# NRC Response to Public Comments

# DANU-ISG-2026-02—NRC Application Pathway for Reactor Designs Previously Authorized by U.S. Department of Energy or Department of War

**NRC-2026-0760**

Narrative Comment Summary and Response Report

**U.S. Nuclear Regulatory Commission**

Office of Nuclear Reactor Regulation

Office of Nuclear Material Safety and Safeguards

November 2026

**This page intentionally left blank.**

**Table of Contents**


**1. General Feedback on the Draft ISG ..... 5**

1.1. General support for the draft ISG ..... 5

1.2. General opposition to the draft ISG ..... 5

1.3. Other general comments on the draft ISG ..... 6

**2. Legal Issues Asserted by Comments ..... 7**

**3. Background and Need for the Draft ISG/Purpose and Scope of the Draft ISG ..... 10**

**4. Major Components of the Draft ISG ..... 10**

4.1. Purpose, background, rationale, and applicability ..... 10

4.2. Guidance and overall approach ..... 13

4.3. Appendices ..... 15

4.3.1. Appendix A—Quality assurance program ..... 15

4.3.2. Appendix B—Licensing event selection and classification of structures, systems, and components ..... 17

4.3.3. Appendix C—Principal design criteria ..... 18

4.3.4. Appendix D—Source term ..... 19

4.3.5. Appendix E—Consequence analysis ..... 21

4.3.6. Appendix F—Emergency preparedness ..... 23

4.3.7. Appendix G—Security ..... 24

4.3.8. Appendix J—Site characterization and design for external hazards ..... 25

4.3.9. Other comments on the appendices ..... 26

4.4. Other comments on the draft ISG components ..... 32

**5. Procedural Matters and Other Supporting Documents ..... 37**

**6. Other Comments on the Draft ISG ..... 38**

**7. Out of Scope ..... 39**

## Abbreviations

| | |
|---|---|
| ADAMS | Agency Documents and Management System |
| AEA | Atomic Energy Act of 1954, as amended |
| APA | Administrative Procedures Act |
| CFR | *Code of Federal Regulations* |
| CRA | Congressional Review Act |
| DOE | U.S. Department of Energy |
| DOW | U.S. Department of War |
| EAB | Exclusion area boundary |
| EO | Executive order |
| EP | Emergency preparedness |
| EPZ | Emergency planning zone |
| HALEU | High-assay low-enriched uranium |
| ISG | Interim staff guidance |
| LE | Licensing event |
| LPZ | Low population zone |
| LWR | Light water reactor |
| NEPA | National Environmental Policy Act |
| NRC | U.S. Nuclear Regulatory Commission |
| OMB | Office of Management and Budget |
| PDC | Principal design criteria |
| PRA | Probabilistic risk assessment |
| QA | Quality assurance |
| RA | Regulatory analysis |
| RG | Regulatory guide |
| RIPB | Risk-informed performance-based |
| SI | Super intelligence |
| SRM | Staff Requirements Memorandum |
| SSC | Structures, systems, and components |
| TRISO | Tri-structural isotropic |

# U.S. NUCLEAR REGULATORY COMMISSION
# RESPONSE TO PUBLIC COMMENTS RECEIVED ON THE DRAFT INTERIM STAFF GUIDANCE
# DANU-ISG-2026-02—"NRC Application Pathway for Reactor Designs Previously Authorized by U.S. Department of Energy or Department of War"

## Introduction

This document presents the U.S. Nuclear Regulatory Commission's (NRC's) responses to written public comments received on the draft interim staff guidance (ISG) DANU-ISG-2026-02, "NRC Application Pathway for Reactor Designs Previously Authorized by U.S. Department of Energy or Department of War." The NRC published the draft ISG in the *Federal Register* on April 17, 2026 (91 FR 20717), with a 30-day public comment period. The draft ISG is available from the Federal e-Rulemaking website at https://www.regulations.gov/document/NRC-2026-0760-0001.

In developing the ISG, the NRC considered all the comments responding to the draft ISG. If, as a result of its review of a public comment, the NRC changed the ISG, the agency's response to the comment describes the change.

## Comment Overview

The NRC received 56 unique comment submissions from individuals and organizations, with 124 identified comments within those comment submissions. The NRC analyzed all the submissions and determined that 30 submissions are unique and contain substantive content, including 1 form letter master and 17 copies associated with form letter campaigns with some additional unique text (form letter plus text). Additionally, 23 submissions were copies associated with form letter campaigns. The NRC also received two comments that were entirely non-substantive. Finally, the NRC received one duplicate submission. This report summarizes the 30 unique and responsive submissions received. All comment submissions were consolidated and can be found under Agencywide Documents and Management System (ADAMS) Accession No. ML26208A269.

Table 1 identifies all unique comment submissions. The NRC reviewed and annotated the comment submissions to identify separate comments within each submission. Accordingly, several individual comments may be associated with a single submission. The NRC gave each individual comment within a submission a unique identifier. The NRC's summaries include this unique identifier to identify which individual comments are addressed by each response.

**Table 1. Unique Comment Submissions on Draft ISG DANU-ISG-2026-02—"NRC Application Pathway for Reactor Designs Previously Authorized by U.S. Department of Energy or Department of War"**

| Commenter | Commenter Type | Regulations.gov ID No. |
|---|---|---|
| Fred Schofer | Private individual | NRC-2026-0760-0002 |
| Don McClure Jr | Private individual | NRC-2026-0760-0003 |
| James Ulrick | Private individual | NRC-2026-0760-0010 |
| David Gloger | Private individual | NRC-2026-0760-0017 |
| David Pedersen | Private individual | NRC-2026-0760-0018 |
| Laura Gibbons | Private individual | NRC-2026-0760-0024 |
| Anna Rondon | Private individual | NRC-2026-0760-0025 |
| Joseph Wasserman | Private individual | NRC-2026-0760-0026 |
| Nuclear Free Hawai'i | Advocacy organization/non-governmental organization | NRC-2026-0760-0027 |
| Pamela Hudson | Private individual | NRC-2026-0760-0029 |
| HGP Intelligent Energy LLC | Nuclear industry company | NRC-2026-0760-0030 |
| Saskia Hostetler Lippy | Private individual | NRC-2026-0760-0031 |
| Lynn Cominsky | Private individual | NRC-2026-0760-0034 |
| Wendy Atcitty | Private individual | NRC-2026-0760-0035 |
| Nuclear Innovation Alliance | Advocacy organization/non-governmental organization | NRC-2026-0760-0039 |
| Franklin Hope | Private individual | NRC-2026-0760-0040 |
| Main Street Foundation Center for Regulatory Analysis and Engagement | Advocacy organization/non-governmental organization | NRC-2026-0760-0043 |
| Ace and Sharon Hoffman | Private individual | NRC-2026-0760-0044 |
| Anonymous | Anonymous | NRC-2026-0760-0045 |
| Radiant Industries LLC | Nuclear industry company | NRC-2026-0760-0046 |
| No Spray Zone | Advocacy organization/non-governmental organization | NRC-2026-0760-0047 |
| Lynne Hyerle | Private individual | NRC-2026-0760-0048 |
| United Association of Journeymen and Apprentices of the Plumbing and Pipefitting Industry of the U.S. and Canada | Other | NRC-2026-0760-0049 |
| The Breakthrough Institute | Advocacy organization/non-governmental organization | NRC-2026-0760-0050 |
| Diana Gordon | Private individual | NRC-2026-0760-0051 |
| Deep Fission | Nuclear industry company | NRC-2026-0760-0052 |
| Nuclear Energy Institute | Nuclear industry trade association | NRC-2026-0760-0053 |
| ClearPath | Advocacy organization/non-governmental organization | NRC-2026-0760-0054 |
| Cathryn Chudy | Private individual | NRC-2026-0760-0055 |
| Snake River Alliance | Advocacy organization/non-governmental organization | NRC-2026-0760-0056 |

## 1. General Feedback on the Draft ISG

### 1.1. General support for the draft ISG

**Comment Bin 1.1.A:** *General support*

A commenter supported the draft ISG, writing that it is consistent with efforts to develop advanced nuclear technologies as well as EO 14299. The commenter provided background on the existing NRC licensing process, arguing that it is notable for its length and complexity. The commenter argued that the U.S. Department of War (DOW) has successfully operated nuclear reactors since 1957 and has expertise in SMRs and microreactors. The commenter said it is a "common-sense principle" that information relevant to a design reviewed by the U.S. Department of Energy (DOE) or DOW is relevant to the NRC's consideration of that design.

The commenter stated that the ISG is important and well timed for setting forth increased nuclear generation in the civilian sector. The commenter stated the need to encourage deployment of advanced nuclear reactors per EO 14299 and described current issues of strain, inconsistency, and affordability of the current U.S. electrical supply system. The commenter stated that nuclear energy is a reliable energy form that combats these issues and welcomed the proposed guidance's streamlining procedures.[1]

Another commenter observed that the ISG properly recognizes the need to integrate prior Federal testing into NRC review. The commenter said that the draft ISG appropriately recognizes that the NRC should not treat prior DOE or DOW testing, authorization, and operational experience as irrelevant to commercial reactor licensing review. The commenter stated that repetitive review processes can increase licensing costs, extend development timelines, delay deployment decisions, and consume resources that could otherwise be directed toward unresolved or application-specific safety questions. The commenter noted that leveraging credible Federal data can improve both the efficiency and the analytical quality of licensing review when properly structured.[2]

**NRC Response:** The NRC acknowledges these comments. The comments do not contain specific suggestions or other substantive information that, if adopted by the NRC, would reasonably require a change to the ISG.

Accordingly, the NRC did not change the ISG in response to these comments.

---

### 1.2. General opposition to the draft ISG

**Comment Bin 1.2.A:** *General opposition*

A commenter expressed opposition to the draft ISG, stating that reactor design approval from the DOE or DOW should not replace a full NRC review of designs, particularly in the context of site-specific environmental reviews and emergency preparations.[3]

---

1 United Association of Journeymen and Apprentices of the Plumbing and Pipefitting Industry of the U.S. and Canada (NRC-2026-0760-0049).

2 Main Street Foundation Center for Regulatory Analysis and Engagement (NRC-2026-0760-0043).

3 NRC-2026-0760-0044.

A few commenters expressed opposition to the finalization of the ISG, stating that the guidance provides the NRC with no methodology, no evidentiary threshold, and no criteria to evaluate DOE or DOW authorization information.[4]

**NRC Response:** The NRC disagrees, in part, with these comments. While the NRC agrees and reiterates that it will continue to conduct its own independent evaluations, regardless of whether an application references a prior DOE or DOW authorization, the NRC disagrees that this ISG does anything to undermine the NRC's ability to do so. The NRC notes that this ISG does not alter the requirement for an applicant to submit a complete application demonstrating how it will meet all applicable NRC regulatory and statutory requirements, including the referenced information from a prior DOE or DOW authorization. The NRC also notes that the "Background" section of the ISG explains that an applicant wishing to leverage information from a DOE or DOW authorization is still required to submit a complete application. However, the NRC also clarified in the "Purpose" section of the ISG that an applicant continues to be required to submit all information necessary to meet NRC requirements.

To the extent that comments suggest that the ISG should provide certain additional information specific to evaluating information from a prior DOE or DOW authorization, the NRC notes that the purpose of this ISG is to provide a roadmap of NRC requirements and associated guidance in select, foundational areas of reactor safety that are generally anticipated to share strong overlap between NRC and DOE or DOW requirements. The scope of the ISG further reflects the principle that the same underlying safety requirements apply regardless of whether a prior DOE or DOW authorization is referenced in an application. Nevertheless, as discussed in Comment Response 4.1.C, the staff revised the "Guidance" section to illustrate some considerations for tailoring the focus and depth of the review based on the information in the application. The staff will continue to assess the need for additional, more specific guidance to support effective use of information derived from DOE or DOW authorizations.

To the extent that the comment remarks on the NRC's environmental reviews, the NRC notes that the details associated with the NRC's environmental reviews are outside the scope of this ISG.

Accordingly, the NRC added language to the "Purpose" section of the ISG in response to these comments.

---

1.3. Other general comments on the draft ISG

**Comment Bin 1.3.A:** *Duplicative review of applications*

A commenter wrote that if their previous comments submitted on the proposed rule were not implemented, then effective implementation of the rule would depend on the ISG. The commenter stated that, as written, the ISG would result in duplicative NRC review to verify compliance with NRC requirements, which is not compatible with performance-based evaluation and does not comply with congressional and executive mandates. The commenter wrote that the NRC needs to focus the ISG on evaluating whether the technical merits of a safety assurance case demonstrate adequate protection with reasonable assurance.[5]

---

[4] NRC-2026-0760-0025; NRC-2026-0760-0026; NRC-2026-0760-0034; NRC-2026-0760-0035.

[5] Deep Fission (NRC-2026-0760-0052).

**NRC Response:** The NRC disagrees with this comment. The NRC disagrees that the ISG, as written, would result in duplicative NRC review to verify compliance with NRC requirements. As stated in the ISG, the NRC will seek to leverage content from prior DOE or DOW authorizations to the maximum extent practical in its own independent reviews, including by risk-informing its reviews and adjusting the focus and depth of review, as appropriate. The NRC notes that Title 10 of the *Code of Federal Regulations* (10 CFR) 50.43(e) has been previously used to adjust the scope and depth of NRC reviews.

Accordingly, the NRC did not change the ISG in response to these comments.

---

## 2. Legal Issues Asserted by Comments

**Comment Bin 2.A:** *NRC independence*

A few commenters expressed concerns about the impacts of the ISG on the independence of NRC reviews and, while expressing support for incorporating prior DOE and DOW findings, maintained that the NRC retains an independent statutory obligation to determine whether proposed reactor applications satisfy applicable NRC safety requirements.[6] One of these commenters wrote that the ISG "subordinates" NRC safety review to DOE or DOW determinations, violating the NRC's nondelegable obligation under section 182(a) of the Atomic Energy Act of 1954, as amended (AEA), to ensure that license issuance does not harm public health and safety. The commenter argued that in *Union of Concerned Scientists v. NRC*, 824 F.2d 108 (D.C. Cir. 1987), the D.C. Circuit held that the AEA's adequate protection standard cannot be satisfied by reference to economic costs or deferring to the conclusions of another agency. Additionally, the commenter argued that in *Union of Concerned Scientists v. NRC*, 880 F.2d 552 (D.C. Cir. 1989), the D.C. Circuit reaffirmed that the Commission's safety mandate requires its own technical evaluation independent of external determinations. The commenter added that DOE and DOW authorization frameworks are structurally incompatible for equivalent NRC findings. In light of these concerns, the commenter wrote that the ISG must explicitly state that DOE and DOW authorization may inform, but not substitute for, the NRC's safety findings, and that "streamlining" refers to process efficiency rather than a reduction in safety requirements.[7] The other commenter wrote that while the ISG should use DOE or DOW information to improve efficiency, the NRC must clearly preserve independent safety authority by distinguishing between the recognition of prior findings versus the use of those findings to substitute for the NRC's safety assessments, requiring minimum independent review; defining categories triggering additional review, such as changes in reactor design or operating conditions; and identifying thresholds for material deviation from prior authorization.[8]

One commenter recommended that the NRC revise the ISG to more clearly define minimum independent review expectations, categories requiring supplemental review, and thresholds for material deviation from prior Federal authorization.[9] Another commenter similarly stated that the ISG should clarify that its value lies in improving predictability, terminology, and documentation expectations, and the DOE/DOW-generated information should be assessed under the same review standards and processes that apply to other submitted technical information.[10] Finally, a

---

6 NRC-2026-0760-0002; Main Street Foundation Center for Regulatory Analysis and Engagement (NRC-2026-0760-0043); ClearPath (NRC-2026-0760-0054).

7 NRC-2026-0760-0002.

8 Main Street Foundation Center for Regulatory Analysis and Engagement (NRC-2026-0760-0043).

9 Main Street Foundation Center for Regulatory Analysis and Engagement (NRC-2026-0760-0043).

10 The Breakthrough Institute (NRC-2026-0760-0050).

commenter said that any recommendations from stakeholders that the NRC should accept DOE/DOW authorizations outright mischaracterize the NRC's review and endorsement process, and a DOE/DOW authorization decision does not, by itself, carry regulatory weight in an NRC licensing proceeding. The commenter said that, at this stage, the most important thing is that the draft ISG provides a framework for applicants to utilize the data from testing and operation under the DOE/DOW, and the ISG leaves open the opportunity for the NRC to provide more specific guidance, especially on opportunities for incorporation-by-reference, as both applicants and the NRC gain more experience.[11]

**NRC Response:** The NRC agrees, in part, with these comments. The NRC agrees to the extent that the comments suggest that the NRC continue to conduct independent reviews. The NRC disagrees that the ISG in any way undermines the NRC's statutory role as an independent safety and security regulator. Nothing in this ISG delegates to the DOE, the DOW, or any other agency the NRC's functions to evaluate a request for NRC approval; nor does the rule allow the NRC to forego an independent review. Additionally, nothing in this ISG changes the safety standards set forth by NRC regulation or by statute. Regardless of whether an applicant references a prior DOE or DOW authorization, it remains the applicant's responsibility to demonstrate compliance with all applicable requirements under the AEA and NRC regulations, and the NRC will continue to conduct the independent assessments necessary to confirm whether such requirements have indeed been satisfied.

The NRC acknowledges that the DOE and DOW follow distinct authorization processes for authorization of a design, that their processes fall outside the NRC's jurisdiction, and that the design and testing authorized by the DOE or DOW may vary in scope. For example, the information needed for a DOE or DOW authorization could be more limited in scope than the information needed for an NRC application. Such an authorization may potentially address only a subset of requirements associated with commercial operation (e.g., material qualification for the duration of a DOE or DOW authorization may differ from material qualification for a commercial 40-year license). Where an NRC applicant references a prior design authorized and tested by the DOE or DOW, the applicant's responsibility includes justifying the applicability and relevance of any DOE or DOW analyses or authorizations it seeks to rely on, and depending on the information provided for a specific application, the NRC may be able to tailor the focus and depth of its review. Furthermore, the NRC retains its authorities in its interactions with applicants regardless of whether the applicant has referenced a prior DOE or DOW authorization, including the ability to request additional information from the applicant and the ability to deny or condition a license or other form of regulatory approval, as appropriate.

The NRC also agrees with the comments to the extent they suggest that the ISG text should be modified to reflect the NRC's commitment to conducting an independent review. The principle that the NRC will conduct an independent review for a request for regulatory approval, regardless of the source of the information that an applicant uses to support its application, is at the core of the NRC's mission. While the draft ISG reflected this, the final ISG has been updated to include explicit language that this guidance does not change this principle.

Accordingly, the NRC added language to the "Purpose" section of the ISG in response to these comments.

---

[11] ClearPath (NRC-2026-0760-0054).

**Comment Bin 2.B:** *Public input*

Several commenters also remarked on public input for the ISG[12] and the review process in general.[13] A commenter stated that the NRC cannot properly seek the public's input on the ISG without publishing legal analyses regarding the statutory boundaries of leveraging non-NRC authorizations, as this prevents meaningful evaluation of the guidance's roadmap and undermines procedural transparency.[14] Other commenters voiced concerns that allowing companies or NRC staff to rely on opaque DOE or DOW safety authorizations, as well as a lack of guidance, undermines the longstanding ability of the public to participate in the review process.[15] A commenter with similar concerns remarked that the public is guaranteed the right to contested hearings by the AEA. Citing *Sholly v. NRC*, 651 F.2d 780 (D.C. Cir. 1980), *NRC v. Sholly*, 463 U.S. 1224 (1983), and *Citizens Ass'n for Sound Energy v. NRC*, 821 F.2d 725 (D.C. Cir. 1987), the commenter concluded that there is a broader principle allowing "contested intervenors" to access evidence used in NRC licensing determinations. As such, the commenter suggested that the ISG require independent NRC review of classified materials, creation of unclassified summaries for public input, and the preclusion of crediting classified material in licensing security findings without adequate unclassified record.[16]

**NRC Response:** The NRC disagrees, in part, with these comments. The NRC disagrees with the comments asserting that the ISG would inhibit public participation in NRC licensing proceedings. First, nothing in this ISG affects the right of any person whose interest may be affected by a proceeding to request a hearing on a license application pursuant to section 189(a) of the AEA or 10 CFR Part 2, "Agency Rules of Practice and Procedure," and nothing in this ISG alters the NRC's procedures or requirements governing such proceedings. Further, an applicant is still required to submit a complete license application on the docket, and the NRC will make that information publicly available or withhold it from public disclosure in accordance with its established processes. For example, where National Security Information or Restricted Data are involved in an adjudicatory proceeding, 10 CFR Part 2, Subpart I, "Special Procedures Applicable to Adjudicatory Proceedings Involving Restricted Data and/or National Security Information," provides procedures to effectively safeguard and prevent disclosure to unauthorized persons with minimum impairment of procedural rights.

Next, the NRC disagrees that separate legal analyses describing any potential statutory boundaries related to leveraging information from DOE or DOW authorizations are necessary to properly seek comment from the public on this ISG. For example, as the "Background" section of the ISG explains, the NRC has since the 1970s considered DOE-generated technical information that has been incorporated by NRC applicants in an application for a class 103 reactor license. The NRC is well within its authority to continue considering such information, and depending on how an applicant justifies the use of such information in its application, the NRC may tailor the focus and depth of its independent review accordingly.

Accordingly, the NRC did not change the ISG in response to these comments.

---

12 NRC-2026-0760-0045.
13 NRC-2026-0760-0002; NRC-2026-0760-0055; NRC-2026-0760-0048; No Spray Zone (NRC-2026-0760-0047).
14 NRC-2026-0760-0045.
15 NRC-2026-0760-0055; NRC-2026-0760-0048; No Spray Zone (NRC-2026-0760-0047).
16 NRC-2026-0760-0002.

## 3. Background and Need for the Draft ISG/Purpose and Scope of the Draft ISG

No comments are associated with this issue.

---

## 4. Major Components of the Draft ISG

### 4.1. Purpose, background, rationale, and applicability

**Comment Bin 4.1.A:** *Focus and depth of review*

Several commenters remarked on potential inconsistencies in the NRC's focus and depth of reviews.[17] One such commenter suggested that the ISG define what it means for the NRC staff to "adjust the focus and depth" of review and specify that it entails ordinary review procedures rather than a lesser review standard. The commenter also stated that the ISG should outline when additional review is required in order to maintain independent judgment and clear application requirements.[18]

For the ISG's purpose statement to be "implementable and consistent" with the intent of the rulemaking, another commenter suggested language in the "Purpose" section that reads as follows:

> "This ISG is also intended to support streamlined NRC review of applications in areas that include pertinent information regarding the accomplishment of safety functions related to DOE or DOW authorized reactor facilities by enabling NRC staff to adjust the focus and depth of that review, where appropriate, to the maximum extent practicable."[19]

**NRC Response:** The NRC agrees, in part, with these comments. The NRC agrees that the safety standards applied during reviews of applications that incorporate information from a DOE or DOW authorization are not altered by implementing this ISG. As stated in the Purpose section of the ISG, the guidance is intended to "provide a roadmap of NRC requirements and associated guidance documents in select, foundational areas of reactor facility safety and the protection of public health and safety," and this ISG does not revise the underlying requirements and associated guidance for those areas.

The ISG also does not change an applicant's obligation to submit a complete application. If an applicant chooses to reference a prior DOE or DOW authorization, it remains the applicant's responsibility to demonstrate how the attributes of that authorization satisfy NRC requirements. The NRC will continue to perform independent reviews and make its own regulatory determinations in accordance with approved procedures. Regarding the suggestion to more specifically define in the ISG what it means for the NRC to "adjust the focus and depth" of review, in general, the intent includes familiar concepts such as risk-informing reviews or how the NRC will concentrate its review resources in a manner that corresponds to applicability of information from the prior authorization, safety-significance of an issue, and uncertainties associated with unique or novel features. At the same time, the NRC acknowledges that the extent to which the NRC is able to adjust the focus and depth of its review will depend on the

---

17 Nuclear Energy Institute (NRC-2026-0760-0053); The Breakthrough Institute (NRC-2026-0760-0050).
18 The Breakthrough Institute (NRC-2026-0760-0050).
19 Nuclear Energy Institute (NRC-2026-0760-0053).

information in the application, including the extent and relevance of any information referenced from a prior authorization, and the strength of the applicant's justification.

Accordingly, in response to these comments, the NRC updated the ISG's "Overall Approach" section to clarify that existing NRC guidance can be used with this approach and that the NRC review will be dependent on the information included in the application and its applicability to NRC requirements.

---

**Comment Bin 4.1.B:** *Draft ISG background*

For predictable leveraging, a commenter suggested language in the "Background" section that reads: "…could then incorporate by reference and rely upon these DOE- or DOW-authorized demonstrations in follow-on NRC applications…."

To focus the NRC review on applicability and material differences, the commenter also suggested the following language in the same section: "Where an applicant references a previously authorized DOE or DOW design, the NRC should, to the maximum extent practicable, adjust the focus and depth…."[20]

**NRC Response:** The NRC agrees with this comment. The NRC acknowledges that applicants may incorporate by reference information from DOE or DOW authorizations, as appropriate, provided that any such information is part of the NRC application and formally docketed for the NRC's review. To reflect this, the NRC has revised the "Background" section of the ISG to clarify that applicants may reference information from a DOE- or DOW-authorized and tested design and that applicants remain responsible for demonstrating how the referenced information supports their safety case and satisfies applicable NRC requirements.

The NRC also agrees that where an applicant references information from a DOE or DOW authorization, the NRC should adjust the focus and depth of a license application review to the maximum extent practical, as appropriate. The NRC revised the "Background" section to clarify this point. The extent of any NRC leveraging opportunities, including adjusting the focus and depth of the review, will depend on how an applicant demonstrates satisfaction of applicable NRC regulatory requirements. The NRC notes that review efficiencies may also be gained where an evaluation associated with a DOE or DOW authorization uses methodologies included in NRC guidance.

Accordingly, the NRC updated the ISG's "Background" section in response to this comment.

---

**Comment Bin 4.1.C:** *Future ISG Updates*

Several commenters remarked on the ISG's "Rationale" section.[21] A commenter voiced concern that the ISG encourages developers to "have the 'end in mind'" and invites applicants to make commitments in the design of facilities, the structure of DOE authorization requests, and preapplication NRC engagement based on its current roadmap. Specifically, the commenter expressed concern that the ISG is a provisional document that may significantly differ once finalized as a regulatory guide (RG) or NUREG, and that an applicant's authorization requests,

---

[20] Nuclear Energy Institute (NRC-2026-0760-0053).

[21] NRC-2026-0760-0002; Nuclear Energy Institute (NRC-2026-0760-0053).

which may be built on the current ISG, may not align with final expectations. The commenter suggested that the ISG specify conditions under which applications may be revised or withdrawn prior to incorporation with a successor document, the notice that will be provided to applicants in reliance, and the impact of revisions on pending NRC applications aligned with the ISG roadmap.[22]

**NRC Response:** The NRC disagrees with this comment. The NRC acknowledges that the ISG encourages a pre-applicant to have "the end in mind" but disagrees that the ISG invites the kind of reliance described by the comment. The ISG does not purport to describe the manner in which an applicant should structure an authorization request but rather describes certain foundational technical areas that the NRC anticipates may overlap with DOE or DOW authorizations. Additionally, the ISG discusses that rulemakings are underway and the guidance document will be updated, as appropriate, and encourages preapplication engagement to help applicants understand licensing framework possibilities. In addition, the NRC has not committed to adding this guidance to a RG or a NUREG at this time; however, the NRC routinely revises guidance documents as new information, experience, and regulatory needs arise. Further, an applicant is always at liberty to supplement or withdraw its application at its own discretion.

Accordingly, the NRC did not change the ISG in response to this comment.

---

**Comment Bin 4.1.D:** *Draft ISG rationale*

For further definition of the leveraging mechanisms and clarification of where prior analyses, testing, and operating experience can be credited, a commenter suggested the following language in the "Rationale" section:

> "facilitate the effective leveraging (including incorporation by reference, docketed reliance, and—where appropriate—crediting prior analyses, testing, prototype operation, and operating experience) of prior DOE or DOW authorizations…."

For clarity and consistency, the commenter also recommended language that reads as follows:

> "Support for the DOE's development of a crosswalk between DOE and NRC regulations and guidance that reflects similarities and differences to assist stakeholders in identifying opportunities for leveraging DOE authorizations for subsequent NRC licensing activities.
>
> This interim staff guidance is intended to support NRC review practices that effectively leverage relevant analyses, testing, prototype operation, and operating experience from prior DOE or DOW authorizations, in a manner that meets the NRC's statutory obligations for independent responsibility to make the safety findings required by statute and regulation.
>
> Applicants may incorporate by reference information from prior DOE or DOW authorizations, provided that the information relied upon is submitted as part of the NRC application and docketed for public notice and opportunity for hearing, subject to applicable public disclosure, exemptions, and withholding provisions.

---

[22] NRC-2026-0760-0002.

> Where an applicant references prior DOE or DOW authorization information, the NRC staff review should be structured to (1) focus on the applicability of the information to the subject application and any differences that are material to the NRC's licensing review, and (2) avoid unnecessary duplication of analyses, tests, prototype testing, or operational experience assessments previously reviewed and accepted by DOE or DOW, where appropriate."[23]

**NRC Response:** The NRC agrees, in part, with this comment. The NRC agrees that it is helpful to clarify examples of the types of information that an applicant may provide to meet the requirements of the associated topical areas outlined in the ISG. For example, an applicant may credit prior analyses, testing, prototype operation, and operating experience, as appropriate, in its application. As noted in Comment Response 4.1.B, the NRC also agrees that an applicant may incorporate by reference information from a DOE or DOW authorization and has updated the "Guidance" section of the ISG, not the Rationale section as suggested in the comment, to reflect this clarification.

To the extent that the comment suggests adding clarifying language for how the NRC can leverage information from a prior DOE or DOW authorization to the "maximum extent practical," the NRC agrees and added language to illustrate how the focus and depth of the review may be tailored based on the information in the application.

Accordingly, the NRC updated the ISG's "Guidance" section in response to these comments.

---

4.2. Guidance and overall approach

**Comment Bin 4.2.A:** *Draft ISG overall approach*

In light of prior comments recommending review focused on material differences, a commenter suggested the following language in the "Overall Approach" section:

> "The available and acceptable approaches within each of these three categories are centered around identifying and thoroughly evaluating the potential risks posed by the proposed facility, while establishing compliance with the associated NRC regulatory requirements.
>
> Applicants who intend to leverage prior DOE or DOW authorizations should identify, in a targeted and practical manner:
>
> (A) the scope of the prior authorization…including analyses, testing, prototype operation, and operational experience;
> (B) the safety functions and design features…; and
> (C) differences…that are material to the NRC's licensing review.
>
> This identification is intended to inform and focus the NRC staff's review on applicability and material differences, rather than requiring duplicative reperformance of prior technical work."[24]

---

[23] Nuclear Energy Institute (NRC-2026-0760-0053).
[24] Nuclear Energy Institute (NRC-2026-0760-0053).

**NRC Response:** The NRC agrees, in part, with this comment. The NRC agrees that additional clarity on the types of information applicants may identify from a prior authorization would be beneficial. Although it did not use the exact language in the comment, the NRC clarified the ISG to include example categories of information that applicants may consider providing to support an NRC license application.

Accordingly, the NRC updated the ISG's "Guidance" section in response to this comment.

---

**Comment Bin 4.2.B:** *Duplicative review avoidance*

To avoid duplicative review, particularly where applicants demonstrate design feature safety function, a commenter suggested the following language in the "Overall Approach" section:

> "Acceptance of Prior Authorization Conclusions (when appropriate): NRC staff may accept the conclusions of a specific aspect of a prior DOE or DOW authorization when (1) the relevant design feature(s) and safety function(s) are materially similar to those previously authorized, and (2) the NRC staff determines that the prior assessment remains applicable and technically valid to the subject application.
>
> This guidance is predicated on an NRC acceptance review that confirms the applicant has submitted a complete application and provided the information necessary for the NRC to make the findings required by statute and regulation, and that nothing in this approach limits the NRC's authority to make independent safety findings or affect applicable hearing rights."[25]

**NRC Response:** The NRC agrees, in part, with this comment. The NRC agrees that an applicant is required to submit a complete application and that nothing in this ISG limits the NRC's authority. The NRC emphasizes that it will continue to independently review an application, including determining the applicability and suitability to NRC requirements of information originating from a DOE or DOW authorization. The NRC agrees that additional clarification would benefit reviewers. Although it did not use the exact language in the comment, the NRC updated the ISG by offering examples of circumstances in which information justified by an applicant as applicable and sufficient may be appropriately leveraged, thereby informing the focus and depth of the NRC's review, such as when (1) the relevant design feature(s) and safety function(s) are materially similar to those previously authorized, and (2) the NRC determines that the prior assessment remains applicable and technically valid to the subject application.

The NRC notes, however, that a DOE or DOW authorization may be more limited in scope than what is required for an NRC application, potentially addressing only a subset of the requirements associated with commercial operation. Consequently, the degree to which prior authorization information can be used—and the extent to which the NRC can tailor its review—will necessarily be determined on a case-by-case basis.

Accordingly, the NRC updated the ISG's "Guidance" section in response to this comment.

---

[25] Nuclear Energy Institute (NRC-2026-0760-0053).

**Comment Bin 4.2.C:** *Source authorization documents*

A commenter provided technical recommendations on the ISG. The commenter recommended that the NRC codify a reference-by-attribute filing mode. The commenter said that the draft ISG could be interpreted as requiring a submission of source authorization documents into the public docket, either directly or through analyses of sufficient specificity that the source content is effectively reconstructed in the docket. The commenter said that DOE and DOW prototype reactor authorizations may involve classified information that cannot be placed in the public record for an NRC licensing proceeding, and the commenter recommended that the NRC define a "reference-by-attribute" filing mode in the final ISG, where the source documents would be made available to the NRC reviewers, but not to the public.[26]

**NRC Response:** The NRC disagrees with this comment. Regardless of whether an applicant elects to leverage information from a DOE or DOW authorization, the applicant must submit a complete application and provide all information necessary for the NRC to make its own independent determination on the docket. This information, including any pertinent classified information, will be treated appropriately in accordance with NRC-approved procedures. For example, information submitted by applicants and information developed by the NRC, including safety evaluations, will continue to be subject to existing provisions of 10 CFR 2.390, "Public inspections, exemptions, requests for withholding."

As noted in previous comment responses, an applicant may, if it chooses, incorporate by reference information from a DOE or DOW authorization when appropriately justified. However, referencing such information does not alter the applicant's responsibility to demonstrate compliance with NRC requirements, nor does it affect the NRC's obligation to conduct its own independent safety and regulatory review.

Accordingly, the NRC did not change the ISG in response to this comment.

---

## 4.3. Appendices

### 4.3.1. Appendix A—Quality assurance program

**Comment Bin 4.3.1.A:** *Appendix A—Quality assurance program equivalence mapping*

A commenter urged the NRC to permit applicants to demonstrate compliance under 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities," Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants," with equivalency mapping of DOE-approved QA programs.[27]

**NRC Response:** The NRC agrees, in part, with this comment. If an applicant plans to leverage aspects of a QA program for a design authorized by the DOE or DOW, it may be beneficial for an application to include an "equivalency map" to NRC QA requirements. The NRC notes that this approach may also be beneficial and applied to other technical areas. However, a complete demonstration of compliance with all NRC regulatory and statutory requirements may require detail or justification beyond a standalone equivalency map.

---

[26] HGP Intelligent Energy LLC (NRC-2026-0760-0030).
[27] Radiant Industries LLC (NRC-2026-0760-0046).

Accordingly, the NRC clarified in the “Guidance” section of the ISG that an applicant may, as an option, provide an equivalency map as part of the demonstration of compliance with NRC regulatory and statutory requirements.

---

**Comment Bin 4.3.1.B:** *Appendix A—Conflict with 10 CFR Part 50, Appendix B*

A commenter expressed concern that appendix A offers no methodology to evaluate equivalency of DOE’s QA framework to 10 CFR Part 50, Appendix B, despite documented and substantive differences between the two. The commenter thus recommended that the NRC revise appendix A to the ISG to identify the differences between DOE requirements and 10 CFR Part 50, Appendix B, across relevant criteria; require applicants to provide an equivalency analysis in their QA program description; require independent NRC verification when DOE or DOW QA cannot be determined to be equivalent to 10 CFR Part 50, Appendix B; and mandate that military or classified QA systems data require NRC verification.[28]

**NRC Response:** The NRC agrees, in part, with this comment. The NRC disagrees that the ISG should be revised at this time to identify differences between DOE requirements and 10 CFR Part 50, Appendix B. The ISG is intentionally structured to be flexible to allow leveraging of a wide variety of approaches. Industry stakeholders planning to leverage prior DOE or DOW authorization in NRC licensing applications are encouraged to have the “end in mind” when developing the technical and applicable regulatory basis necessary to receive DOE or DOW authorization. The NRC notes that, while not required, approaching QA using guidance describing methods acceptable to the NRC for meeting 10 CFR Part 50, Appendix B, when pursuing DOE or DOW authorization will help avert inconsistencies with NRC regulations. However, the NRC will continue to assess the need for additional guidance.

With regards to equivalency analyses, the NRC notes that this ISG does not alter the requirement for an applicant to submit a complete application demonstrating how all NRC regulatory and statutory requirements, including QA requirements, are met. This includes how the referenced information from a prior DOE or DOW authorization contributes to demonstrating that NRC requirements are met. An equivalency analysis may serve as a portion of that demonstration, but it is not a requirement. As summarized in Comment Response 1.2.A, the NRC clarified in the “Purpose” section of the ISG that an applicant continues to be required to submit all information necessary to meet NRC requirements.

Regarding the comment’s suggestion to require certain independent NRC verifications, the NRC broadly agrees and reiterates that it will continue to conduct its own independent evaluations, regardless of whether an application references a prior DOE or DOW authorization.

Accordingly, the NRC did not change the ISG in response to this comment.

---

[28] NRC-2026-0760-0002.

4.3.2. Appendix B—Licensing event selection and classification of structures, systems, and components

**Comment Bin 4.3.2.A:** *Appendix B—Licensing event identification and compliance*

Several commenters recommended that the NRC clarify guidance on appendix B.[29] A commenter stated that the approach outlined in appendix B of the ISG that licensing event (LE) identification be done without "preconceptions or reliance on predefined lists" is incompatible with the directive that staff leverage DOE or DOW authorization "to the maximum extent practical." The commenter wrote that the ISG should specify the categories that would trigger independent LE analysis despite DOE or DOW authorization content; resolve inconsistencies in the above-mentioned approaches; and require that commercial plant and prototype structures, systems, and components (SSC) classification be completed independently when design or deployment differ significantly.[30] Sharing similar concerns about potential contradictions in appendix B approaches, the other commenter also recommended that the NRC provide additional guidance.[31]

**NRC Response:** The NRC disagrees with these comments. The NRC disagrees that the identification of LEs being done without preconceptions or reliance on predefined lists is incompatible with the directive that the NRC staff leverage DOE or DOW authorization to the maximum extent practical. Regardless of whether a design authorized by the DOE or DOW is significantly similar or different from the design in a commercial licensing application submitted to the NRC, the NRC encourages approaching LE selection and classification of SSCs without preconceptions or reliance on predefined lists to avoid the unwitting or unquestioning carryover of assumptions about plant design or behavior and the use of predefined lists that are out of date and do not reflect contemporary commercial nuclear plant design or operating experience. For example, industry stakeholders planning to leverage prior DOE or DOW authorization in NRC licensing applications are encouraged to have the "end in mind" when developing the technical and applicable regulatory basis necessary to receive DOE or DOW authorization, and as such, the appropriate stage at which a particular stakeholder approaches LE selection and classification of SSCs that may be applicable for commercial licensing may occur before or during the DOE or DOW authorization process. One way to help achieve the goal of comprehensive LE selection and classification of SSCs is via the "blank sheet of paper" approach described in appendix B to the ISG. At the same time, the NRC acknowledges that an NRC applicant's design may evolve and therefore may differ from the design previously authorized by the DOE or DOW. In any event, that applicant will be responsible for ensuring that LE selection and classification of SSCs are comprehensive.

The NRC also disagrees that the ISG should specify at this time the categories that would trigger independent LE analysis despite DOE or DOW authorization content. Predetermining categories may limit the intended flexibility of the ISG because of the wide variety of technologies, testing approaches, and information from a design previously authorized and tested by the DOE or DOW (e.g., information from an authorization involving criticality testing versus full-scale demonstration), as well as potential differences in operating conditions.

Accordingly, the NRC did not change the ISG in response to these comments.

---

29 NRC-2026-0760-0002; Nuclear Innovation Alliance (NRC-2026-0760-0039).
30 NRC-2026-0760-0002.
31 Nuclear Innovation Alliance (NRC-2026-0760-0039).

4.3.3. Appendix C—Principal design criteria

**Comment Bin 4.3.3.A:** *Appendix C—Principal design criteria*

A commenter stated that the NRC is incorrectly directed to leverage DOE or DOW's principal design criteria (PDC), despite DOE's framework lacking PDC analogous to the NRC's requirement. The commenter wrote that treating PDC development as partially creditable from an authorization using significantly different requirements undermines the NRC's recognition in SRM-SECY-93-092, "Issues Pertaining to the Advanced Reactor (PRISM, MHTGR, and PIUS) and CANDU 3 Designs and Their Relationship to Current Regulatory Requirements," that advanced reactors require design-specific analyses. Accordingly, the commenter suggested that the ISG state that PDC for the NRC cannot be satisfied by prior authorization, and that previous operational and test data may support, but not substitute, the PDC.[32]

**NRC Response:** The NRC disagrees, in part, with this comment. The NRC disagrees that direction to leverage prior DOE or DOW authorization information with regards to PDC is categorically incorrect. While DOE and DOW frameworks may not use the term "PDC," establishment of nuclear safety design criteria and use of those criteria to connect safety analyses to design bases and SSC requirements are not unique to the NRC. Additionally, the NRC disagrees that leveraging prior DOE or DOW authorization information during development of PDC to satisfy NRC licensing requirements undermines the recognition in SRM-SECY-93-092 that advanced reactors require design-specific analyses. As described in the ISG, applicants remain fully responsible for submitting a complete application that demonstrates compliance with all applicable NRC requirements, including providing design-specific PDC and the associated technical bases. The applicant must justify any referenced DOE or DOW information as applicable, technically valid, and appropriately supplemented where limitations exist. Consistent with appendix C to the ISG, the NRC will "seek to understand the aspects of the application that were reviewed by either DOE or DOW as a part of that prior authorization and consider the site- and applicant-specific adoption and applicability of that content as reflected in the application."

The NRC agrees that, where there are significant differences in the design, conditions, or operation of the technology approved in a DOE or DOW authorization compared to a design undergoing NRC licensing, the design criteria from the prior authorization may not be directly transferrable. However, the NRC acknowledges that an applicant may still be able to justify that data from the authorization support the PDC.

Accordingly, the NRC did not change the ISG in response to this comment.

---

**Comment Bin 4.3.3.B:** *Appendix C—Review process*

A commenter suggested that PDC review based on prior DOE or DOW authorizations should prioritize review of changes between previously authorized design and proposed commercial design to avoid duplicative review. The commenter also recommended that the NRC provide clarification for how DOE-authorized supplier qualification and fabrication QA controls be credited for a manufacturing license or fleet deployment model. Finally, the commenter also stated that without a clear process to recognize DOE or DOW design criteria, it is more difficult

[32] NRC-2026-0760-0002.

to standardize and deploy mass-produced microreactors, contrary to the NRC's proposed regulatory framework.[33]

**NRC Response:** The NRC agrees, in part, with this comment. The NRC agrees in general that its tailored focus and depth of review can be informed, as appropriate, by the changes between a previously DOE- or DOW-authorized and tested design and the proposed commercial design. The agency will tailor its review based on the information leveraged from a DOE or DOW authorization, including incorporating risk-informed and performance-based insights. However, this does not change the NRC's commitment to conduct an independent review of an application, but rather, it enhances licensing effectiveness and efficiency.

The NRC disagrees that this ISG should provide clarification for how DOE-authorized supplier qualification and fabrication QA controls be credited for a manufacturing license or fleet deployment model. As stated in multiple comment responses, the DOE and DOW testing and authorization may not consider conditions that reflect the full life cycle and analyses required for licensing of a commercial reactor, such as operating conditions and design life. The suitability of supplier qualification and fabrication QA controls from a prior authorization for fleet-scale deployment of a commercial reactor depends particularly on these variable parameters. As such, how applicants may leverage prior authorization information and how the NRC will review applications leveraging prior authorization information are expected to be case specific. However, the NRC will continue to assess the need for additional guidance.

With regards to the comment concerning the review process and standardizing and deploying mass-produced microreactors, this comment is outside the scope of the ISG.

Accordingly, the NRC did not change the ISG in response to this comment.

---

4.3.4. Appendix D—Source term

**Comment Bin 4.3.4.A:** *Appendix D—DOE/DOW mechanistic source term analysis*

A commenter stated that applicants should be permitted to use or adapt mechanistic source term analyses developed under DOE or DOW authorizations.[34]

**NRC Response:** The NRC agrees with this comment. The NRC agrees that applicants may use or adapt mechanistic source term analyses developed under DOE or DOW authorizations, as appropriate. However, applicants are responsible for justifying how such analyses developed under DOE or DOW authorizations support compliance with NRC regulations, identifying any limitations, and providing supplemental information where DOE or DOW results alone do not fully demonstrate compliance. Appendix D to the ISG addresses these considerations.

Accordingly, the NRC did not change the ISG in response to this comment.

---

[33] Radiant Industries LLC (NRC-2026-0760-0046).
[34] Radiant Industries LLC (NRC-2026-0760-0046).

**Comment Bin 4.3.4.B:** *Appendix D—Specificity regarding analytical methodologies and coordination mechanisms*

A commenter cited appendix D to this ISG as an area that would benefit from specificity regarding analytical methodologies and coordination mechanisms between the DOE or DOW and the NRC. The commenter stated that applicants would benefit from additional clarity about how DOE or DOW approaches to source term analyses can be leveraged. The commenter recommended allowing public access to documentation to improve predictability and confidence. The commenter further suggested providing increased clarity around expectations for demonstrating applicability and where additional NRC-specific analyses may be needed.[35]

**NRC Response:** The NRC disagrees with this comment. The NRC disagrees that the ISG should establish greater specificity at this time as to the analytical methodologies and coordination mechanisms between the DOE or DOW and the NRC regarding approaches to source term analyses. The ISG is intentionally structured to be flexible to allow leveraging of a wide variety of technologies, testing approaches, and information from a previously DOE- or DOW-authorized and tested design (e.g., information from an authorization involving criticality testing versus full-scale demonstration). The NRC also notes that DOE or DOW testing and authorization may occur under operating conditions that do not reflect the full life cycle of a commercial reactor. Accordingly, applicants must clearly justify how such information supports compliance with NRC requirements, identify any limitations, and provide supplemental information when the referenced analyses or testing do not fully demonstrate compliance with NRC regulations. However, the NRC will continue to assess the need for additional guidance.

Additionally, with regards to public availability of documentation, the NRC will conduct these activities transparently in accordance with its established processes and the Principles of Good Regulation (ML14135A076).

Accordingly, the NRC did not change the ISG in response to this comment.

---

**Comment Bin 4.3.4.C:** *Appendix D—SECY-93-092*

A commenter expressed concern that, although appendix D correctly identifies SECY-93-092 as establishing the applicable criteria for mechanistic source term analyses for non-LWR designs, the ISG directs the staff to leverage DOE or DOW authorizations without requiring evaluation of whether the SECY-93-092 conditions were satisfied, which is required by NRC policy.[36]

**NRC Response:** The NRC disagrees with this comment. For non-light water reactors (LWRs) using either a predominantly deterministic approach or a risk-informed and performance-based approach, appendix D to this ISG reiterates that the NRC should assess and confirm that the application adequately describes mechanistic source terms based on the NRC's assurance that the conditions associated with SRM-SECY-93-092 are met. Industry stakeholders planning to leverage prior DOE or DOW authorization in NRC licensing applications are encouraged to have the "end in mind" when developing the technical and applicable regulatory basis necessary to receive DOE or DOW authorization. Approaching mechanistic source term using criteria in SECY-93-092 (ML040210725) and SRM-SECY-93-092 (ML003760774) when pursuing DOE or DOW authorization will help maximize consistency with NRC policy.

---

35 Nuclear Innovation Alliance (NRC-2026-0760-0039).

36 NRC-2026-0760-0002.

Additionally, the NRC notes that SECY-93-092 and the associated SRM establish one set of criteria for mechanistic source term analyses for non-LWR designs acceptable to the NRC. However, applicants may propose alternative criteria. Applicants are responsible for providing technically supported source term calculations, justifying how alternative criteria from DOE or DOW authorizations support compliance with NRC regulations, identifying any limitations, and providing supplemental information when DOE or DOW results alone do not fully demonstrate compliance.

Accordingly, the NRC did not change the ISG in response to this comment.

---

4.3.5. Appendix E—Consequence analysis

**Comment Bin 4.3.5.A:** *Appendix E—Consequence analysis clarity*

Several commenters remarked on the need for additional clarity regarding consequence analysis.[37] For example, a commenter remarked that guidance should clarify whether NRC applications can use DOE or DOW consequence analysis tools and methods.[38] Another commenter pointed to appendix E to this ISG as an area that could use further specificity regarding methodologies and coordination mechanisms between the DOE or DOW and the NRC, specifically in relation to how DOE or DOW approaches to dose consequence analyses can be leveraged. As with appendix D, the commenter recommended allowing public access to documentation to improve predictability and confidence and clarifying expectations for demonstrating applicability and areas where additional NRC-specific analyses may be needed.[39]

**NRC Response:** The NRC disagrees with the comments. The ISG need not establish at this time greater specificity as to the analytical methodologies and coordination mechanisms between the DOE or DOW and the NRC regarding approaches to consequence analyses. The ISG is intentionally structured to be flexible to allow leveraging of a wide variety of technologies, testing approaches, and information from a previously DOE- or DOW-authorized and tested design. The NRC also notes that DOE or DOW testing and authorization may occur under operating conditions that do not reflect the full life cycle of a commercial reactor. Accordingly, applicants must clearly justify how such information supports compliance with NRC requirements, identify any limitations, and provide supplemental information when the referenced analyses or testing do not fully demonstrate compliance with NRC regulations.

Additionally, with regards to public availability of documentation, the NRC will conduct these activities transparently in accordance with its Principles of Good Regulation.

Accordingly, the NRC did not change the ISG in response to this comment.

---

**Comment Bin 4.3.5.B:** *Appendix E—Consequence analysis guidance*

37 Radiant Industries LLC (NRC-2026-0760-0046); Nuclear Innovation Alliance (NRC-2026-0760-0039).
38 Radiant Industries LLC (NRC-2026-0760-0046).
39 Nuclear Innovation Alliance (NRC-2026-0760-0039).

A commenter said that guidance should clarify that control room consequence analyses are unnecessary if the design does not depend on operator actions for safety or does not require a traditional control room. The commenter also recommended that applicants be allowed to perform consequence analyses using conservative site parameters to avoid repeated site-specific analyses in manufacturing license applications. Finally, the commenter suggested that guidance should recognize that non-LWR microreactors can have reduced source terms.[40]

**NRC Response:** The NRC agrees, in part, with these comments. Appendix E to this ISG acknowledges that non-LWR designs may or may not propose a control room habitability criterion similar to General Design Criterion 19, "Control room," of 10 CFR Part 50, Appendix A, "General Design Criteria for Nuclear Power Plants."

Use of conservative site parameters to avoid repeated site-specific analyses in manufacturing license applications is a concept that may be considered acceptable. The NRC notes that this approach may be applied more broadly than solely for manufacturing license applications. However, applicants must demonstrate that site-specific deployments are within the bounding site parameter envelope and must demonstrate compliance with NRC requirements, identify any limitations, and provide supplemental information when the referenced information does not fully demonstrate compliance with NRC regulations.

However, the NRC disagrees that the guidance should recognize that non-LWR microreactors can have reduced source terms, as general statements on relative source term quantities across reactor designs are not relevant to guidance on contents of applications, NRC reviews, or acceptance criteria, which is the type of guidance provided by the ISG.

Accordingly, the NRC did not change the ISG in response to this comment.

---

**Comment Bin 4.3.5.C:** *Appendix E—Consequence analyses at the exclusion area boundary and low-population zone*

Writing that dose calculation methodology similarly applies to commercial applications regardless of prior authorization, a commenter stated that consequence analyses at the exclusion area boundary (EAB) and low-population zone (LPZ) require categorical distinctions and independent site-specific consequence analysis regardless of prior authorization content.[41]

**NRC Response:** The NRC agrees, in part, with this comment. To the extent that the comment is stating that the EAB and LPZ require site-specific consequence analysis, the NRC agrees. However, the NRC disagrees that appendix E to this ISG should be updated to reflect this as the "NRC Staff Review Considerations" section of the appendix already states that the NRC staff should consider the site- and applicant-specific adoption and applicability of information leveraged from prior authorizations as reflected in the application. As stated in previous comment responses, industry stakeholders planning to leverage prior DOE or DOW authorization in NRC licensing applications are encouraged to have the "end in mind" when developing the technical and applicable regulatory basis necessary to receive DOE or DOW authorization. Applicants are responsible for providing technically supported site-specific EAB and LPZ results, justifying how information referenced from DOE or DOW authorizations supports compliance with NRC regulations, identifying any limitations, and providing

40 Radiant Industries LLC (NRC-2026-0760-0046).
41 NRC-2026-0760-0002.

supplemental information when DOE or DOW results alone do not fully demonstrate compliance.

Accordingly, the NRC did not change the ISG in response to this comment.

---

4.3.6. Appendix F—Emergency preparedness

**Comment Bin 4.3.6.A:** *Site specificity and dependent nature of emergency preparedness*

Several commenters expressed concern about site specificity in emergency preparedness.[42] Remarking that emergency planning is one of the most site-specific NRC licensing requirements, a commenter concluded that the NRC "safety review cannot be reduced to blanket deference to secret" DOE or DOW authorizations. The commenter provided examples of cases in which DOE or DOW testing does not generate documentation applicable to civilian commercial sites.[43]

In addition to offering similar remarks, another commenter stated that, unlike appendix J to this ISG, appendix F does not acknowledge the site-dependent nature of assessments. Accordingly, the commenter recommended that the NRC revise appendix F to explicitly state that emergency planning documentation from DOE or DOW prototype authorizations at remote, government-owned sites is not applicable to commercial civilian environments; require applicants to independently prepare emergency preparedness (EP) documentation for commercial deployment sites; and narrowly permit DOE or DOW authorization to inform NRC EP review when consequence analysis or source term data is relevant to emergency planning zone (EPZ) sizing and analyses are applicable to the commercial site arrangement.[44]

**NRC Response:** The NRC agrees, in part, with these comments. The NRC agrees that its independent safety review cannot be reduced to blanket deference. However, the NRC disagrees to the extent that the comment is implying that the NRC review will be reduced to "blanket deference to 'secret' DOE or DOW authorizations" and that appendix F should be updated to include the comment's proposed language because appendix F already states the following:

> The NRC staff should seek to understand the aspects of the application that were reviewed by either the DOE or DOW as a part of that prior authorization and consider the site- and applicant-specific adoption and applicability of that content as reflected in the application. The extent of any NRC leveraging opportunities, including the focus and depth of the review, would depend on how the applicant demonstrates compliance with applicable NRC regulatory requirements and whether the emergency plans were developed using the NRC guidance reflected above or are based on a proposed alternate or hybrid approach.

The NRC agrees that applicants must still submit a complete commercial application to the NRC addressing all required safety considerations for their specific site. Appendix F emphasizes the need to evaluate site-specific information. Therefore, as stated in other comment responses, regardless if a design has been authorized for use on a government-owned site, any applicant

---

42 Snake River Alliance (NRC-2026-0760-0056); NRC-2026-0760-0002.
43 Snake River Alliance (NRC-2026-0760-0056).
44 NRC-2026-0760-0002.

seeking to rely on information approved in a DOE or DOW authorization must clearly justify how such information from an authorization supports compliance with NRC requirements, identify any limitations, and provide supplemental information when the referenced information does not fully demonstrate compliance with NRC regulations.

Accordingly, the NRC did not change the ISG in response to this comment.

---

4.3.7. Appendix G—Security

**Comment Bin 4.3.7.A:** *Appendix G—Nonpublic regulatory guidance for security*

A commenter stated that, despite RGs 5.59, 5.69, 5.76, and 5.71 being listed as acceptable approaches to meeting the physical security requirements in 10 CFR 73.55, some of these RGs, along with RGs 5.81 and 5.54, are marked "Non-Publicly Available" in the ISG's reference list. The commenter argued that directing applicants to unobtainable guidance fails the basic fair notice requirement of the APA and cannot serve as a lawful basis for adverse licensing action.[45]

**NRC Response:** The NRC disagrees with this comment. RG 5.54, "Standard Format and Content of Safeguards Contingency Plans for Nuclear Power Plants," June 2009; RG 5.69, "Guidance for the Application of Radiological Sabotage Design-Basis Threat in the Design, Development and Implementation of a Physical Security Program that Meets 10 CFR 73.55 Requirements," March 2022; and RG 5.76, "Physical Protection Programs at Nuclear Power Reactors," November 2020, contain safeguard information and are not publicly available. Similarly, RG 5.81, "Target Set Identification and Development for Nuclear Power Reactors," July 2024, contains Official Use Only—Security Related Information and is not made publicly available. NRC applicants, licensees, or certificate holders or cleared stakeholders who have an established need-to-know for access to these RGs and who wish to review these documents can contact the NRC directly to request access. For example, the NRC provided access to these RGs during the development of these guidance documents. Specifically, the NRC provided a comment opportunity on draft versions of these guidance documents for cleared stakeholders that established need-to-know for access to these documents.

Accordingly, the NRC did not change the ISG in response to this comment.

---

[45] NRC-2026-0760-0002.

4.3.8. Appendix J—Site characterization and design for external hazards

**Comment Bin 4.3.8.A:** *Appendix J—DOE/DOW data*

Several commenters remarked that data developed by the DOE or DOW should not be used as a substitute for site-specific data for civilian commercial sites.[46] A commenter stated that under appendix J to this ISG, applicants should have the option to reevaluate for the NRC's envelope conditions or to request that the NRC apply limiting conditions to the license that would enable restricted siting using the existing external hazards analysis. The commenter recommended distinguishing between circumstances where the NRC intends to leverage prior Federal analyses and where the NRC intends to perform a de novo review. This commenter stated that the efficiency goals of the proposed pathway are best achieved when prior Federal analyses are leveraged and recommended providing additional guidance on how prior NRC evaluations can appropriately inform NRC reviews.[47]

**NRC Response:** The NRC agrees, in part, with these comments. To the extent that the comment is suggesting that evaluations in the topical areas of site characterization and design for external hazards are heavily site dependent and that the ability to leverage prior authorization information depends on the similarity of the site selected in the NRC application to the site associated with DOE or DOW authorization, the NRC agrees.

However, the NRC disagrees that appendix J should include the option to reevaluate for the NRC's "envelope conditions" or request limiting conditions from the NRC that would enable restricted siting using the existing external hazards analysis, as there is no generic set of NRC site envelope conditions.

The NRC also disagrees that appendix J should be updated at this time to distinguish between circumstances in which the NRC intends to leverage prior Federal analyses and where the NRC intends to perform a de novo review. As stated, the amount of information to be leveraged by an applicant depends on the authorized and tested technology, as well as the similarity of the site selected in the NRC application to the site associated with DOE or DOW authorizations. However, the NRC will continue to assess the need for additional guidance.

Accordingly, the NRC did not change the ISG in response to these comments.

---

**Comment Bin 4.3.8.B:** *Appendix J—Maximum extent practical criteria*

Another commenter stated that appendix J to this ISG does not provide criteria for what constitutes "maximum extent practical" regarding allowed uses of DOE or DOW material and minimum independent site characterization. The commenter recommended that the NRC edit appendix J to specify the following:

- Site characterization and external hazard design-basis analysis are new-work requirements for all commercial applications,

[46] NRC-2026-0760-0002; Snake River Alliance (NRC-2026-0760-0056).
[47] Nuclear Innovation Alliance (NRC-2026-0760-0039).

- DOW or DOE information can be used as supporting reference data, but not a substitute, for site characterizations, and

- that only site characterization elements potentially creditable from a prior authorization are those performed for a site that is materially identical to the proposed commercial site is unlikely to be met in practice.[48]

**NRC Response:** The NRC disagrees, in part, with this comment. With regard to the recommended edits to appendix J, the NRC acknowledges that site characterization and design for external hazards are heavily site dependent and that the ability to leverage prior authorization information depends on the similarity of the site selected in the NRC application to the site associated with DOE or DOW authorization, as stated in appendix J. The NRC disagrees with the comment's specific recommendations to categorically limit the site information that may be leveraged. The ISG is intentionally structured to be flexible to allow leveraging of a wide variety of approaches.

However, to the extent that the comment is suggesting a clarification of how the NRC can leverage to the "maximum extent practical," as discussed in Comment Response 4.1.D, the NRC amended the "Guidance" section to illustrate how the focus and depth of the review may be tailored based on the information in the application.

Accordingly, the NRC did not change the ISG in response to this comment. Comment Response 4.1.D contains more information on other related changes made to the ISG.

---

4.3.9. Other comments on the appendices

**Comment Bin 4.3.9.A:** *NRC efficiency*

A commenter noted that the NRC is not legally required to duplicate technical evaluations that have already been performed through prior Federal processes, if those evaluations addressed substantially similar safety questions, relied upon rigorous technical methodologies, and produced high-quality technical evidence. The commenter said that the ISG leaves substantial uncertainty regarding how prior Federal processes will be leveraged and whether the NRC will substantially re-perform technical reviews that the DOE or the DOW have already completed. The commenter said that this could undermine the efficiency objectives intended by EO 14300 and EO 14301. The commenter recommended that the NRC incorporate into the ISG a framework under which prior DOE/DOW technical conclusions receive a rebuttable presumption of adequacy where the prior authorization addressed substantially similar safety issues, the underlying methodologies are technically sound, and the applicant demonstrates the applicability of those conclusions to the NRC licensing action. The commenter said that, if the NRC declines to incorporate a "presumption of adequacy" in the final rule language, the ISG should explicitly operationalize staged licensing authorities Congress provided in the Nuclear Energy Innovation and Modernization Act and apply risk-informed performance-based (RIPB) methods to plan and perform early conceptual design assignments, in order to realize the efficiencies intended by EO 14300 and EO 14301. Finally, the commenter stated that "the NRC's review should not focus on verifying compliance with NRC requirements (many of which are outdated and undergoing wholesale revision)," and that a performance-based review could significantly improve licensing efficiency, and documented critical digital assets could play an

[48] NRC-2026-0760-0002.

important role in preserving an RIPB review of the safety assurance case while bridging the transition between DOE/DOW authorization and NRC commercial licensing.[49]

**NRC Response:** The NRC disagrees, in part, with this comment. The NRC recognizes that there will be overlapping topical areas considered in DOE and DOW authorization reviews that will involve information that the NRC will seek to leverage to the maximum extent practical in its own independent reviews, including by risk-informing its reviews and adjusting the focus and depth of review, as appropriate. However, the NRC declines to modify the ISG to create the rebuttable presumption suggested by the comment because it is unclear, in this context, how that modification would be consistent with the NRC's commitment to conducting independent reviews.

In particular, the DOE and DOW conduct their respective reactor programs to ensure safe and secure activities within their jurisdictions. However, the NRC is not charged with performing DOE and DOW authorization reviews, and the DOE and DOW authorization reviews do not involve the application of the NRC's regulations to the specific reactor design that is the subject of the DOE or DOW authorization review. Rather, the DOE and DOW set and apply their own standards and make determinations fit for the purposes of their programs. To be clear, the NRC recognizes that such standards and associated analyses or testing may also be sufficient to satisfy particular NRC requirements. An NRC applicant may show how an attribute of a prior DOE or DOW authorization is sufficient to bridge the gap between determinations made by the DOE or DOW and those made by the NRC. In this way, this ISG facilitates crediting DOE and DOW authorizations to the extent appropriate, while also maintaining the NRC's independent statutory role. In addition, the NRC agrees that certain tools such as staged licensing and RIPB methods are available and may generally enhance efficiency; however, the NRC does not agree that the ISG needs updates to further reflect these tools.

Further, the NRC disagrees with the assertion that its review should not focus on verifying compliance with NRC requirements. Applicants must submit a complete application demonstrating how NRC regulatory and statutory requirements are met, and the NRC's review will verify compliance with those requirements. The agency will tailor its review, as appropriate, based on the information leveraged from a DOE or DOW authorization, including incorporating risk-informed and performance-based insights. These approaches enhance licensing effectiveness and efficiency, while ensuring that the NRC maintains its independent safety review responsibilities.

Accordingly, the NRC did not change the ISG in response to this comment.

---

**Comment Bin 4.3.9.B:** *Clarify the applicability of prior analyses*

Several commenters recommended that the ISG clearly define standards for equivalence and reliance. The commenters said that the guidance currently risks replacing one form of inefficiency (duplicative review) with another form of uncertainty rooted in discretionary interpretation, inconsistent application, and unclear evidentiary expectations. The commenters said that the ISG should provide clearer standards for determining when DOE or DOW findings are sufficiently equivalent to NRC regulatory requirements and safety expectations.[50] One

[49] Deep Fission (NRC-2026-0760-0052).

[50] Main Street Foundation Center for Regulatory Analysis and Engagement (NRC-2026-0760-0043); Radiant Industries LLC (NRC-2026-0760-0046).

commenter said that the NRC should also clarify what the applicant should submit to inform the NRC that a submission for NRC approval already obtained a DOE or DOW approval.[51] Another commenter additionally stated that, without clearer criteria, applicants and reviewers may reach inconsistent conclusions regarding the applicability of prior findings. The commenter also said that the ISG should establish clearer thresholds for determining whether a reactor design has adequately demonstrated the ability to function safely, and the ISG should more clearly define the permissible scope of reliance on prior Federal authorizations and associated testing activities.[52]

Similarly, a commenter said that the draft ISG should more clearly distinguish between circumstances where the NRC intends to substantially leverage prior Federal analyses and circumstances where the NRC intends to perform a new NRC review. The commenter expressed support for the NRC's position that leveraging prior Federal analyses does not constitute "rubber stamping" DOE or DOW decisions and noted that efficiency goals are best achieved when prior Federal analyses are appropriately leveraged.[53]

**NRC Response:** The NRC disagrees, in part, with these comments. The NRC disagrees that this ISG should prescribe specific criteria at this time for determining the equivalency of information derived from a DOE or DOW authorization to NRC requirements. The purpose of this ISG is to outline NRC requirements and associated guidance across select foundational areas of reactor facility safety and the protection of public health and safety. Potential applicants may reference this guidance regardless of whether they intend to leverage information from a DOE or DOW authorization. The NRC will continue to rely on established licensing review procedures, supplemented by this ISG and future revisions, to conduct an independent evaluation of any commercial license application.

The NRC also disagrees that the ISG should be updated to more clearly define the permissible scope of reliance on prior Federal authorizations, as such determinations will largely be case specific. This ISG is intentionally structured to be flexible to allow the NRC to leverage a wide variety of technologies, testing approaches, and information from a design previously authorized and tested by the DOE or DOW (e.g., information from an authorization involving criticality testing versus full-scale demonstration). The NRC also notes that DOE or DOW testing and authorization may occur under operating conditions that do not reflect the full life cycle of a commercial reactor. Accordingly, applicants must clearly justify how such information supports compliance with NRC requirements, identify any limitations, and provide supplemental information when the referenced analyses or testing does not fully demonstrate compliance with NRC regulations.

However, the NRC agrees that clarifying the types of information that applicants may consider identifying in their application from a prior authorization would be beneficial. In response to these comments, the NRC has clarified in the ISG example categories of information that applicants should consider providing to support an NRC license application.

The NRC notes that there are rulemaking and regulatory guidance updates in progress as the ISG is being finalized, and the NRC plans to update the guidance in the ISG to reflect the results of those, as well as updates related to identifying additional opportunities to leverage

---

51 Radiant Industries LLC (NRC-2026-0760-0046).
52 Main Street Foundation Center for Regulatory Analysis and Engagement (NRC-2026-0760-0043).
53 Nuclear Innovation Alliance (NRC-2026-0760-0039).

DOE or DOW authorizations in areas where those authorizations satisfy associated NRC regulatory requirements.

Accordingly, the NRC updated the ISG's "Guidance" section in response to these comments.

---

**Comment Bin 4.3.9.C:** *"Maximum extent practical"*

Several commenters stated that all 10 appendices instruct the NRC to defer to DOE or DOW authorization "to the maximum extent practical," but the draft ISG provides no evidentiary threshold and no methodology for determining when information is sufficient.[54] Another commenter said that the ISG should establish strict evidentiary thresholds for what constitutes sufficient historical design data, rather than vaguely instructing the NRC to defer to DOE or DOW authorizations "to the maximum extent practical."[55] Similarly, a commenter observed that the ISG should provide specificity regarding how to leverage prior Federal work "to the maximum extent practical." The commenter recommended that the ISG include additional details regarding: the evidentiary basis for leveraging decisions, expectations for demonstrating applicability of prior analyses, treatment of differences in assumptions or operating conditions, acceptable approaches for addressing gaps between DOE/DOW and NRC frameworks, and examples illustrating varying levels of acceptable reliance on prior Federal work.[56] Finally, a commenter said that the draft ISG does not explain whether the "to the maximum extent practical" phrase is intended to change how the NRC evaluates DOE/DOW-generated information, so the NRC should remove the phrase.[57]

**NRC Response:** The NRC agrees, in part, with these comments. First, the NRC notes that the appendices instruct it to leverage prior DOE or DOW authorizations by considering information therefrom in an NRC application to the maximum extent practical. Next, the NRC disagrees that the scope of the ISG should be expanded at this time to include evidentiary thresholds or a specific methodology to determine when information from a prior DOE or DOW authorization is sufficient. As stated in other comment responses, the NRC will use its current licensing processes and guidance. For example, NUREG-0800, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants: LWR Edition," provides a model for NRC review and is referenced in multiple places in the ISG. Where NUREG-0800 may not directly apply due to differences in reactor technology or the approach to licensing-basis development, other applicable NRC review guidance is provided (e.g., in the DANU-ISG-2022-XX series for the Advanced Reactor Content of Application Project). This ISG, "NRC Application Pathway for Reactor Designs Previously Authorized by U.S. Department of Energy or Department of War," is intentionally structured to be flexible to allow the NRC to leverage a wide variety of technologies, testing approaches, and information from a design previously authorized and tested by the DOE or the DOW.

However, the NRC agrees that the ISG does not define the term "to the maximum extent practical." The NRC acknowledges that this term, as used in the ISG, does not provide acceptance criteria or an evidentiary threshold, nor is it intended to. As stated, the amount of information to be leveraged by an applicant depends on the authorized and tested technology.

---

54 NRC-2026-0760-0010; NRC-2026-0760-0031; NRC-2026-0760-0051; Snake River Alliance (NRC-2026-0760-0056); Nuclear Free Hawai'i (NRC-2026-0760-0027).

55 NRC-2026-0760-0045.

56 Nuclear Innovation Alliance (NRC-2026-0760-0039).

57 The Breakthrough Institute (NRC-2026-0760-0050).

Accordingly, the NRC did not change the ISG in response to these comments.

---

**Comment Bin 4.3.9.D:** *Future crosswalks*

A few commenters discussed the reference in the ISG to possible future development of crosswalks and other coordination mechanisms to connect DOE/DOW materials to the NRC. They recommended that the NRC develop a more structured crosswalk connecting DOE/DOW authorization materials to NRC licensing requirements.[58] One commenter additionally recommended that the NRC ensure that any such crosswalks or mapping approaches are transparent and publicly accessible. This commenter noted that providing transparent guidance in this area would improve efficiency and reinforce public confidence in the NRC's safety determinations.[59]

**NRC Response:** The NRC disagrees with these comments. The NRC disagrees that this ISG should establish at this time a mapping between DOE or DOW authorization bases and NRC requirements. The DOE and DOW authorization processes are distinct from the NRC licensing process, and because applicants best understand their design, deployment strategy, and the DOE or DOW requirements under which their design was previously authorized, they are best positioned to demonstrate how that prior authorization basis aligns with NRC regulations. To support this, the NRC encourages early engagement by applicants pursuing a commercial license to discuss the information from prior authorizations that applicants intend to rely on. Additionally, early preapplication engagement with the NRC enables developers to identify the most appropriate commercial licensing pathway for their technology and make informed decisions from the outset to maximize overlap between DOE or DOW requirements and NRC regulations. The NRC will also continue to assess the need for additional guidance.

Accordingly, the NRC did not change the ISG in response to these comments.

---

**Comment Bin 4.3.9.E:** *Lack of additional appendices*

A commenter provided detailed comments on the ISG's failure to address aging management, failure to distinguish design-transferable from site-specific review elements, and lack of guidance on prototype-scale-to-commercial-scale physics. The commenter recommended that the NRC add an aging management appendix to the ISG or explicitly address aging management within the existing appendices, specifying the supplemental analysis required to bridge the gap between prototype test duration and commercial operating life. Additionally, the commenter said that the NRC should revise the ISG to explicitly categorize each appendix topic area according to its transferability and specify the minimum independent NRC analysis required for partially transferable and nontransferable elements, regardless of the DOE or DOW authorization scope. Finally, the commenter recommended that the NRC add an appendix K to the ISG to address prototype-to-commercial scaling analysis.[60]

---

58 Main Street Foundation Center for Regulatory Analysis and Engagement (NRC-2026-0760-0043); Nuclear Innovation Alliance (NRC-2026-0760-0039); Nuclear Energy Institute (NRC-2026-0760-0053).

59 Nuclear Innovation Alliance (NRC-2026-0760-0039).

60 NRC-2026-0760-0002.

**NRC Response:** The NRC disagrees, in part, with this comment. The NRC disagrees that the scope of this ISG should be expanded at this time to include the suggested additional appendices. However, the NRC agrees that additional future revisions of the ISG are likely, and such revisions may consider additional topical areas to include at that time.

Accordingly, the NRC did not change the ISG in response to this comment.

---

**Comment Bin 4.3.9.F:** *"NRC Staff Review Considerations" section*

A commenter said that the "NRC Staff Review Considerations" section is nearly identical across all 10 appendices, and it provides no operational acceptance criteria. The commenter recommended that the NRC review each appendix's "NRC Staff Review Considerations" section to include topic-specific acceptance criteria addressing the following elements: (1) what DOE or DOW authorization documentation must be submitted for any leveraging to be permitted, (2) what evidentiary threshold must be met before staff may reduce the scope of independent confirmatory analysis, (3) what topic-specific elements of a DOE or DOW authorization document are relevant to each of the 10 appendix areas, (4) how staff must document their leveraging determination so that the licensing record is reviewable, and (5) what happens when DOE or DOW authorization content is found insufficient, internally inconsistent, or unavailable.[61]

**NRC Response:** The NRC disagrees with this comment. First, to the extent that the comment implies that the NRC will not conduct independent reviews, the NRC reiterates that it will continue to conduct independent reviews and will conduct the independent assessments necessary to confirm whether its requirements have indeed been satisfied. Next, the NRC disagrees that the ISG should be expanded to include the specific information provided in the comment. As stated, the DOE and DOW testing and authorization may not consider conditions that reflect the full life cycle and analyses required for licensing of a commercial reactor, and this ISG is intentionally structured to be flexible to allow the NRC to leverage a wide variety of technologies, testing approaches, and information from a design previously authorized and tested by the DOE or DOW (e.g., information from an authorization involving criticality testing versus full-scale demonstration). Accordingly, applicants must clearly justify how such information from an authorization supports compliance with NRC requirements, identify any limitations, and provide supplemental information when the referenced information does not fully demonstrate compliance with NRC regulations.

Further, the DOE and DOW authorization processes are distinct from the NRC licensing process, and because applicants best understand their design, deployment strategy, and the DOE or DOW requirements under which their design was previously authorized, they are best positioned to demonstrate how that prior authorization basis aligns with NRC regulations. To support this, an applicant may reference the regulations and guidance provided in the ISG to determine the appropriate acceptance criteria for the selected framework, and the NRC encourages early engagement from applicants pursuing a commercial license to discuss the information from prior authorizations that applicants intend to rely on. As previously stated, this ISG does not change the requirement for an applicant to submit a complete application on the docket, and the NRC will follow its processes for controlling such information, including the handling of sensitive information.

Accordingly, the NRC did not change the ISG in response to this comment.

---

[61] NRC-2026-0760-0002.

4.4. Other comments on the draft ISG components

**Comment Bin 4.4.A:** *Scaling of higher enriched fuel*

A few commenters observed that the ISG provides no guidance on how to scale the higher enrichment of fuel that would be used in small modular nuclear reactors from prototypes to larger commercial reactor designs. They found that this would circumvent the deliberate process that takes input from all stakeholders and replace it with a fast-track and antidemocratic path to approval, which severely compromises the checks and balances that have kept the public safe for over 50 years.[62]

**NRC Response:** The NRC disagrees, in part, with this comment. The NRC disagrees that the ISG creates a "fast-track and anti-democratic path" to commercial application approval. This ISG merely supports an independent and efficient NRC review of certain reactor applications and does nothing to affect the right of any person whose interest may be affected by a proceeding to request a hearing on a license application pursuant to section 189(a) of the AEA or 10 CFR Part 2. Next, the NRC acknowledges that the ISG does not provide specific guidance on "how to scale the higher enrichment of fuel that would be used in small modular nuclear reactor from prototypes to larger commercial reactor designs." Such guidance is outside the scope of this ISG.

The NRC further recognizes that the technology and breadth of testing performed under a DOE or DOW authorization may not be identical to the design and analysis submitted in an application to the NRC. However, this ISG does not change the NRC application submittal requirements or an applicant's responsibility to provide a complete application demonstrating compliance with applicable NRC regulations and statutory requirements. That responsibility gives applicants the opportunity to explain the applicability of information from the DOE or DOW authorization to NRC regulations, as well as any associated limitations thereof. The NRC will then perform an independent review to determine, on a case-by-case basis, the adequacy of the justification and whether any additional information is needed to support the NRC's reasonable assurance finding.

Accordingly, the NRC did not change the ISG in response to this comment.

**Comment Bin 4.4.B:** *Secret DOE or DOW authorizations*

A commenter expressed that independent NRC safety review cannot be reduced to blanket deference to "secret" DOE or DOW authorizations.[63]

**NRC Response:** The NRC agrees, in part, with this comment. As discussed in Comment Response 4.3.6.A, the NRC agrees that its independent safety review cannot be reduced to blanket deference. However, the NRC disagrees to the extent that the comment is implying that the NRC review will be reduced to blanket deference to "secret" DOE or DOW authorizations. Further, the NRC disagrees that the ISG does anything of this nature. As discussed in Comment Response 2.A, when an NRC applicant references a prior design authorized and tested by the

62 No Spray Zone (NRC-2026-0760-0047); NRC-2026-0760-0048.
63 NRC-2026-0760-0003.

DOE or DOW, the applicant's responsibility includes justifying the applicability and relevance of any DOE or DOW analyses or authorizations it seeks to rely on, and the NRC will then conduct an independent review of that application, including evaluation of the justification given. Further, nothing in this ISG affects the right of any person whose interest may be affected by a proceeding to request a hearing on a license application pursuant to section 189(a) of the AEA or 10 CFR Part 2.

Accordingly, the NRC did not change the ISG in response to this comment.

---

**Comment Bin 4.4.C:** *Definition of "leverage"*

A commenter stated that the ISG does not define "leverage" and recommended that the ISG define "leverage" as the use of applicant-submitted technical information, not deference to DOE/DOW authorization decisions.[64]

**NRC Response:** The NRC agrees, in part, with this comment. The NRC agrees that the concept of leveraging as used in this ISG includes the consideration of applicant-submitted technical information that originated as part of a prior DOE or DOW authorization and agrees that it does not mean that the NRC will simply defer to DOE/DOW authorization decisions. However, the NRC does not agree to define "leverage" in this ISG at this time. The extent to which the NRC may tailor the scope and depth of its review will vary on a case-by-case basis, depending on the maturity, applicability, and completeness of the information provided in each application. As discussed in Comment Response 2.A, the NRC did revise the ISG to include a discussion emphasizing that the NRC will continue to conduct independent reviews. Comment Response 2.A further explains that nothing in this ISG delegates to the DOE or the DOW the NRC's functions to evaluate a request for NRC approval.

Accordingly, the NRC did not change the ISG in response to this comment. Comment Response 2.A contains more information on other related changes made to the ISG.

---

**Comment Bin 4.4.D:** *Integration of 10 CFR Part 53 and other future licensing frameworks*

Multiple commenters stated that the ISG completely omits Part 53, which is the most likely licensing pathway for the companies the rulemaking was designed for.[65] Several commenters observed that the draft ISG focuses on applications under Parts 50 and 52, but the NRC is simultaneously implementing broader modernization efforts through Part 53 and other new reactor licensing initiatives, such as Part 57. The commenters recommended that the NRC clarify how the approach in the draft ISG interfaces with Part 53, whether similar concepts are expected to apply under Parts 53 and 57, and how applicants should evaluate licensing pathway selection when considering use of prior DOE or DOW authorization work.[66] A commenter specifically recommended updating the guidance to include Part 57 and acknowledged that this might necessitate issuing the guidance after the Part 57 final rule is

---

64 The Breakthrough Institute (NRC-2026-0760-0050).

65 Nuclear Free Hawai'i (NRC-2026-0760-0027); Nuclear Innovation Alliance (NRC-2026-0760-0039); NRC-2026-0760-0002; NRC-2026-0760-0003; NRC-2026-0760-0010; NRC-2026-0760-0031; Snake River Alliance (NRC-2026-0760-0056); NRC-2026-0760-0051; NRC-2026-0760-0045.

66 Nuclear Innovation Alliance (NRC-2026-0760-0039); NRC-2026-0760-0045.

issued.[67] Another commenter recommended that the NRC revise the ISG to explicitly address the Part 53 pathway in the "Applicability" section and in each appendix, specify the minimum probabilistic risk assessment scope and methodology required to bridge the gap between DOE prototype authorization documentation and the full Licensing Modernization Project (LMP)-standard probabilistic risk assessment required by Part 53, and identify any additional Part 53 requirements that cannot be satisfied by reference to a prior DOE or DOW authorization.[68]

A commenter said that the proposed rule is framed around Parts 50 and 53, but the draft ISG is framed around Parts 50 and 52. The commenter noted that the NRC presentation stated that similar guidance for applicants requesting approvals under Part 53 remains under development, but this leaves uncertainty about how DOE/DOW-generated information will be evaluated under the proposed Part 53 pathway. The commenter said that, until Part 53-specific guidance is developed, applicants and staff may be left to rely on existing Parts 50 and 52 roadmaps, which reduces the practical value of the Part 53 pathway. The commenter expressed that the same concern applies to proposed Part 57, as the draft ISG does not address Part 57. The commenter recommended that the NRC acknowledge the current implementation gap between the proposed rule and the draft guidance, and the commenter said the ISG should state that the NRC intends to apply consistent principles for evaluating DOE/DOW-generated information across Parts 50, 52, 53, 57, or any other future licensing pathway.[69]

A commenter recommended that the ISG recognize modern validated modeling and simulation evidence. The commenter found that the draft ISG does not recognize validated modeling and simulation output as permissible evidence, and simulation evidence validated against DOE data should qualify. Additionally, the commenter said that DOE-credited components should satisfy Part 53's performance-based safety case requirements. The commenter finally noted that their recommendation is intended to address the recognition of modeling and simulation evidence, and it does not propose any specific tool or methodology. The commenter said that this approach is consistent with the NRC's risk-informed, performance-based framework under Part 53.[70]

**NRC Response:** The NRC agrees, in part, with these comments. The NRC agrees that additional clarification is warranted regarding the general strategy for how applicants using the 10 CFR Part 53 or proposed 10 CFR Part 57 frameworks may reference information from DOE or DOW authorizations. Accordingly, the NRC has updated the "Applicability" section to address this point.

However, the NRC disagrees that the scope of this ISG should be expanded at this time to include discussions of specific requirements from the frameworks of 10 CFR Part 53 or 10 CFR Part 57. Guidance for 10 CFR Part 53 is being developed separately, and any formal guidance related to 10 CFR Part 57 will be addressed following direction associated with the rulemaking titled "Licensing Requirements for Microreactors and Other Reactors with Comparable Risk Profiles." However, the NRC will continue to assess if guidance for additional frameworks is warranted in this ISG.

Accordingly, the NRC updated the "Applicability" section of the ISG in response to this comment.

---

67 Radiant Industries LLC (NRC-2026-0760-0046).

68 NRC-2026-0760-0002.

69 The Breakthrough Institute (NRC-2026-0760-0050).

70 HGP Intelligent Energy LLC (NRC-2026-0760-0030).

**Comment Bin 4.4.E:** *Multiunit probabilistic risk assessment*

A few commenters noted that the ISG does not contain guidance on multiunit probabilistic risk assessment for multimodule or campus-scale deployments.[71] One commenter said that the nuclear industry has already publicly announced the licensing of 10 to 20 reactors on a single commercial site referencing a single DOW or DOE prototype authorization, and neither the proposed rule nor the ISG addresses this deployment scenario. The commenter stated that the NRC's treatment of multiunit reactor sites under existing licensing frameworks is well established and requires a plant-level probabilistic risk assessment that addresses module-to-module interactions. The commenter found that the proposed rule and ISG are silent on this requirement, and a single DOW prototype authorization for a single reactor operated for 3 years at a remote government site provides no information about how 10 to 20 reactors interact on a commercial civilian site. Additionally, the commenter stated that the ISG provides no guidance on campus-scale deployments combining multiple reactors with fuel fabrication, enrichment, reprocessing, and large-scale data center operations on a single site. The commenter recommended that the NRC revise the ISG to specify that any commercial licensing application that references a prior DOE or DOW authorization and proposes to deploy more than one reactor unit on a single site must include (1) a site-specific multiunit probabilistic risk assessment (PRA) addressing all module-to-module and unit-to-unit interactions, (2) an analysis of common-cause failure modes affecting multiple co-located units simultaneously, (3) an emergency planning analysis that accounts for the cumulative source terms from all co-located units and demonstrates EPZ adequacy for the full site configuration, and (4) for campus-scale deployments combining reactor operations with fuel cycle activities, a cumulative site safety analysis that addresses the combined radiological risk profile of all co-located nuclear activities.[72]

**NRC Response:** The NRC disagrees with this comment. The NRC acknowledges that the ISG does not provide specific guidance on multiunit sites. However, the NRC disagrees that the scope of the ISG needs to be expanded to specifically address multiunit considerations. NRC regulations require applicants to submit a complete application, including applicable analyses necessary to address risks associated with deploying multiple units on a single site. The ISG does not replace or modify those requirements. Applicants remain fully responsible for submitting all necessary information and analyses to address any applicable safety, security, and risk considerations, including those impacted by siting multiple units on a single site.

Accordingly, the NRC did not change the ISG in response to this comment.

---

**Comment Bin 4.4.F:** *Fuel qualification scaling guidance*

Several commenters stated that the ISG contains no fuel qualification scaling guidance for high-assay low-enriched uranium (HALEU) tri-structural isotropic (TRISO) fuel used by several pilot program reactors, and fuel qualification data from a prototype-scale nuclear reactor does

---

71 Nuclear Free Hawai'i (NRC-2026-0760-0027); NRC-2026-0760-0002; NRC-2026-0760-0003; NRC-2026-0760-0045.

72 NRC-2026-0760-0002.

not automatically transfer to a larger commercial design.[73] One commenter wrote that several DOE pilot programs and advanced reactor demonstration reactors use HALEU TRISO fuel enriched to between 5% and 20% U-235. The commenter noted that fuel performance under irradiation is a function of four independent variables, which change with scale: (1) neutron flux and fluence, (2) power density and fuel temperature, (3) burnup, and (4) enrichment-specific fission product inventory. The commenter said that a compliant fuel qualification scaling analysis for a commercial HALEU TRISO reactor referencing prototype authorization data would require: demonstration that prototype irradiation conditions bracket the commercial design's operating envelope, TRISO particle failure fraction data at the commercial plant's peak power density, fission product transport analysis through the full TRISO barrier sequence at commercial power density and temperature, and demonstrated compliance with the AGR fuel qualification program acceptance criteria (or equivalent criteria established in the ISG) at the commercial enrichment level and power density. The commenter recommended that the ISG be revised to include HALEU TRISO-specific fuel qualification scaling guidance in appendix D, and cross-referenced in appendix B.[74]

**NRC Response:** The NRC disagrees with these comments. While the NRC acknowledges that the ISG does not include detailed guidance on scaling fuel qualification, it does not agree that the scope of the ISG should be expanded to include such criteria at this time. The ISG is intentionally structured to allow the NRC to consider a broad range of technologies, testing methods, and information from designs previously authorized and tested by the DOE or the DOW, including fuel performance and qualification data. Applicants remain responsible for demonstrating how this information supports compliance with NRC requirements, identifying any limitations, and providing supplemental analyses when the referenced testing does not fully establish compliance. However, the NRC will continue to assess the need for additional guidance.

In addition, as discussed in appendix D to this ISG, the NRC should assess and confirm that the application adequately describes the source term and accident scenarios, including the retention of radionuclides by barriers and the transport of radionuclides for all barriers and pathways to the environs. The ISG does not alter or reduce the requirement for applicants to demonstrate the qualification of their fuel.

Accordingly, the NRC did not change the ISG in response to these comments.

---

**Comment Bin 4.4.G:** *Proprietary information*

A commenter said that the draft ISG is ambiguous about whether material that is referenced from a prior Federal authorization inherits the source agency's information-protection regime, or whether such material needs to be re-treated under the NRC's own proprietary information protections (principally § 9.17(a) and § 2.390(b)). The commenter recommended that the NRC clarify that the more protective of the two applicable regimes governs the treatment of referenced material.[75]

---

[73] Nuclear Free Hawai'i (NRC-2026-0760-0027); NRC-2026-0760-0002; NRC-2026-0760-0010; NRC-2026-0760-0031; Snake River Alliance (NRC-2026-0760-0056); NRC-2026-0760-0051; NRC-2026-0760-0045.

[74] NRC-2026-0760-0002.

[75] HGP Intelligent Energy LLC (NRC-2026-0760-0030).

**NRC Response:** The NRC disagrees with this comment. Although the NRC acknowledges that the ISG does not discuss in detail the agency's processes for withholding information, the ISG does not alter the NRC's established practices in this regard. Applicants remain responsible for submitting on the docket all information necessary for the NRC to make an independent safety finding, and information submitted by applicants and information developed by the NRC, including safety evaluations, will continue to be subject to existing provisions of 10 CFR 2.390, "Public inspections, exemptions, requests for withholding."

Accordingly, the NRC did not change the ISG in response to this comment.

---

## 5. Procedural Matters and Other Supporting Documents

**Comment Bin 5.A:** *Congressional Review Act*

Several commenters stated that the Congressional Review Act (CRA) legal analysis is incomplete and includes only placeholder text.[76] Several commenters recommended that the NRC publish the complete analysis for public review and comment.[77] One of the commenters argued that omitting the legal analysis from the draft ISG undermines procedural transparency and statutory compliance.[78] Another commenter stated that the NRC's CRA determination is not a formality but a condition precedent to the ISG's effectiveness. The commenter continued that direction in the ISG for staff to adjust the focus and depth of licensing review based on DOE or DOW authorization content may function as a substantive rule rather than guidance. The commenter recommended that the NRC address in the CRA whether the ISG's leveraging direction constitutes a substantive rule requiring public notice and comment.[79]

**NRC Response:** The NRC disagrees with these comments. First, the draft ISG includes only placeholder text because the CRA does not apply to draft-for-comment versions of "rules," as that term is defined in the CRA. As identified in the final ISG, before the finalization of this ISG, the Office of Management and Budget (OMB) determined that this action is not a major rule as defined in the CRA, 5 U.S.C. 804(2).

To the extent that the comment suggests that the ISG may function as a legislative rule subject to notice and comment procedures under the APA rather than guidance that qualifies as an interpretive rule, the NRC disagrees with this comment. The draft ISG provides guidance and does not establish any legally binding requirements; nevertheless, the NRC notes that a *Federal Register* notice for the draft ISG was published on April 17, 2026 (91 FR 20717), opening a 30-day comment period for the public to provide comments.

Accordingly, the NRC did not change the ISG in response to these comments. The NRC notes that it has revised the Congressional Review Act section of the final ISG to reflect OMB's determination.

---

**Comment Bin 5.B:** *Public notice and comment of draft ISG*

---

[76] NRC-2026-0760-0010; NRC-2026-0760-0051; Nuclear Free Hawai'i (NRC-2026-0760-0027); NRC-2026-0760-0031; NRC-2026-0760-0051; Snake River Alliance (NRC-2026-0760-0056).

[77] NRC-2026-0760-0002; NRC-2026-0760-0045.

[78] NRC-2026-0760-0045.

[79] NRC-2026-0760-0002.

A commenter requested that the guidance be withdrawn and reissued after proper public notice and comment.[80]

**NRC Response:** The NRC disagrees with this comment. A *Federal Register* notice for the draft ISG was published on April 17, 2026 (91 FR 20717), opening a 30-day comment period for the public to provide comments. The comment did not provide sufficient reason to withdraw and reissue the ISG for notice and comment.

Accordingly, the NRC did not withdraw the guidance nor reissue the draft ISG for public comment.

---

## 6. Other Comments on the Draft ISG

**Comment Bin 6.A:** *Collaboration and alignment with the DOE and DOW*

A commenter encouraged the NRC to continue collaborating with the DOE and DOW to reduce duplication of review activities and ensure that the review processes of those agencies support the NRC's licensing activities. The commenter added that the DOE should strive to align its process as closely as possible with the NRC's while still meeting its own mission and objectives and argued that this could result in some tension as there are fundamental differences between the purposes of the two agencies.[81]

**NRC Response:** The NRC agrees, in part, with this comment.

The NRC agrees that it should continue to collaborate with the DOE and DOW as appropriate. An example of such a collaboration is DOE-NRC Memorandum of Understanding No. 9, "Coordinating DOE and NRC Technical Expertise and Knowledge on Advanced Nuclear Reactor and Advanced Reactor Fuel Technologies," issued October 2025 (ML25303A288). The NRC will continue working with other Federal agencies, such as the DOE and DOW, to find efficiencies and eliminate duplicate activities in the review process, where appropriate.

To the extent that the comment suggests reforms to the DOE's processes, the NRC notes that such suggestions are outside the scope of this ISG.

Accordingly, the NRC did not change the ISG in response to this comment.

---

**Comment Bin 6.B:** *DOE/DOW analyses documentation*

A commenter said that maintaining robust public documentation explaining how prior DOE or DOW analyses were considered and relied on will be essential to sustaining public confidence in this approach.[82]

**NRC Response:** The NRC agrees with this comment. As stated in several comment responses, the NRC will continue to conduct a review to make an independent safety finding and will document this finding in a safety evaluation. The NRC will conduct these activities transparently

---

80 NRC-2026-0760-0003.

81 ClearPath (NRC-2026-0760-0054).

82 Nuclear Innovation Alliance (NRC-2026-0760-0039).

in accordance with its Principles of Good Regulation. Further, this ISG does not change the requirement for an applicant to submit a complete application on the docket, and the NRC will follow its processes for controlling associated information, including the handling of sensitive information.

Accordingly, the NRC did not change the ISG in response to this comment.

---

## 7. Out of Scope

**Comment Bin 7.A:** *Out-of-scope comments*

A few commenters provided comments that were outside the scope of the draft ISG, including comments supporting the proposed rule, "NRC Reviews of Reactor Designs Previously Authorized by U.S. Department of Energy or Department of War,"[83] opposition to that proposed rule,[84] and workforce development for the nuclear industry.[85]

**NRC Response:** The NRC considers these comments to be out of scope of the ISG. Comments on the proposed rule cited above were addressed separately if timely submitted in response to that notice of proposed rulemaking (91 FR 16584) and can be found in ADAMS at Accession No. ML26282A996.

Accordingly, the NRC did not change the ISG in response to these comments.

---

**Comment Bin 7.B:** *Environmental review considerations*

A commenter recommended that the NRC consider how environmental reviews conducted by DOE/DOW can be used to support the NRC's own National Environmental Policy Act (NEPA) obligations.[86] Another commenter recommended that the ISG state that the NRC will leverage relevant DOE/DOW NEPA documentation to the maximum extent practicable.[87]

A different commenter stated that the guidance should clearly define the limits of using categorical exclusions when evaluating commercial sites leveraging prior authorizations. The commenter said that moving defense-authorized reactors into commercial spaces can necessitate tailored environmental assessments.[88]

**NRC Response:** The NRC considers these comments to be outside the scope of this ISG. This ISG does not modify regulations or processes related to its NEPA implementing regulations or otherwise affect its environmental review procedures.

Accordingly, the NRC did not change the ISG in response to these comments.

---

83 HGP Intelligent Energy LLC, (NRC-2026-0760-0030-0004).
84 No Spray Zone (NRC-2026-0760-0047); NRC-2026-0760-0048.
85 United Association of Journeymen and Apprentices of the Plumbing and Pipefitting Industry of the U.S. and Canada (NRC-2026-0760-0049).
86 ClearPath (NRC-2026-0760-0054).
87 Nuclear Energy Institute (NRC-2026-0760-0053).
88 NRC-2026-0760-0045.

**Comment Bin 7.C:** *Regulatory analysis*

A commenter provided several critiques of the regulatory analysis (RA) that was part of the proposed rule, "NRC Reviews of Reactor Designs Previously Authorized by U.S. Department of Energy or Department of War." The commenter stated that the proposed rule RA indicates that the NRC was not able to quantify potential savings, but this is contradicted by the requirements of section 6(a)(3)(B) of EO 12866, OMB Circular A-4, NUREG/BR-0058, Revision 4, "Regulatory Analysis Guidelines of the U.S. Nuclear Regulatory Commission," and SRM-SECY-14-0087, "Staff Requirements—SECY-14-0087—Qualitative Consideration of Factors in the Development of Regulatory Analyses and Backfit Analyses." Additionally, the commenter wrote that the RA states that the NRC would not need to repeat technical reviews performed by the DOE or DOW; however, this is contradicted by the ISG, which states that "an applicant would still be required to submit a complete application to the NRC such that the NRC can make a determination that all applicable NRC requirements are met." Further, the commenter stated that the RA omits material cost categories, including the NRC staff burden for confirmatory review of DOE and DOW data, applicant burden for requirement-by-requirement mapping, classified information handling costs, Price-Anderson and indemnification implications, and expected-value cost of under-review. The commenter recommended preparing a revised RA that provides a transparent baseline, quantifies costs and benefits to the extent feasible, addresses all cost categories, and explains why any elements that cannot be quantified cannot be measured.[89]

**NRC Response:** The NRC disagrees that the draft ISG is inconsistent with the draft regulatory analysis associated with the proposed rule, "NRC Reviews of Reactor Designs Previously Authorized by U.S. Department of Energy or Department of War." The preamble to that proposed rule states that "the NRC expects that the NRC would not need to repeat technical reviews previously performed by DOE or DOW, *to the extent that those reviews cover the same scope as the related content in the NRC license application*" (italics added). As stated throughout this comment response document, the NRC will seek to leverage content from prior DOE or DOW authorizations to the maximum extent practical in its own independent reviews, including by risk-informing its reviews and adjusting the focus and depth of review, as appropriate.

To the extent that the comment focuses on the regulatory analysis associated with the separate rulemaking, the NRC considers those comments to be outside the scope of this ISG because the comment refers to an RA that was not part of this ISG.

Accordingly, the NRC did not change the ISG or the referenced RA in response to this comment

---

**Comment Bin 7.D:** *Guidance suitability*

A commenter stated that guidance documents can serve an important role, but guidance cannot substitute for stable and clearly articulated regulatory standards. The commenter wrote that core principles governing equivalence, reliance, evidentiary sufficiency, and review scope should not exist solely within evolving implementation documents or discretionary staff interpretation. The commenter additionally expressed concern about the potential for "guidance creep," which the commenter explained as the potential for ISG language to evolve into de facto substantive requirements that materially shape licensing outcomes without having undergone formal notice-and-comment rulemaking. The commenter stated that clear and transparent standards

[89] NRC-2026-0760-0002.

are important for preserving the long-term legal durability and institutional legitimacy of the NRC's licensing framework, and the commenter encouraged the NRC to more clearly identify which principles belong within regulations, which are appropriately addressed through guidance, and which should remain subject to case-specific evaluation.[90]

**NRC Response:** The NRC considers this comment to be outside the scope of this ISG because it expresses concern about guidance documents in general rather than the specific draft ISG. The NRC notes that guidance documents do not contain regulatory requirements, and applicants and licensees may choose whether to use guidance documents.

Accordingly, the NRC did not change the ISG in response to this comment.

---

**Comment Bin 7.E:** *Conducting a lessons-learned review*

A commenter recommended that the NRC periodically evaluate lessons learned from initial applicants and update guidance over time.[91]

**NRC Response:** The NRC considers this comment to be outside the scope of the ISG. While the NRC does not commit to the described lessons-learned assessment, the NRC regularly conducts lessons-learned activities related to its licensing and regulatory decisions and processes as part of its efforts to continually improve efficiency and effectiveness.

Accordingly, the NRC did not change the ISG in response to this comment.

---

**Comment Bin 7.F:** *Collaboration in endorsement of codes and standards*

A commenter discussed the "significant opportunity" for the DOE and national labs to assist the NRC in endorsing additional codes and standards, including QA standards. The commenter remarked on a previous instance of collaboration and provided an example of potential future collaboration before adding that such efforts should include improvements to the commercial-grade dedication process.[92]

**NRC Response:** The NRC considers this comment to be outside the scope of the ISG as this ISG does not focus on NRC processes or activities related to the endorsement of codes and standards.

Accordingly, the NRC did not change the ISG in response to this comment.

---

90 Main Street Foundation Center for Regulatory Analysis and Engagement (NRC-2026-0760-0043).
91 Nuclear Innovation Alliance (NRC-2026-0760-0039).
92 ClearPath (NRC-2026-0760-0054).

**Comment Bin 7.G:** *Super intelligence use*

Multiple commenters noted that the ISG does not include a framework for license application content generated using super intelligence (SI).[93] The commenters stated that the DOE publicly demonstrated the use of Gordian AI to convert a preliminary documented safety analysis for the DOE's National Reactor Innovation Center's Generic High Temperature Gas Reactor into sections equivalent to an NRC license application in 24 hours.[94] One commenter observed that the ISG does not address SI-enabled application pathways in any way, which creates a pathway for SI-translated DOE safety documents to become the de facto basis for commercial licenses without any QA, methodological verification, or human expert review requirements. The commenter recommended that the NRC revise the ISG to include a section addressing SI-assisted license application preparation, which includes that: (1) any application content generated with the assistance of SI tools to process prior DOE or DOW authorization materials must include a disclosure identifying the SI tools used, the authorization documents processed, the prompting or mapping methodology applied, and the human expert review and verification procedures applied to the SI output, (2) SI-generated mapping of DOE or DOW authorization content to NRC regulatory requirements is not an adequate basis for an NRC leveraging determination, (3) the QA pedigree requirements of appendix A to the ISG apply to SI-generated application content, and (4) the NRC will develop a minimum methodological standard for SI-assisted DOE-to-NRC document translation before any application relying on such translation can be accepted for docketed review.[95] Another commenter similarly stated that the NRC must incorporate explicit QA protocols for SI use and added that SI-generated applications risk introducing hallucinations, data translation errors, or unverified safety assumptions without strict validation parameters.[96]

A commenter stated that an NRC licensing determination based on an SI-generated mapping of DOE safety analysis content to NRC regulatory requirements without any quality assurance (QA) framework cannot satisfy the Administrative Procedures Act's (APA) arbitrary and capricious standard as articulated in the Supreme Court's decision in *Motor Vehicle Manufacturers Ass'n of the United States, Inc. v. State Farm Mutual Automobile Insurance Co.*, which found that the APA requires agencies to "examine the relevant data and articulate a satisfactory explanation for its action including a 'rational connection between the facts found and the choice made.'" 463 U.S. 29, 43 (1983). Additionally, the commenter expressed that if the NRC is evaluating SI-generated content that has not been subject to a defined, verified methodology, this would undermine the independent safety finding obligation under section 182(a) of the AEA.[97]

**NRC Response:** The NRC considers these comments to be outside the scope of this ISG as the purpose and scope of this ISG are to provide a roadmap to certain NRC requirements and associated guidance in select, foundational areas of reactor facility safety. The ISG is not intended to address the use of SI in the review or development of applications.

---

93 While comments may use the term "Artificial Intelligence" or AI, the NRC is using the term "Super Intelligence" or SI throughout this document in accordance with EO 14434, "Inaugurating the Era of Super Intelligence" (91 FR 63129; October 2, 2026).

94 Nuclear Free Hawai'i (NRC-2026-0760-0027); NRC-2026-0760-0002; NRC-2026-0760-0003; NRC-2026-0760-0010; NRC-2026-0760-0031; Snake River Alliance (NRC-2026-0760-0056); NRC-2026-0760-0051; NRC-2026-0760-0045.

95 NRC-2026-0760-0002.

96 NRC-2026-0760-0045.

97 NRC-2026-0760-0002.

Accordingly, the NRC did not change the ISG in response to these comments.