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CNRO2025-00029 10 CFR 50.12
10 CFR 52.7
10 CFR 52.15

September 24, 2025

ATTN: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Subject: Resubmittal of Request for Exemption from 10 CFR 52.29(a) and Renewal
of Early Site Permit ESP-002

Grand Gulf ESP Site
Early Site Permit No. ESP-002
NRC Docket Nos. 52-009

By letter dated August 28, 2025 (Reference 1), Entergy Operations, Inc. (Entergy), on behalf of System Energy Resources, Inc. (SERI), submitted a request for exemption from 10 CFR 52.29(a) and renewal of the Grand Gulf Early Site Permit (ESP-002). During subsequent discussion between Entergy and the U.S. Nuclear Regulatory Commission (NRC), it was determined that the request should be resubmitted under oath and affirmation, in accordance with 10 CFR 52.15(b) and 10 CFR 50.30(b). Accordingly, this letter replaces the original submittal dated August 28, 2025, and includes the required oath and affirmation. The content of the Enclosure is unchanged from the original submittal. Entergy also requests the Reference 1 request be withdrawn.

In Reference 2, the Nuclear Regulatory Commission (NRC) issued Early Site Permit (ESP) ESP-002 to System Energy Resources, Inc. (SERI), a subsidiary of the Entergy Corporation, for additional nuclear power plants at a site located approximately 25 miles south of the city of Vicksburg, Mississippi and adjacent to the existing Grand Gulf Nuclear Station (GGNS). The ESP became effective on April 5, 2007, and expires on April 5, 2027.

In accordance with Appendix A of the Nuclear Energy Institute's (NEI) guidance¹, NEI 25-06, "Guidance for Implementing the Requirements of 10 CFR Part 52 for Early Site Permit Renewals," (Reference 3) this letter requests that the NRC renew Early Site Permit ESP-002 for an additional 20 years, and grant an exemption from the requirement contained in

¹ NEI 25-06 was submitted for NRC review and endorsement on June 9, 2025. In a public meeting held on July 22, 2025, NEI gave a presentation on NEI 25-06 (Reference 4), which included NEI's proposed streamlined approach to renewal of an ESP.

10 CFR 52.29(a) that "An application for renewal must contain all information necessary to bring up to date the information and data contained in the previous application." This approach would allow Entergy Operations, Inc. (Entergy), also a subsidiary of Entergy Corporation, on behalf of SERI, to update the information contained in the original ESP application when it pursues either a construction permit (CP) under 10 CFR Part 50 or a combined license (COL) under 10 CFR Part 52, or if it so chooses, in a later ESP amendment.

In Reference 5, the NRC acknowledged receipt of the June 9, 2025, letter and agreed with the high-level concepts outlined within it. In Reference 5, the NRC also agreed that an industry pilot of the Appendix A approach would be an effective next step for timely engagement on this topic.

Entergy anticipates being the first licensee to request a review and approval of an ESP renewal (*i.e.*, as a "lead" or "pilot" plant) under this proposed approach. Therefore, Entergy believes that this submittal satisfies the standard for an NRC review fee waiver described in 10 CFR 170.11(b) on the basis that the review of the request will assist the NRC in implementing generic regulatory improvements or efforts. A request for fee waiver was submitted in a separate letter (Reference 6).

The enclosure to this letter provides the rationale and justification for the exemption request. To briefly summarize, the requested exemption is permissible under 10 CFR 50.12 because it is authorized by law, will not present an undue risk to public health and safety, is consistent with the common defense and security, and represents special circumstances.

More specifically, consistent with 10 CFR 50.12(a)(2):

- Application of the regulation in this particular circumstance is not necessary to achieve the underlying purpose of the rule, as the ESP information will be updated prior to use in a CP or COL application.
- Compliance would result in undue hardship or other costs significantly in excess of those contemplated when the rule was adopted, as Entergy would have to update (and the NRC would have to review) the ESP information multiple times with no practical need for an interim update.
- There are other material circumstances not previously considered, such that granting the exemption would be in the public interest. As Congress has made clear, the NRC is expected to focus its regulatory efforts on matters with some potential safety significance. The ESP does not allow construction or operation of a nuclear power plant, and there is no safety significance to extending an ESP.

This requested exemption from a portion of 10 CFR 52.29(a) is separate from the exemptions from 10 CFR 2.109(c) and 10 CFR 52.29(a) granted in Reference 7 that allows delaying submittal of the ESP-002 renewal application until no later than 45 days prior to the expiration of the permit while still receiving timely renewal protection.

Entergy requests renewal of ESP-002 and approval of the proposed exemption by December 31, 2025.

There are no regulatory commitments contained in this letter.

Should you have any questions or require additional information, please contact me at 601-368-5102.

I declare under penalty of perjury that the foregoing is true and correct.
Executed on September 24, 2025.

Respectfully,

Phil Couture

PC/gn

Enclosure: Request for Exemption from 10 CFR 52.29(a)

References:

1. Entergy letter to NRC, "Request for Exemption from 10 CFR 52.29(a) and Renewal of Early Site Permit ESP-002," Grand Gulf ESP Site, (ML25240B489), dated August 28, 2025
2. NRC letter to System Energy Resources, "Issuance of Early Site Permit (ESP) for System Energy Resources, Inc. – Grand Gulf ESP Site (ESP-002)," (ML070780457) dated April 5, 2007
3. NEI letter to NRC, "NEI Guidance for Implementing the Requirements of 10 CFR Part 52 for Early Site Permit Renewal," (ML25171A132) dated June 9, 2025
4. NEI presentation "Industry Guideline for Early Site Permit (ESP) Renewal (NEI 25-06)" (ML25198A359)
5. NRC letter to NEI, "U.S. Nuclear Regulatory Commission Response to Nuclear Energy Institute 25-06 'Guidance for Implementing the Requirements of 10 CFR Part 52 for Early Site Permit Renewal,'" (ML25209A488) dated July 28, 2025
6. Entergy letter to NRC, "Letter-of-Intent to Submit a Request for Renewal of ESP-002 and Request for NRC Fee Waiver," Grand Gulf ESP Site, (ML25226A204), dated August 14, 2025
7. NRC letter to Entergy, "Grand Gulf ESP-002 – Exemption from the Requirements Related to Submission of Early Site Permit Renewal Application (EPID-L-2025-LLE-015)," (ML25218A052) dated August 18, 2025

cc: NRC Region IV Regional Administrator
NRC Senior Resident Inspector – GGNS
NRC Project Manager - GGNS

Enclosure

CNRO2025-00029

Request for Exemption from 10 CFR 52.29(a)

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REQUEST FOR EXEMPTION FROM 10 CFR 52.29(a)

1.0 SPECIFIC EXEMPTION REQUEST

In accordance with 10 CFR 52.7 and 50.12, "Specific exemptions," Entergy Operations, Inc. (Entergy), on behalf of System Energy Resources, Inc. (SERI), holder of Early Site Permit (ESP) No. ESP-002 for the Grand Gulf ESP site (NRC Docket No. 52-009), requests an exemption from the requirement in 10 CFR 52.29(a) that a renewal application for an ESP must bring the information and data contained in the previous application up to date. If granted, this exemption would allow use of an alternative process for ESP renewal, whereby the term of ESP-002 is renewed for another 20 years without update, similar to the manner by which the NRC extends construction permit (CP) completion dates under 10 CFR 50.55(b). Importantly, under this alternative process, the ESP data must still be updated before incorporation into any application to construct or operate a nuclear power plant.

2.0 BACKGROUND

The ESP process, offered under 10 CFR 52, Subpart A, was first established by the NRC in 1989 to address industry concerns with the former licensing process under 10 CFR Part 50. Previously, the licensing process required large expenditures of time and money by utilities well before key environmental, site safety, and emergency planning issues could be resolved. As envisioned, the ESP process is meant to resolve key environmental, site safety, and emergency planning issues well in advance of when a decision is made to build a nuclear power facility and before substantial capital is invested in the construction of a new nuclear facility. When the NRC revised 10 CFR Part 52 in 2007, it reiterated that the current ESP process allows applicants to "request preapproval of a site (so-called site banking), separate from other licensing actions," and that "[t]his process was created for proposed sites that the applicant may not plan to use in the near term."²

Under the NRC's 10 CFR Part 52 regulations, an ESP has a term not to exceed 20 years and may be renewed for up to an additional 10- to 20-year term (not to exceed 40 years from initial issuance) by applying for renewal not less than 12 months, and no more than 36 months before, the permit expires.³ Importantly, 10 CFR 52.29(a) also specifies that "*[a]n application for renewal must contain all information necessary to bring up to date the information and data contained in the previous application*" (emphasis added). In other words, the default requirement is for an ESP renewal applicant to comprehensively update its Safety Analysis Report (SAR), Environmental Report (ER), and other parts of the original ESP application to reflect any new information or changes that have occurred since the ESP was first issued.

The NRC has characterized an ESP as a "partial construction permit." However, an ESP does not authorize any construction or operation of a nuclear power plant. The holder of an ESP must still seek a 10 CFR Part 50 CP or Part 52 combined construction permit and operating license (COL), at which time the NRC will review updated design, site, and environmental information

² Licenses, Certifications, and Approvals for Nuclear Power Plants; Final Rule, 72 Fed. Reg. 49,352, 49,439 (Aug. 28, 2007) (2007 Part 52 Rule).

³ 10 CFR 52.26; 10 CFR 52.33; 10 CFR 52.29(a)

provided by the applicant before any safety-related construction is authorized. For example, under 10 CFR 52.79(b), a COL application that references an ESP must contain, among other things, information to demonstrate that the facility design falls within the site characteristics and design parameters specified in the ESP. In other words, COL applicants relying on an ESP must provide any new and significant information relevant to the ESP parameters. Section 52.79(b) also requires updated emergency preparedness information, as does 10 CFR 52.39. These analyses and updates are most pertinent at the time when the applicant is ready to move forward with a new nuclear project.

The NRC issued ESP-002 for the Grand Gulf site on April 5, 2007, with an expiration date of April 5, 2027 (Reference 1). Entergy, on behalf of SERI, is seeking to renew ESP-002 for an additional 20 years to preserve the option of constructing new nuclear capacity at the Grand Gulf site. However, Entergy believes that completely updating the original ESP application at this time would require the expenditure of substantial resources that could be better directed at a potential future CP/COL application. It also is unnecessary as a practical matter because the ESP does not authorize construction, and any future CP/COL application referencing the ESP must include updated site information and analyses in accordance with NRC regulations.

3.0 BASIS FOR EXEMPTION REQUEST

As noted, Entergy, on behalf of SERI, requests an exemption from the requirements in 10 CFR 52.29(a), such that the term of ESP-002 may be renewed for another 20 years for good cause shown, consistent with the approach used by NRC to extend construction permit completion dates under 10 CFR 50.55(b). Granting the requested exemption would not alter any of the substantive safety or environmental findings or conditions associated with the ESP. The ESP's terms, site parameters, and permit conditions would remain as previously approved. It also would not authorize any physical changes to the site or reductions to the site acceptability criteria. Before any construction at the site could occur, Entergy would still be required to obtain a CP or COL. At that stage, all required safety, environmental, and technical information must be updated by Entergy and reviewed by the NRC prior to issuance of the CP or COL. Thus, the NRC will have access to updated information and data before authorizing any construction or operation of a plant, satisfying the intent of the update requirement even if it is deferred until the CP or COL application stage.

Entergy is currently assessing the feasibility of constructing one or more new nuclear power plants at the ESP site. Under 10 CFR 52.29(a), SERI would need to file an ESP renewal application by February 19, 2027, consistent with the exemption granted in Reference 2. To meet this deadline, Entergy would need to expend significant resources preparing an ESP renewal application. As the current economic and energy policy environments evolve, those factors can also influence the feasibility of a new nuclear construction project. Deferring the substantial cost of updating the required ESP information until Entergy has greater certainty around a new nuclear project will result in more efficient use of both Entergy and NRC financial and other resources.

Furthermore, the proposed exemption is consistent with the intent of the "Accelerating Deployment of Versatile, Advanced Nuclear for Clean Energy Act of 2024" (ADVANCE Act) to modernize the regulatory framework and spur the deployment of advanced reactors. As an example, Subsection 501(a) of the ADVANCE Act requires the NRC to update its mission statement to include that the licensing and regulation of radioactive materials and nuclear energy for civilian purposes be "conducted in a manner that is efficient and does not

unnecessarily limit (1) the civilian use of radioactive materials and deployment of nuclear energy; or (2) the benefits of civilian use of radioactive materials and nuclear energy technology to society." In its updated mission statement, the NRC affirmed that it "protects public health and safety and advances the nation's common defense and security by enabling the safe and secure use and deployment of civilian nuclear energy technologies and radioactive materials through efficient and reliable licensing, oversight, and regulation for the benefit of society and the environment." (Reference 3). The enhanced mission statement directly aligns with the purpose of the ESP process, as discussed above in Section 2.0, in that the process was promulgated by the NRC in 1989 to address concerns with, and to improve the efficiency of, the licensing process for building and starting up a new nuclear facility.

Finally, the proposed exemption is consistent with Executive Order "Ordering the Reform of the Nuclear Regulatory Commission" from May 23, 2025. Section 2 of the Order, titled "Policy," states, in part "[i]t is the policy of the United States to: ... (b) Facilitate increased deployment of new nuclear reactor technologies, such as Generation III+ and IV reactors, modular reactors, and microreactors, including by lowering regulatory and cost barriers to entry[.]" Section 3 of the Order, titled "Reforming the NRC's Culture," states, in part, "[w]hen carrying out its licensing and related regulatory functions, the NRC shall consider the benefits of increased availability of, and innovation in, nuclear power to our economic and national security in addition to safety, health, and environmental considerations." These sections from the Order align with the intent of this exemption request in that they support the deployment of new nuclear reactor technology through an innovative approach to ESP renewal that lowers the regulatory and cost barriers.

4.0 JUSTIFICATION FOR EXEMPTION AND SPECIAL CIRCUMSTANCES

10 CFR 52.7 provides that "[t]he Commission may...grant exemptions from the requirements of the regulations of this part," and "[t]he Commission's consideration will be governed by § 50.12 of this chapter" unless other criteria are specified (which is not the case here). Therefore, for the reasons discussed below, Entergy requests that this proposed exemption be granted because it meets the exemption criteria in 10 CFR 50.12.

4.1 Exemption Justification

4.1.1 The Exemption is Authorized by Law

The exemption is authorized by law. The requirement in 10 CFR 52.29(a) that an ESP renewal application include updated information and data is not mandated by any provision of the Atomic Energy Act (AEA) of 1954, as amended. Rather, that requirement was imposed via rulemaking and is a matter of regulatory policy, not a specific statutory mandate. In fact, the AEA only explicitly requires an application to be brought "up to date" at the point of proceeding from a construction permit to an operating license – and only then because the plant's construction would be completed and ready for operation. Specifically, Section 185.a of the AEA provides that "[u]pon the completion of the construction or modification of the facility, [and] upon the filing of any additional information needed to bring the original application up to date," and subject to all other standards being met, the Commission shall issue an operating license. The AEA contains no similar language or provision requiring an ESP renewal application to be updated. Indeed, ESPs were not contemplated when Section 185 was written, and that section's updating requirement is limited to the CP-to-OL transition. Thus, there appears to be no statutory bar to

the exemption-based approach described in this Appendix, subject to the ESP renewal applicant demonstrating compliance with the other criteria specified on 10 CFR 50.12.

4.1.2 The Exemption will not Present an Undue Risk to Public Health and Safety

Granting an exemption from 10 CFR 52.29(a) would not present any undue risk to the public health and safety. An ESP does not itself permit the construction or operation of a nuclear facility – it only addresses site suitability issues. Before any license to construct or operate a reactor at the site is granted in the future, the NRC must verify that the site and design meet all applicable safety, environmental, and emergency planning requirements, including consideration of new information since the original ESP review, consistent with 10 CFR 52.39 and 52.79.

The Commission will continue to have a full opportunity to conduct a complete and thorough safety and environmental review at the CP application or COL stage, and the full right of the public to participate in the licensing process will be maintained in accordance with the Commission's regulations. The NRC will not issue a CP or COL unless and until it makes the requisite findings under 10 CFR Parts 50 or 52, respectively. Therefore, there is no undue risk to public health and safety.

4.1.3 The Exemption is Consistent with the Common Defense and Security

Granting an exemption from 10 CFR 52.29(a) that would allow the ESP to be renewed without bringing the information and data contained in the initial application up to date would not affect continued protection of the common defense and security at the ESP site since there is no existing nuclear facility located at the ESP site. ESP-002 does not allow construction of a new nuclear facility. Rather, it is intended to be referenced in a future application for a CP under 10 CFR Part 50, or an application for a COL under 10 CFR Part 52.

4.2 Special Circumstances Supporting the Issuance of an Exemption

Under 10 CFR 50.12(a)(2), the NRC will not consider granting an exemption unless at least one of six "special circumstances" enumerated in the regulation is present. Three special circumstances apply to this request. First, under 10 CFR 50.12(a)(2)(ii), the underlying purpose of the rule can still be achieved if Entergy files an ESP renewal application without bringing the information and data in the initial application up to date. Thus, application of "update" requirement 10 CFR 52.29(a) is not necessary in this circumstance. Second, compliance would result in undue hardship or other costs significantly in excess of those contemplated when the rule was adopted (10 CFR 50.12(a)(2)(iii)). Third, other material circumstances not considered when the regulation was adopted are present, such that granting the exemption is in the public interest (10 CFR 50.12(a)(2)(vi)).

4.2.1 Application of the regulation would not serve the underlying purpose.

The underlying purpose of the 10 CFR 52.29(a) "update" requirement is to ensure that, when the NRC reviews an ESP renewal application, it has sufficiently current information to make sound safety and environmental determinations. In the case of an ESP, the ultimate safety and environmental decisions on plant construction and operation are deferred to the later CP or COL application.

The ESP renewal itself does not authorize construction or any new activity; it simply extends the period during which the site remains "banked" for potential future use. The NRC's regulations already require that at the time of a CP or COL application, the application contents be supplemented to account for any "new and significant" information and that the safety analysis incorporate the actual reactor design and current site data. The underlying purpose of 10 CFR 52.29(a) – to base licensing decisions on accurate, up-to-date information – will not be undermined by this exemption. The NRC will still receive all necessary updated information (safety analyses, environmental data, etc.) at the proper time (prior to construction authorization). Therefore, strict application of the "bring up to date" provision in 10 CFR 52.29(a) is not necessary to serve the rule's underlying purpose.

In sum, application of the "update" requirement in 10 CFR 52.29(a) is not necessary to achieve the underlying purpose of the rule, as required by 10 CFR 50.12(a)(2)(ii). Accordingly, special circumstances are present to justify the requested exemption.

4.2.2 Compliance would result in undue hardship or other costs significantly in excess of those contemplated when the rule was adopted

Requiring an ESP holder to fully update every element of the previous ESP application (especially where no major physical changes to or uses of the site have occurred) imposes an undue burden that was likely not fully contemplated when the regulation was adopted. Preparing a complete update of the ESP Safety Analysis Report, Environmental Report, and other documentation is essentially akin to re-doing much of the original application's work (which was an extensive multi-year effort). It would potentially entail new site studies, revisiting environmental surveys and population/socioeconomic data, updating meteorological and geological analyses, and so forth to reflect the current conditions and any changes since the permit was issued. The cost of this effort can be substantial – likely requiring millions of dollars in analysis and documentation costs and more than a year of dedicated effort. This is a substantial expenditure for a site that ultimately may not be developed and utilized for an operating reactor(s) if market or other conditions prove to be unfavorable. Moreover, as noted above, much of the required update work likely would need to be repeated when a CP or COL application is eventually prepared.

If the ESP is renewed now (with updated information) but the actual CP or COL application is not submitted for several more years, the "new" data gathered for ESP renewal purposes could itself become outdated, necessitating yet another round of updates. In effect, strict compliance with 10 CFR 52.29(a) could result in duplicative updates – one now for ESP renewal and another later for the CP/COL application. Imposing this cost at the renewal stage could discourage ESP holders from maintaining valid site permits or pursuing new nuclear projects, contrary to the NRC's updated mission statement, focus on improving regulatory efficiency, and recent congressional and executive directives that are aimed at expediting new domestic nuclear deployments and which did not exist when 10 CFR 52.29(a) was promulgated in 1989.

4.2.3 Other material circumstance not considered when the regulation was adopted

The public interest is served by a modern and efficient regulatory process that focuses resources on areas of safety significance. Congress and the NRC have recently emphasized

the importance of avoiding unnecessary regulatory burdens that do not meaningfully contribute to safety. For example, the ADVANCE Act of 2024 directs the NRC to modernize its licensing framework and explicitly calls for regulatory processes to be "efficient and not unnecessarily limit" the development of nuclear energy. Requiring an ESP holder to undertake duplicative updates and analysis – when those updates will have to be repeated at the CP or COL stage – could be an unnecessary regulatory impediment that offers no significant safety or environmental benefit.

Granting the exemption described herein would be consistent with the ADVANCE Act's overarching purpose, the NRC's updated mission statement, and the May 23, 2025, Executive Order titled "Ordering the Reform of the Nuclear Regulatory Commission," which calls for "expeditious processing of license applications and the adoption of innovative technology."

It also is in the public interest for both the NRC and applicants to use their resources efficiently, focusing on the most safety-significant reviews. Granting an exemption to 10 CFR 52.29(a) would allow ESP holders to efficiently maintain their license and be ready to move forward with new nuclear development when appropriate, without unnecessary regulatory burdens in the interim. This outcome would clearly serve the public interest by facilitating potential future energy development, conserving resources, and still ensuring that all necessary information will be reviewed by NRC at the proper time.

5.0 ENVIRONMENTAL CONSIDERATION

Entergy has determined that the proposed exemption request meets the categorical exclusion provision in 10 CFR 51.22(c)(25). Specifically, the requested licensing action is an exemption from the requirements of the Commission's regulations and: (1) there is no significant hazards consideration; (2) there is no significant change in the types or significant increases in the amounts of any effluents that may be released offsite; (3) there is no significant increase in individual or cumulative occupational radiation exposure; (4) there is no significant construction impact; (5) there is no significant increase in the potential for or consequences from radiological accidents; and (6) the requirements from which an exemption is sought involve other requirements of an administrative nature.

Therefore, in accordance with 10 CFR 51.22(b), no environmental assessment or environmental impact statement needs to be prepared in connection with the proposed exemption request.

5.1 No Significant Hazards Consideration Analysis

Entergy has evaluated the proposed exemption using the criteria in 10 CFR 50.92, "Issuance of amendment," and has determined that the proposed exemption does not involve a significant hazards consideration. The following information is provided to support a finding of no significant hazards consideration.

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

Response: No

The proposed exemption would allow Entergy to submit the ESP-002 renewal application without updating the information and data contained in the initial application. The ESP does not allow construction of a new nuclear facility. Rather, the ESP is intended to be referenced in a future application for a CP under 10 CFR Part 50, or an application for a COL under 10 CFR Part 52. The accident analyses associated with the ESP was based on source term parameters using surrogate reactor characteristics, in conjunction with specific site characteristics, for the purpose of assessing the suitability of the proposed ESP site. The conclusions of the accident analyses are subject to confirmation at the COL or CP stage. The proposed exemption only affects the "update" requirement for the ESP-002 renewal application. Therefore, the proposed exemption does not involve a significant increase in the probability or consequences of an accident previously evaluated.

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

Response: No

The proposed exemption would allow Entergy to submit the ESP-002 renewal application without updating the information and data contained in the initial application. The proposed exemption only affects the "update" requirement for the ESP-002 renewal application. Therefore, the proposed exemption does not create the possibility of a new or different kind of accident from any accident previously analyzed.

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

Response: No

The proposed exemption would allow Entergy to submit the ESP-002 renewal application without updating the information and data contained in the initial application. Margin of safety is associated with confidence in the ability of the fission product barriers (i.e., fuel cladding, reactor coolant system pressure boundary, and containment structure) to limit the radiological dose to the public and control room operators in the event of an accident. The proposed exemption only affects the "update" requirement for the ESP-002 renewal application. No existing or authorized plant is affected. Therefore, the proposed exemption does not involve a significant reduction in a margin of safety. Based upon the reasoning presented above, Entergy concludes that the requested change involves no significant hazards consideration, as set forth in 10 CFR 50.92(c), "Issuance of Amendment."

- 5.2 There is no significant change in the type or significant increase in the amounts of effluents that may be released offsite

The proposed exemption only affects the "update" requirement for the ESP-002 renewal application. The early site permit does not allow construction of a new nuclear facility. Rather, the early site permit is intended to be referenced in a future application for a CP under 10 CFR Part 50, or an application for a COL under 10 CFR Part 52. The proposed exemption will not cause any materials or chemicals to be introduced that could cause effluent release offsite. Therefore, the proposed exemption will result in no significant change to the types or significant increase in the amounts of any effluents that may be released offsite.

5.3 There is no significant increase in the cumulative public or occupational radiation exposure

The proposed exemption only affects the "update" requirement for the ESP-002 renewal application. There are no changes that could lead to a significant increase in individual or cumulative occupational radiation exposure.

5.4 There is no significant construction impact

No construction activities are associated with the proposed exemption. The proposed exemption only affects the "update" requirement for the ESP-002 renewal application.

5.5 There is no significant increase in the potential for or consequences from radiological accidents

See the no significant hazards considerations discussion in Section 5.1 above.

5.6 The requirements from which the exemption is sought involve 10 CFR 51.22(c)(25)(vi)(I)

The underlying purpose of the "update" requirement in 10 CFR 52.29(a) from which this exemption is sought is to ensure that, when the NRC reviews an ESP renewal application, it has sufficiently current information to make sound safety and environmental determinations. In the case of an ESP, the ultimate safety and environmental decisions on plant construction and operation are deferred to the later CP or COL application, and the NRC reviews updated information at that time. As such, the requirement to "update" the information contained in the initial application for the permit to support a renewal is considered administrative because the information will have to be updated once again in support of a CP or COL application. The requested exemption, if granted, would allow Entergy to submit the early site permit renewal application without bringing up to date the information contained within the initial permit application.

6.0 PRECEDENT

Although there is no precedent yet for the renewal of an ESP, the action and associated level of review should be viewed as comparable to an extension of the completion date in a construction permit. Under AEA Section 185.a and 10 CFR 50.55(b), the NRC may extend the completion date for a construction permit "upon good cause shown." The Tennessee Valley Authority (TVA), for example, has made use of this provision on numerous occasions for Bellefonte Nuclear Plants (BLN) (CP Nos. CPPR-122 and CPPR-123, for BLN Units 1 and 2, respectively). Most recently, on January 22, 2021, the NRC issued an Order (ML20335A393) amending CPPR-122 and CPPR-123, thereby extending the latest completion dates to October 1, 2021.

7.0 CONCLUSION

As demonstrated above, this request for an exemption from the "update" requirement of 10 CFR 52.29(a) meets the criteria of 10 CFR 52.7 and 10 CFR 50.12 for specific exemptions. Specifically, the requested exemption is authorized by law, will not present an undue risk to the

public health and safety, and is consistent with the common defense and security. In addition, the special circumstances described in 10 CFR 50.12(a)(2)(ii), (iii) and (vi) are present and warrant issuance of the exemption.

8.0 REFERENCES

1. Letter from NRC to SERI, "Issuance of Early Site Permit (ESP) for System Energy Resources, Inc. – Grand Gulf ESP Site (ESP-002)" (ML070780457), dated April 5, 2007
2. NRC letter to Entergy, "Grand Gulf ESP-002 – Exemption from the Requirements Related to Submission of Early Site Permit Renewal Application (EPID-L-2025-LLE-015)," (ML25218A052) dated August 18, 2025
3. SRM-SECY-24-0083, "Mission Statement Update Options Pursuant to Subsection 501(a) of the ADVANCE Act of 2024," (ML25024A040), dated January 24, 2025