 should be eliminated (79 FR 56238). The EPA developed Yucca Mountain-specific repository radiation standards, which were adopted by the NRC in 10 CFR Part 63, "Disposal of High-Level Radioactive Wastes in a Geologic Repository at Yucca Mountain, Nevada." As reflected in the definition of SMALL where "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," adherence to applicable NRC dose limits would ensure that impacts are not significant.

Therefore, if there is no new and significant information (such as any activity or aspect associated with the nuclear power plant operations that can act upon the environment in a manner or an intensity not previously recognized or quantified) with respect to the Category 1 issues in Table B-1 in the Part 51 proposed rule, the NRC has determined the impacts are not significant. New and significant information is information that identifies a significant environmental issue that was not considered or addressed in the LR GEIS or information not considered in the assessment of impacts evaluated in the LR GEIS leading to a seriously different picture of the environmental consequences of the action than previously considered. A significant environmental issue includes, but is not limited to, any new activity or aspect associated with the nuclear power plant that can act upon the affected environment in a manner or an intensity not previously recognized or quantified.

Table B-1 in the Part 51 proposed rule identifies two Category 2 issues that are within the scope of the NRC's regulatory authority. As a result of lessons learned and knowledge gained from license renewal environmental reviews conducted by the NRC since 1996 for the Category 2 issues of Radionuclides released to groundwater and Groundwater quality degradation (plants with cooling ponds), the NRC staff has identified conditions and factors that should normally mean that impacts are not significant.

The Category 2 issue, Radionuclides released to groundwater, evaluates the potential contamination of groundwater from the inadvertent (abnormal) release of liquids containing radioactive material from nuclear power plant systems into the environment. The majority of the inadvertent liquid release events have involved tritium, which is a radioactive isotope of hydrogen. However, other radioactive isotopes, such as cesium and strontium, have also been inadvertently released into the groundwater. The types of events have included, but have not been limited to, leakage from spent fuel pools, storage tanks, buried piping, failed pressure relief valves on an effluent discharge line, and other nuclear power plant equipment. In 2006, the NRC chartered a task force to conduct a lessons-learned review of these incidents. On September 1, 2006, the task force issued its report: "Liquid Radioactive Release Lessons Learned Task Force Report." The report concluded that although there were numerous events where radioactive liquid was released to the groundwater in an unplanned, uncontrolled, and unmonitored fashion, based on the data available, no instances where public health and safety was adversely affected were identified. As discussed above, the LR GEIS documents the results of the systematic approach the NRC used to evaluate the environmental impacts of renewing the operating licenses of commercial nuclear power plants. For this Category 2 issue, Section 4.5.1.2.7 of the LR GEIS documents the lessons learned and knowledge gained from license renewal environmental reviews (as documented in reactor license renewal supplemental environmental impact statements, including for example in NRC 2015, 2018, and 2020) conducted by the NRC since 1996. This supports the NRC's determination that impacts on groundwater as a result of radionuclide releases are not significant if inadvertent radionuclide releases to groundwater have not resulted in radionuclide concentrations onsite or offsite that exceed drinking water maximum contaminant levels and there are no current or ongoing inadvertent releases under investigation such that the impact is unknown or uncertain. Therefore, the NRC concludes that the impacts related to this issue are normally not significant.

The Category 2 issue, Groundwater quality degradation (plants with cooling ponds), evaluates groundwater quality and beneficial use (based on applicable water use classification) becoming degraded as a result of the migration of contaminants discharged to cooling ponds. Nuclear plants that use cooling ponds, impoundments, or similar structures as part of their recirculating cooling water system discharge heated cooling water effluent back to the structure. The effluent's contaminant concentration may increase relative to that of the makeup water as it passes through the cooling system. Because the ponds are generally unlined, the water discharged to them can interact with the shallow groundwater system and may create a groundwater mound. In this case, groundwater below the pond can flow radially outward, and this groundwater would have some of the characteristics of the cooling system effluent. Therefore, radionuclides from the cooling pond can seep into the groundwater. For this Category 2 issue, Section 4.5.1.2.6 of the LR GEIS documents the lessons learned and knowledge gained from license renewal environmental reviews (as documented in reactor license renewal supplemental environmental impact statements, including for example in NRC 2013, 2016, 2019, and 2024) conducted by the NRC since 1996. This supports the NRC's determination that for plants with cooling ponds, groundwater quality degradation is not significant if cooling pond water quality is maintained such that the maximum contaminant levels for radionuclides in drinking water have not been exceeded. Therefore, the NRC concludes that impacts related to this issue are normally not significant.

Therefore, NRC concludes actions related to renewed licenses under 10 CFR Part 54 do not normally significantly affect the quality of the human environment provided that (1) no new and significant information has been identified for any of the issues identified as Category 1 and listed in Table B-1 of Appendix B of 10 CFR 51, such that it would change the conclusions listed in the table and further described in NUREG-1437, Revision 2; (2) inadvertent radionuclide releases to groundwater have not resulted in radionuclide concentrations onsite or offsite that exceed drinking water maximum contaminant levels and there are no current or ongoing inadvertent releases under investigation; and (3) for plants with cooling ponds, cooling pond water quality is maintained such that the maximum contaminant levels for radionuclides in drinking water have not been exceeded. These actions would be categorically excluded by proposed 10 CFR 51.22(j).

9. *Actions related to the possession and use of special nuclear material for an activity at a permanent site, provided that (i) there are no associated effluents that may be released offsite, or there is no significant change in the types of or significant increase in the amounts of effluents that may be released offsite, (ii) occupational and public dose meets 10 CFR Part 20, "Standards for Protection Against Radiation" limits, and (iii) any new or increased possession limit for licensed material is of a physical form that is not readily dispersible. This categorical exclusion would not apply to actions related to enriched uranium processing, fabrication of uranium fuel or fuel assemblies, uranium enrichment, enriched uranium hexafluoride conversion, plutonium processing, fabrication of mixed-oxide fuel or fuel assemblies, or scrap recovery of special nuclear material.* This categorical exclusion focuses on actions related to the possession and use of special nuclear material that is not in a physical form that is readily dispersible and for activities at a permanent (fixed) site that are not related to enriched uranium processing, fabrication of uranium fuel or fuel assemblies, uranium enrichment, enriched uranium hexafluoride conversion, plutonium processing, fabrication of mixed-oxide fuel or fuel assemblies, or scrap recovery of special nuclear

material. Material is considered to be in a dispersible form if it can be readily ingested or inhaled (e.g., in a gaseous, liquid, or powder form) in normal or accidental situations or if it is processed in a manner such that the material containing the dispersible material is physically or chemically changed (78 FR 32316, September 13, 2013). Therefore, activities associated with this categorical exclusion do not have associated radiological effluents that may be released into the environment or any release is not significant. External exposure to direct and scattered radiation is the primary pathway of radiation. Occupational and public dose must meet 10 CFR Part 20 limits. Compliance with occupational and public dose requirements in 10 CFR Part 20 ensures adequate protection of the public and the environment from any radioactivity remaining in the facility or site. For the purpose of assessing radiological impacts, the Commission has concluded that radiological impacts are not significant if doses to individuals and releases do not exceed the permissible levels in the Commission's regulations and, thus, would not have reasonably foreseeable significant effects. Consistent with the new proposed definition of effects, there are no further environmental effects within the scope of the NRC's substantive statutory authority to prevent or mitigate that could be considered significant. So long as the action is related to the possession and use of special nuclear material for an activity at a permanent site that is not related to those listed in the categorical exclusion and the criteria (i) through (iii) are met, the environmental impacts are anticipated to be similar to those actions under NRC's existing categorical exclusion 10 CFR 51.22(a)(10), such as use of radioactive materials for research and development and for educational purposes [10 CFR 51.22(a)(10)(v)] or possession of radioactive material incident to performing services such as installation, maintenance, leak tests, and calibration [10 CFR 51.22(a)(10)(x)], for which the NRC has determined do not have a significant effect on the human environment. Therefore, based on the expertise and judgment of its professional staff and for the reason discussed above, actions related to the possession of special nuclear material for an activity at a permanent site that is not related to activities listed in the categorical exclusion would not normally significantly affect the quality of the human environment, provided that (i) there are no associated effluents that may be released offsite, or there is no significant change in the types of or significant increase in the amounts of effluents that may be released offsite, (ii) occupational and public dose meets 10 CFR Part 20 limits, and (iii) any new or increased possession limit for licensed material is of a physical form that is not readily dispersible. These actions would be categorically excluded by proposed 10 CFR 51.22(k).

Special nuclear material that is not readily dispersible would include, for example, receipt and possession of fabricated reactor fuel or possession and use of special nuclear material sources for calibration, nondestructive testing, or development of radiation detection technologies. This categorical exclusion would not apply to actions related to enriched uranium processing, fabrication of uranium fuel or fuel assemblies, uranium enrichment, enriched uranium hexafluoride conversion, plutonium processing, fabrication of mixed-oxide fuel or fuel assemblies, or scrap recovery of special nuclear material.

10. *Actions under 10 CFR Part 72, except decommissioning actions under 10 CFR 72.54, related to the storage of undamaged spent fuel or reactor related greater-than-class C waste in a dry cask independent spent fuel storage installation located within the site boundary of an operating nuclear power plant or located at an away-from-reactor decommissioned reactor site provided that occupational and public dose meets 10 CFR Part 20 limits, real*

individual dose meets 10 CFR Part 72.104 limits, and postulated accident dose meets 10 CFR 72.106 limits. Between 2010 and 2024, the NRC completed approximately 35 EAs associated with license renewals, approvals of exemptions or license amendments, or decommissioning funding plans related to the storage of undamaged spent fuel or reactor related greater-than-class C waste in a dry cask independent spent fuel storage installation located within the site boundary of an operating power nuclear plant or located at an away-from-reactor site that only stores fuel generated by the decommissioned reactor, each resulting in a FONSI and determination that no EIS was required. The EAs have concluded that these actions do not result in liquid or solid effluents. These actions may result in external exposure to direct and scattered radiation, which is the primary pathway of radiation. The NRC has determined that occupational and public dose would be below 10 CFR Part 20 limits nearest potential member of the public dose is below the limit specified in 10 CFR Part 72.106 and potential radiological impacts resulting from postulated accident events have been found to be below the dose limits in 10 CFR 72.106. Therefore, the NRC concludes that actions under 10 CFR Part 72, “Licensing Requirements for the Independent Storage of Spent Nuclear Fuel, High-Level Radioactive Waste, and Reactor Related Greater Than Class C Waste,” of this chapter, except decommissioning actions under 10 CFR 72.54, related to the storage of spent fuel in an independent spent fuel storage installation at a site occupied by a nuclear plant do not normally significantly affect the quality of the human environment, provided that occupational and public dose meets 10 CFR Part 20 limits, real individual dose limits at 10 CFR Part 72.104, and postulated accident dose limits at 10 CFR 72.106. These actions would be categorically excluded by proposed 10 CFR 51.22(l).

Consolidated interim storage facilities are not within the scope of this categorical exclusion. The NRC does not have substantial history of licensing actions for consolidated interim storage facilities. While the NRC has developed a limited number of environmental impact statements for consolidated interim storage facility applications (e.g., NUREG-1714, NUREG-2237, NUREG-2239), additional consideration is still needed with respect to radiological human health. For instance, in NUREG-1714, NRC staff evaluated radiological impacts to workers from transportation of spent nuclear fuel across four alternatives; occupational doses to individual workers were found to exceed NRC’s regulatory limits depending on the site location and transfer mode of spent nuclear fuel selected. Therefore, at this time, the NRC limits the scope of this categorical exclusion to dry cask independent spent fuel storage installations at operating or decommissioned reactor sites.

Additionally, the NRC is proposing to revise 10 CFR 51.22(a)(1)(xii), 51.22(a)(8), 51.22(a)(11), 51.22(a)(15), and 51.22(d)(8) to explicitly expand the categorical exclusions to include applicable actions under 10 CFR Part 53, “Risk-Informed, Technology-Inclusive Regulatory Framework for Commercial Nuclear Plants.” 10 CFR Part 53 established a risk-informed, performance-based, and technology-inclusive regulatory framework as an alternative for the licensing and regulation of commercial nuclear plants. The requirements under 10 CFR Part 53 for decommissioning funding, operators’ licenses, standard design approvals, findings for a combined license were adapted from comparable regulations in 10 CFR Part 50, 52, and 55 (91 FR 15696). The NRC has previously determined that actions on or changes to requirements for decommissioning funding under 10 CFR Part 50; approvals of or changes to operators’ licenses under 10 CFR Part 55; standard design approvals under 10 CFR Part 52; Commission findings for a combined license under 10 CFR 52.103(g); and authorizations under, or changes to requirements in 10 CFR Parts 50 or 52 with respect to installation or use of a facility

component are a category of actions that do not have a significant environmental effect. Therefore, the NRC concludes that actions on or changes to requirements for decommissioning funding under 10 CFR Part 53; approvals of or changes to operators' licenses under 10 CFR Part 53; standard design approvals under 10 CFR Part 53; Commission findings for a combined license under 10 CFR 53.1542(g); authorizations under, or changes to requirements in 10 CFR Part 53 with respect to installation or use of a facility component normally do not significantly affect the quality of the human environment.

Environmental Assessments and Findings of No Significant Impact Substantiating Categorical Exclusions

As discussed above, the proposed rule expanding the list of categorical exclusions at 10 CFR 51.22 is based upon a review of NRC past EA/FONSI, generic environmental impact statements, and site specific environmental impact statements for subsequent license renewals, power uprate license amendments, construction permits, and site decommissioning to develop new categorical exclusions and to define parameters and criteria that bounds the applicability of the categorical exclusion. For those proposed categorical exclusions that relied on past EA/FONSI, the following tables identify a subset of EA/FONSI that NRC completed for those category of actions.

Proposed Categorical Exclusion in 10 CFR 51.22(f)(2)- Approvals of partial site releases or license termination plans, except for facilities and sites that possess Atomic Energy Act Section 11e.(2) byproduct material, provided that the NRC has determined that the radiological criteria for unrestricted use in 10 CFR 20.1402 is met.

Year	EA/FONSI	ADAMS No.	FRN
2007	Rancho Seco Nuclear Generating Station Environmental Assessment Related to License Termination Plan Approval	ML072040235	72 FR 63203
2009	San Onofre Nuclear Generating Station, Unit 1 Environmental Assessment Related to Issuance of License Amendment Regarding a Partial Site Release	ML093010071	74 FR 62605
2016	Vallecitos Nuclear Center, Environmental Assessment Related to Issuance of License Amendment Regarding a Partial Site Release	ML16069A155	81 FR 29581
2019	Vallecitos Nuclear Center, Environmental Assessment Related to Issuance of License Amendment Regarding a Partial Site Release	ML19249C371	84 FR 54188
2023	Fort Calhoun Station, Unit 1 Environmental Assessment Related to License Termination Plan Approval	ML23333A049	89 FR 105
2024	Crystal River Nuclear Power Station, Unit 3 Environmental Assessment Related to License Termination Plan Approval	ML24081A068	89 FR 58196
2025	Crystal River, Unit 3 Environmental Assessment Related to Issuance of License Amendment Regarding a Partial Site Release	ML25240B598	90 FR 46661

Proposed Categorical Exclusion in 10 CFR 51.22(g)-Approvals under 10 CFR 20.2002 provided that there is no significant change in the types or significant increase in the amounts of any radiological effluents that may be released offsite, no significant increase in public or occupational radiation exposure, and no significant increase in the potential for or consequences from radiological accident.

Year	EA/FONSI	ADAMS No.	FRN
2015	Environmental Assessment and Finding of No Significant Impact for the Authorization under 10 CFR 20.2002 to License SNM-33 for alternate disposal of radioactive waste	ML15029A064	80 FR 21266
2015	Environmental Assessment and Finding of No Significant Impact for the Authorization under 10 CFR 20.2002 at the Dresden Nuclear Power Station for alternate disposal of radioactive waste	ML15058A380	80 FR 60183
2021	Environmental Assessment and Finding of No Significant Impact for the Authorization under 10 CFR 20.2002 at the Columbia Fuel Fabrication Facility for alternate disposal of radioactive waste	ML21054A194	86 FR 13915
2021	Environmental Assessment and Finding of No Significant Impact for the Authorization under 10 CFR 20.2002 at the Vermont Yankee Nuclear Power Station for alternate disposal of radioactive waste	ML21077A277	86 FR 24675
2022	Environmental Assessment and Finding of No Significant Impact for the Authorization under 10 CFR 20.2002 at the South Texas Project for alternate disposal of radioactive waste	ML22293A003	87 FR 74450

Categorical Exclusion in 10 CFR 51.22(h)- Actions related to changes to reactor power levels provided that there is no significant change in the types or significant increase in the amounts of any effluents that may be released offsite, no significant increase in public or occupational radiation exposure, no significant increase in the potential for or consequences from radiological accident, and no significant increase in radioactive solid waste.

Year	EA/FONSI	ADAMS No.	FRN
2010	Northern States Power Company, LLC; Monticello Nuclear Generating Plant Final Environmental Assessment and Finding of No Significant Impact- License Amendment to Increase the Maximum Reactor Power Level	ML093220964	75 FR 2565
2011	Nextera Energy Point Beach, LLC; Point Beach Nuclear Plant, Units 1 and 2;	ML111080583	76 FR 22928

	Environmental Assessment and Finding of No Significant Impact Related to the Proposed License Amendment to Increase the Maximum Reactor Power Level		
2011	Nine Mile Point Nuclear Station, LLC, Nine Mile Point Nuclear Station, Unit No. 2, Environmental Assessment and Finding of No Significant Impact Related to the Proposed License Amendment To Increase the Maximum Reactor Power Level	ML112460009	76 FR 73721
2012	Grand Gulf Nuclear Station, Unit 1; Environmental Assessment and Finding of No Significant Impact- Amendment for an Extended Power Uprate	ML12167A269	77 FR 41814
2012	License Amendment to Increase the Maximum Reactor Power Level, Florida Power & Light Company, St. Lucie, Units 1 and 2; Environmental Assessment And Finding Of No Significant Impact	ML12165A512	77 FR 40092
2014	License Amendment to Increase the Maximum Reactor Power Level, Peach Bottom Atomic Power Station, Units 2 and 3	ML14042A397	79 FR 18073
2017	License Amendment to Increase the Maximum Reactor Power Level, Tennessee Valley Authority; Browns Ferry Nuclear Plant, Units 1, 2, and 3; Environmental Assessment and Finding of No Significant Impact	ML17062A383	82 FR 24998

Proposed Categorical Exclusion in 10 CFR 51.22(l)- Actions under 10 CFR Part 72, except decommissioning actions under 10 CFR 72.54, related to the storage of undamaged spent fuel or reactor related greater-than-class C waste in a dry cask independent spent fuel storage installation located within the site boundary of an operating nuclear power plant or located at an away-from-reactor decommissioned reactor site, provided that occupational and public dose meets 10 CFR Part 20 limits, real individual dose meets 10 CFR Part 72.104 limit, and postulated accident dose meets 10 CFR 72.106 limit.

Year	EA/FONSI	ADAMS No.	FRN
2011	Environmental Assessment and Finding of No Significant Impact for the License Renewal of the U.S. Nuclear Regulatory Commission License NO. SNM-2504 For Fort St. Vrain Independent Spent Fuel Storage Installation	ML111110339	76 FR 30399
2012	Environmental Assessment and Finding of No Significant Impact for the License Renewal of the U.S. Nuclear Regulatory	ML121220084	77 FR 34093

	Commission License No SNM-2505 for Calvert Cliffs Nuclear Power Plant Independent Spent Fuel Storage Installation		
2013	Environmental Assessment and Finding of No Significant Impact for the License Amendment of the U.S. Nuclear Regulatory Commission License No SNM-2514 for Humboldt Bay Independent Spent Fuel Storage Installation to allow storage of or the storage of greater than Class C	ML13241A289	78 FR 56944
2015	Environmental Assessment and Finding of No Significant Impact for the License Amendment of the U.S. Nuclear Regulatory Commission License No SNM-2507 for North Anna Independent Spent Fuel Storage Installation to amend technical specifications	ML15022A575	80 FR 10726
2018	Environmental Assessment and Finding of No Significant Impact for the License Renewal of the U.S. Nuclear Regulatory Commission License No SNM-2507 for North Anna Power Station Independent Spent Fuel Storage Installation	ML17311A450	83 FR 4932
2019	Environmental Assessment and Finding of No Significant Impact for the Approval of the Decommissioning funding plan for the Haddam Neck Independent Spent Fuel Storage Installation	ML19053A429	84 FR 8122
2019	Environmental Assessment and Finding of No Significant Impact for the Approval of the Decommissioning funding plan for the Maine Yankee Independent Spent Fuel Storage Installation	ML19126A117	84 FR 23072
2019	Environmental Assessment and Finding of No Significant Impact for the License Renewal of the U.S. Nuclear Regulatory Commission License No SNM-2509 for Trojan Nuclear Plant Independent Spent Fuel Storage Installation	ML19058A264	84 FR 32478
2019	Environmental Assessment and Finding of No Significant Impact for the Approval of the Decommissioning funding plan for the Perry Independent Spent Fuel Storage Installation	ML19162A009	84 FR 38069
2020	Environmental Assessment and Finding of No Significant Impact for the License Renewal of the U.S. Nuclear Regulatory Commission License No SNM-2514 for the Humboldt Bay Independent Spent Fuel Storage Installation	ML19252A248	85 FR 26734
2020	Environmental Assessment and Finding of No Significant Impact for the License	ML20275A342	85 FR 63588

Amendment of the U.S. Nuclear Regulatory Commission License No SNM-2506 for the Prairie Island Independent Spent Fuel Storage Installation to allow increase the amount of spent fuel allowed

NRC Subject Matter Experts

The NRC also relied on expertise, experience, and judgment of its professional staff to develop the proposed categorical exclusions. The following table lists subject matter experts and their area of expertise.

Name	Education/Experience	Expertise
Adam Schwartzman, NRC	MS Environmental Toxicology BS Biological Sciences 17 years of risk analysis and dose modeling experience	Partial Site Releases and License Termination Plans
Diana Diaz-Torro, NRC	Master of Business Administration BS Chemical Engineering Over 20 years of experience in NEPA compliance and environmental impact analysis.	Material License Categorical Exclusions
Donald Palmrose, NRC	PhD Nuclear Engineering MS Nuclear Engineering BS Nuclear Engineering 39 years of experience including operations on U.S. Navy nuclear powered surface ships, NEPA analyses, nuclear safety and material reviews, U.S. Department of Energy nuclear authorization basis support, and NRC project management.	Radiological Human Health and Postulated Accidents
Douglas Mandeville, NRC	BS Civil Engineering MS Civil Engineering Over 18 years experience in regulatory oversight of uranium recovery facilities.	Engineering aspects of long-term care of near surface disposal cells.
James Downs, NRC	BS Fire Protection Engineering Over 20 years of experience in nuclear fuel facility regulatory compliance and safety analysis.	Fuel facilities
Kevin Folk, NRC	B.A., Geoenvironmental Studies; M.S., Environmental Biology; Over 30 years of experience in	Power Reactor

	NEPA compliance; geologic, hydrologic, and water quality impacts analysis; utility infrastructure analysis; and environmental regulatory compliance and water supply and wastewater discharge permitting	License Renewal
Lloyd Desotell, NRC	MS Civil Engineering MS Water Resources Management BA Environmental Studies Over 20 years of experience conducting surface and subsurface hydrologic analyses	Power Reactor License Renewal Surface and Subsurface Hydrologic Analyses
Nancy Martinez, NRC	BS Earth and Environmental Science MA Earth and Planetary Science 13 years of experience in environmental impact analysis	Nonpower and Power Reactor Categorical Exclusions
Robert Hoffman, NRC	B.S., Environmental Resource Management; 40 years of experience in NEPA compliance, environmental impact assessment, alternatives identification and development, and energy facility siting	New Reactor Generic Environmental Impact Statement

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