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10 CFR 50.12
10 CFR 54.15

January 27, 2023

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
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Quad Cities Nuclear Power Station, Units 1 and 2
Renewed Facility Operating License Nos. DPR-29 and DPR-30
NRC Docket Nos. 50-254 and 50-265

Subject: Request for Exemption from 10 CFR 2.109(b)

In accordance with 10 CFR 54.15 and 50.12, "Specific exemptions," Constellation Energy Generation, LLC (CEG) requests an exemption from 10 CFR 2.109(b), "Effect of timely renewal application." Section 2.109(b) provides that if a nuclear power plant licensee files a sufficient license renewal application (LRA) with the U.S. Nuclear Regulatory Commission (NRC) "at least 5 years before the expiration of the existing license, the existing license will not be deemed to have expired until the application has been finally determined." Specifically, CEG requests that it be permitted to submit the subsequent LRA for the Quad Cities Nuclear Power Station, Units 1 and 2, no later than three years prior to the expiration of each unit's renewed operating license, December 14, 2032, for both units.

The attachment to this letter provides the rationale and justification for the exemption request. The requested exemption from 10 CFR 2.109(b) is permissible under 10 CFR 54.15 and 10 CFR 50.12 because it 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, special circumstances are present such that: (1) the application of 10 CFR 2.109(b) in this instance would not serve the underlying purpose of the rule; (2) compliance with the five-year time limit specified in that regulation would result in undue hardship or other costs that are significantly in excess of those contemplated when the regulation was adopted, or that are significantly in excess of those incurred by others similarly situated; and (3) other material circumstances that were not considered when the regulation was adopted are present such that granting the exemption are in the public interest.

CEG requests approval of the proposed exemption by January 27, 2024. There are no regulatory commitments contained in this submittal.

January 27, 2023
U.S. Nuclear Regulatory Commission
Page 2

If you have any questions or require additional information, please contact Ms. Lydia S. Dworakowski at (779) 231-5682 or via email at lydia.dworakowski@constellation.com.

Respectfully,

Christopher D. Wilson
Senior Manager License Renewal
Constellation Energy Generation, LLC

Attachment: Request for Exemption from 10 CFR 2.109(b)

cc: NRC Regional Administrator, Region III
NRC Senior Resident Inspector, Quad Cities Nuclear Power Station
NRC NRR Project Manager, Quad Cities Nuclear Power Station
Illinois Emergency Management Agency – Division of Nuclear Safety

Attachment
Request for Exemption from 10 CFR 2.109(b)

1.0 SPECIFIC EXEMPTION REQUEST

In accordance with 10 CFR 54.15 and 50.12, "Specific exemptions," Constellation Energy Generation, LLC (CEG) requests exemption from the five-year deadline specified in the U.S. Nuclear Regulatory Commission's (NRC) timely renewal regulation at 10 CFR 2.109(b). Specifically, CEG requests that it be permitted to submit the subsequent license renewal application (SLRA) for the Quad Cities Nuclear Power Station, Units 1 and 2, (Quad Cities, Units 1 and 2) no later than three years prior to the expiration of each unit's renewed operating license and still receive timely renewal protection under 10 CFR 2.109(b). If the NRC approves this exemption request, CEG would be authorized to submit the Quad Cities, Units 1 and 2 SLRA by December 14, 2029 (i.e., three years before the renewed license expiration date of December 14, 2032 for each unit) and still be granted the protections afforded by the timely renewal provision in 10 CFR 2.109(b).

2.0 BACKGROUND

As a result of changing economic and legislative environments, the economic viability of the continued operation of certain nuclear units in the Constellation fleet beyond their current license expiration dates has been uncertain. In June 2016, for instance, Exelon Generation Company (currently known as Constellation Energy Generation, LLC) announced plans to retire the Clinton Power Station and Quad Cities, Units 1 and 2 in June 2017 and June 2018, respectively – absent the passage of Illinois energy legislation that would make continued operation of those plants financially viable. Later that year, the Illinois General Assembly enacted the Future Energy Jobs Act (FEJA), enabling Exelon to keep operating those units. Also, in August 2020, Exelon announced plans to retire Byron Station, Units 1 and 2 and Dresden Nuclear Power Station, Units 2 and 3 in September 2021 and November 2021, respectively for similar economic reasons since the FEJA did not apply to these plants. On September 15, 2021, however, the State of Illinois enacted sweeping legislation designed to achieve 100% carbon-free power by 2045 to enable it to transition to a clean energy economy. This legislation establishes decarbonization requirements for the State as well as programs to support the retention and development of emissions-free sources of electricity. This resulted in the Illinois Power Agency (IPA) being authorized to procure carbon mitigation credits from qualifying nuclear plants for a five-year period beginning on June 1, 2022. As a result of this new legislation, Byron Station, Units 1 and 2 and Dresden Nuclear Power Station, Units 2 and 3 were provided economic relief at least through 2027. Consequently, Exelon reversed its plans to retire these plants. The dynamics of evolving economic and legislative environments resulted in delaying decisions to pursue license renewal.

On August 16, 2022, Congress passed and President Biden signed into law the Inflation Reduction Act of 2022 (IRA), which, among other things, includes federal tax credits, certain of which are transferable or fully refundable, for clean energy technologies including existing nuclear plants and hydrogen production facilities. The Nuclear Production Tax Credit (PTC) recognizes the contributions of carbon-free nuclear power by providing a federal tax credit of up to \$15/MWh, subject to phase-out, beginning in 2024 and continuing through 2032.

As the nation's largest producer of clean, carbon-free energy, the continued operation of the CEG nuclear fleet would assist in achieving zero emissions goals. To that end, CEG intends to

Attachment
Request for Exemption from 10 CFR 2.109(b)

seek license renewal for nuclear units within the fleet provided sustained favorable economic viability. CEG has notified the NRC of the intent to pursue license renewal for Clinton Power Station, Unit 1 with a planned submittal date in the first quarter 2024 (Reference 1). CEG has also recently notified the NRC of the intent to pursue subsequent license renewal for Dresden Nuclear Power Station, Units 2 and 3 with a planned submittal date in the second quarter 2024 and additional subsequent license renewal applications for unnamed Constellation plants planned in the second quarter of 2026 and third quarter 2026 (Reference 2).

3.0 BASIS FOR EXEMPTION REQUESTS

Under Section 9(b) of the Administrative Procedure Act of 1946 (APA), 5 USC 558(c), "[w]hen the licensee has made timely and sufficient application for a renewal or a new license in accordance with agency rules, a license with reference to an activity of a continuing nature does not expire until the application has been finally determined by the agency." This is known as the "timely renewal doctrine." The timely renewal doctrine is embodied in the NRC's regulations in 10 CFR 2.109(b), which states that "[i]f the licensee of a nuclear power plant licensed under 10 CFR 50.21(b) or 50.22 files a sufficient application for renewal of either an operating license or a combined license at least 5 years before the expiration of the existing license, the existing license will not be deemed to have expired until the application has been finally determined."

Under 10 CFR 2.109(b), CEG would need to file the SLRA for Quad Cities, Units 1 and 2 by December 14, 2027. To meet these deadlines, CEG estimates that it would need to begin expending significant resources preparing the SLRAs by October 2025. Granting the exemption would permit better management of CEG and NRC resources associated with the preparation, review, and approval of planned license renewal applications and relieve schedule congestion. Furthermore, while Illinois's Future Energy Jobs Act provides economic relief to Quad Cities, Units 1 and 2 at least through 2027 and federal Nuclear PTC may provide additional relief potentially through 2032, beyond that time the economic viability of continued operation of Quad Cities, Units 1 and 2 is uncertain. Allowing CEG to make its decision on subsequent license renewal at a later date, when the economic viability of extended Quad Cities, Units 1 and 2 operations can be more readily assessed, will result in more efficient use of both CEG and NRC financial and other resources.

As explained below, allowing Quad Cities, Units 1 and 2 to receive timely renewal protection if the SLRA is filed three years in advance of the license expiration dates would enable CEG and the NRC to better manage resources and relieve schedule congestion and also allow CEG to make the most well-informed decision regarding the prudence of seeking subsequent license renewal while still providing adequate time for the NRC to complete its reviews of the SLRA in accordance with the NRC's established license renewal review schedule goal of 18 months.

4.0 JUSTIFICATION FOR EXEMPTION and SPECIAL CIRCUMSTANCES

10 CFR 54.17(a) states, in part, that "[t]he filing of an application for a renewed license must be in accordance with Subpart A of 10 CFR Part 2," which includes the timely renewal provision in 10 CFR 2.109(b). In addition, 10 CFR 54.15 provides that "[e]xemptions from the requirements of this part [Part 54] may be granted by the Commission in accordance with 10 CFR 50.12." For the reasons discussed below, CEG respectfully requests that this exemption be granted because it meets the exemption criteria in Section 50.12.

Attachment
Request for Exemption from 10 CFR 2.109(b)

4.1 Exemption Justification

A. The exemption is authorized by law

10 CFR 50.12(a)(1) requires a demonstration that an exemption from NRC regulations is authorized by law. The NRC's timely renewal regulation (10 CFR 2.109) implements APA Section 9(b), which states that "[w]hen a licensee has made timely and sufficient application for a renewal or a new license in accordance with agency rules, a license with reference to an activity of a continuing nature does not expire until the application has been finally determined by the agency."¹

As discussed further in Section 4.2.A of this exemption request, the five-year deadline (i.e., latest permitted date) for obtaining timely renewal protection for an SLRA as specified in 10 CFR 2.109(b) is the result of a discretionary agency rulemaking under Sections 161 and 181 of the Atomic Energy Act of 1954, as amended (AEA), and not mandated by statute. No statute requires the NRC to specifically adopt a five-year timely renewal limit for license renewal applications. Rather, in implementing the APA's timely renewal provision, the NRC need only ensure that it provides itself with reasonable and sufficient time to review SLRAs while providing appropriate timely renewal protection to compliant applicants.²

In fact, before the NRC first issued Part 54 in 1991, Section 2.109 contained a 30-day renewal application-filing deadline for all licenses issued for activities "of a continuing nature." The NRC and stakeholders recognized that reactor LRA reviews would take considerably longer than 30 days. The proposed Part 54 rule would have modified Section 2.109 to require that nuclear power plant LRAs be submitted at least three years prior to license expiration to be eligible for timely renewal protection, which the Commission explained was "based upon a projected 3-year period for completing staff review of a renewal application and any necessary hearing."³ In the final rule, however, the Commission concluded that "for consistency [with requirements to submit decommissioning plants and related financial assurance information], the deadline for the submittal of a license renewal application should be 5 years prior to the expiration of the current operating license."⁴

Thus, neither the AEA nor the APA requires a five-year period for filing a renewal application to comply with the timely renewal doctrine. The NRC may shorten the period at its discretion and in accordance with agency rules through a change to, or exemption from, the existing regulation. Accordingly, this exemption request is authorized by law.

B. The exemption will not present an undue risk to public health and safety

10 CFR 50.12(a)(1) requires a demonstration that the granting of an exemption from the requirement in question "will not present an undue risk to the public health and safety." As

¹ Administrative Procedure Act of 1946 (APA), 5 USC 558(c).

² At the time the NRC issued its original license renewal rule, the NRC Staff noted that "[a]ny period determined as reasonable for NRC review of license renewal applications should ideally not be restrictive to licensees." NUREG-1362, "Regulatory Analysis for Final Rule on Nuclear Power Plant License Renewal" (Dec. 1991) at 5-5.

³ Nuclear Power Plant License Renewal; Proposed Rule, 55 Fed. Reg. 29,043 (July 17, 1990).

⁴ Nuclear Power Plant License Renewal; Final Rule, 56 Fed. Reg. 64,943, 64,962 (Dec. 13, 1991).

Attachment
Request for Exemption from 10 CFR 2.109(b)

shown below, this exemption request fully satisfies that criterion.

CEG will need to satisfy applicable regulatory requirements in connection with the preparation and submittal of a sufficient SLRA for Quad Cities, Units 1 and 2 if CEG decides to seek subsequent license renewal. If this exemption is approved, CEG would be able to submit the application no later than three years prior to the license expiration and conduct any necessary technical reviews and evaluations to ensure continued safe plant operation for the requested period of extended operation. The NRC's targeted schedule for review of subsequent license renewal applications is 18 months.⁵ Three years will therefore afford the NRC a sufficient and reasonable period of time to complete its safety and environmental reviews prior to the December 14, 2032 expiration date of the Quad Cities, Units 1 and 2 operating licenses.

Pursuant to 10 CFR 54.29,⁶ "Standards for issuance of a renewed license," a renewed license may be issued only upon a finding by the NRC that, for matters within the scope of license renewal, there is "reasonable assurance that the activities authorized by the renewed license will continue to be conducted in accordance with the [current licensing basis], and that any changes made to the plant's [current licensing basis] ... are in accord with the [AEA] and the Commission's regulations." Nothing in this exemption request would obviate the NRC's required findings under Section 54.29, or limit public participation in the subsequent license renewal process. Furthermore, pending final action on any future SLRA, the NRC would retain its authority to conduct all regulatory activities associated with licensing, inspection, and oversight, and to take whatever action(s) may be necessary to ensure adequate protection of the public health and safety.

C. The exemption is consistent with the common defense and security

Modifying the timely renewal application-filing deadline from five years to three years before license expiration would not affect continued protection of the common defense and security at Quad Cities, Units 1 and 2. Quad Cities, Units 1 and 2's safeguards and security programs will remain in full effect during any interim period permitted under the timely renewal doctrine. Further, licensee security programs are outside the scope of a subsequent license renewal review.⁷

4.2 Special Circumstances Supporting the Issuance of 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

⁵ The 18-month review target is noted, for example, in the NRC's letter to Exelon accepting its application for subsequent license renewal. See Letter to Michael Gallagher, "Peach Bottom Atomic Power Station, Units 2 and 3, Determination of Acceptability and Sufficiency for Docketing, Proposed Review Schedule, and Opportunity for a Hearing Regarding the Exelon Generation Company, LLC, Application for Subsequent License Renewal" (Aug. 27, 2018) (ML18191B085).

⁶ As noted in NUREG-2192, "Standard Review Plan for Review of Subsequent License Renewal Applications for Nuclear Power Plants," "the NRC has not adopted special provisions that apply only to subsequent renewal, so that the requirements in 10 CFR Part 54 continue to govern SLR." NUREG-2192 at xxix.

⁷ See 10 CFR § 54.4, "Scope."

Attachment
Request for Exemption from 10 CFR 2.109(b)

of the rule can be achieved if CEG files an SLRA three years before the Quad Cities, Units 1 and 2 licenses expire. Thus, application of the five-year time limit in 10 CFR 2.109(b) is not necessary in this circumstance. Second, compliance with the regulation would result in undue hardship and costs to CEG that are significantly in excess of those contemplated when the regulation was adopted, or those incurred by others similarly situated (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)).

A. Application of the regulation would not serve the underlying purpose of the rule or is not necessary to achieve the underlying purpose of the rule

As previously noted, the "timely renewal" doctrine "embodied in the Commission's regulations at 10 CFR 2.109"⁸ is not a doctrine unique to the NRC. Rather, Section 2.109 is reflective of a statutory requirement found in Section 9(b) of the APA, which states:

When the licensee has made timely and sufficient application for a renewal or a new license in accordance with agency rules, a license with reference to an activity of a continuing nature does not expire until the application has been finally determined by the agency.⁹

The underlying purpose of the APA's timely renewal provision is to "prevent[] the unfairness that would result if agency delay caused a licensee to lose a license despite having filed a timely renewal application."¹⁰ The NRC's regulation in Section 2.109 is therefore intended to protect a licensee who is engaged in an ongoing licensed activity and who has complied with agency rules in applying for a renewed or new license from facing license expiration due to delays in the administrative process.

As noted above, on December 13, 1991, the NRC published the license renewal rule, 10 CFR Part 54. The Statement of Considerations (SOC) for that rule discussed the timely renewal doctrine and the basis for establishing the deadline for filing LRAs as five years prior to expiration of the existing license. The Commission made clear in the 1991 Final Rule that the purpose of the filing deadline is to "provide the NRC a reasonable time to review an application for a renewed operating license for a nuclear power plant."¹¹ Specifically, the SOC stated that:

Because the review of a renewal application will involve a review of many complex technical issues, the NRC estimates that the technical review would take approximately 2 years. Any necessary hearing could likely add an additional year or more. Therefore, in the proposed rule, the Commission

⁸ Nuclear Power Plant License Renewal; Final Rule, 56 Fed. Reg. at 64,962.

⁹ APA at Section 558(c).

¹⁰ *Kay v. FCC*, 525 F. 3d 1277, 1279 (D.C. Cir. 2008) (citing *Miami MDS Co. v. FCC*, 14 F.3d 658, 659-60 (D.C. Cir. 1994)). See also United States Attorney General's Manual on the Administrative Procedure Act (1973) at 91 ("In such a case the licensee has done everything that is within its power to do and he should not suffer if the agency has failed, for one reason or another, to consider his application prior to the lapse of his license.").

¹¹ Nuclear Power Plant License Renewal; Final Rule, 56 Fed. Reg. at 64,962. The Attorney General's Manual on the Administrative Procedure Act (noted above) also points out that, under the APA, "Agencies, of course, may make reasonable rules requiring sufficient advance application."

Attachment
Request for Exemption from 10 CFR 2.109(b)

modified § 2.109 to require that nuclear power plant operating license renewal applications be submitted at least 3 years prior to their expiration in order to take advantage of the timely renewal doctrine.

No specific comment was received concerning the proposal to add a 3-year provision for the timely renewal provision for license renewal. The current regulations require licensees to submit decommissioning plans and related financial assurance information on or about 5 years prior to the expiration of their operating licenses. The Commission has concluded that, *for consistency*, the deadline for submittal of a license renewal application should be 5 years prior to the expiration of the current operating license. The timely renewal provisions of § 2.109 now reflect the decision that a 5-year time limit is more appropriate.¹²

The foregoing excerpts demonstrate that although the NRC viewed three years as providing "a reasonable time to review an application," the five-year deadline was ultimately codified based on what was thought of as merely an efficiency. Should CEG seek subsequent license renewal for Quad Cities, Units 1 and 2, it would submit the SLRA no later than three years prior to expiration of these licenses. Based on the NRC's extensive history in reviewing LRAs and more recent history in reviewing SLRAs, the proposed three-year period will provide the NRC ample time to perform a full and adequate review of the applications. Therefore, application of the five-year period in 10 CFR 2.109(b) for the filing of an SLRA is not necessary in this situation to achieve the purpose of the regulation.

Submittal of the Quad Cities, Units 1 and 2 SLRA at least 36 months prior to expiration of the operating license would provide the three-year review period that the NRC originally estimated would be adequate to review an LRA and complete any associated adjudicatory hearing. Again, the NRC's current targeted schedule for reviewing LRAs is to complete its review and make a decision on issuing the renewed license within 18 months (or less) of receipt if there is no hearing. Furthermore, in the first two completed SLRA reviews, Turkey Point and Peach Bottom, the NRC's reviews were completed in 19 and 18 months respectively,¹³ and both applications were contested.¹⁴ More recently, the Surry SLRA review took approximately 18 months.¹⁵ Therefore, a period of 36 months would provide ample time for the NRC to perform

¹² Nuclear Power Plant License Renewal, Final Rule, 56 Fed. Reg. at 64,962 (emphasis added).

¹³ The Turkey Point, 3 & 4 SLRA was accepted by the NRC on April 26, 2018, and the renewed license was issued on December 4, 2019. (ML19305C879) The Peach Bottom 2 & 3 SLRA was accepted by the NRC on August 27, 2018, and the NRC's review was completed on March 5, 2020. (ML20010F285)

¹⁴ See *In the Matter of Florida Power & Light Co.* (Turkey Point Nuclear Generating Units 3 and 4), LBP-19-08 (Oct. 24, 2019) (Order terminating Licensing Board proceedings), and *In the Matter of Exelon Generation Company, LLC* (Peach Bottom Atomic Power Station Units 2 and 3), LBP-19-05 (June 20, 2019) (Order terminating Licensing Board proceedings).

¹⁵ The Surry 1 & 2 SLRA was accepted by the NRC on October 15, 2018, and the NRC's issued the final approval on May 4, 2021. (ML20091L850) While the total time from docketed to approval was 30 months, the NRC notes that "the applicant had not obtained a Coastal Zone Management Act (CZMA) consistency determination from the State prior to [the NRC's original target date]" and that "the licenses could not be issued until such a concurrence was completed by the State." The NRC completed its technical and environmental reviews in March 2020 and April 2020, or 17 and 19 months respectively.

Attachment
Request for Exemption from 10 CFR 2.109(b)

full and adequate safety and environmental reviews of the Quad Cities, Units 1 and 2 SLRA.¹⁶

Based on the above, application of the five-year timeframe in 10 CFR 2.109(b) is not necessary to achieve the underlying purpose of the rule satisfying 10 CFR 50.12(a)(2)(ii). Accordingly, this special circumstance is present to justify the requested exemption.

B. Compliance would result in undue hardship or other costs that are significantly in excess of those contemplated when the regulation was adopted, or that are significantly in excess of those incurred by others similarly situated

The NRC's timely renewal regulation did not contemplate the substantial impact that regulatory and legislative conditions could have on licensee's decisions to pursue license renewal, as comparable conditions did not exist at the time. The recent decisions of numerous licensees to prematurely close nuclear power plants and related State and federal legislative actions intended to prevent further shutdowns are a testament to this fact.

As explained above, while Illinois's Future Energy Jobs Act provides economic relief to Quad Cities, Units 1 and 2 at least through 2027 and the federal Nuclear PTC potentially through 2032, beyond that time the economic viability of continued operation of Quad Cities, Units 1 and 2 is uncertain. Allowing CEG to make its decision on subsequent license renewal at a later date, when the economic viability of extended Quad Cities, Units 1 and 2 operations can be more readily assessed, will result in more efficient use of both CEG and NRC financial and other resources. Granting the exemption would also permit better management of both CEG and NRC resources associated with the preparation, review, and approval of planned license renewal applications and relieve schedule congestion; created as a result of changing economic and legislative environments.

Without this exemption, CEG would face undue hardship and costs significantly in excess of those contemplated when the regulation was adopted. If the exemption is not granted and CEG must submit the SLRA no later than five years from expiration the licenses to preserve timely renewal protection, it may unnecessarily expend resources on developing and filing applications that CEG ultimately decides to withdraw for reasons that it cannot discern at this time. The cost to prepare an SLRA is substantial, estimated to be approximately \$30 million. Included in this cost are the fees associated with the NRC's review, which may prove unnecessary if the application is ultimately abandoned based on unforeseen economic or other conditions that adversely impact continued Quad Cities, Units 1 and 2 operations.

Alternatively, if the exemption is not granted and CEG submits the SLRA in less than five years from license expiration (so that it may have a better understanding of market conditions and relevant energy policies), then it faces a different risk: being forced to shut down Quad Cities,

¹⁶ CEG acknowledges, of course, the Commission's series of decisions in February 2022 regarding the adequacy of environmental reviews for subsequent license renewal and subsequent actions taken by the NRC staff to address the Commission's concerns. NRC has since made available to the public its proposed rule to modify 10 C.F.R. Part 51 and the Generic Environmental Impact Statement (GEIS) for license renewal, but NRC had given no indication that the overall goal for completing license renewals would change as a result of proposed change to the regulation and GEIS. See SECY-22-0109, Proposed Rule - Renewing Nuclear Power Plant Operating Licenses - Environmental Review.

Attachment
Request for Exemption from 10 CFR 2.109(b)

Units 1 and 2 if the applications are not approved before the current licenses expires. This scenario would cause CEG to lose operating revenue and incur expenses associated with preparing the SLRA. It would also cause significant uncertainty for Quad Cities, Units 1 and 2 employees and could create staffing concerns due to the indeterminate length of time that the station would be shut down and the possibility of a permanent shutdown.

Therefore, the potential financial and employment hardships Quad Cities, Units 1 and 2 would bear if the requested exemption is not granted significantly exceed those contemplated by the NRC when the current timely renewal regulation was promulgated. These are additional special circumstances justifying issuance of the exemption.

C. It is in the public interest to grant the exemption based on new and material circumstances that did not exist when the NRC adopted Section 2.109(b)

As described above, Quad Cities, Units 1 and 2 must operate within economic, regulatory, and legislative environments that continue to evolve and factors heavily into any future decision by CEG to pursue subsequent license renewal for Quad Cities, Units 1 and 2. These dynamic market and political conditions constitute material circumstances that were not specifically considered when the NRC revised 10 CFR 2.109(b) in 1991. In deciding upon a five-year advance filing period for the timely renewal rule, the NRC did not consider these factors. Rather, it adopted the five-year timeframe purely for administrative reasons; i.e., to provide consistency with other regulations requiring the filing of decommissioning plans and financial assurance information five years prior to license expiration. It is in the public interest to grant the exemption based on these new and material circumstances because it would allow for more prudent use of CEG and NRC resources while having no impact on maintaining public health and safety.

5.0 PRECEDENT

The NRC has previously approved the following requests for exemption from the timely renewal provision of 10 CFR 2.109:

1. Oyster Creek Nuclear Generating Station – Exemption from the Requirements of Section 109(b) of 10 CFR Part 2, Regarding the Effect of Timely License Renewal Application (TAC No. MC3967), dated December 22, 2004 (ML042960164)
2. Clinton Power Station, Unit 1, Exemption from the Requirements of 10 CFR 54.17(A) (EPID L-2018-LLE-0018), dated July 11, 2019 (ML19193A015)
3. Perry Nuclear Power Plant, Unit No. 1 – Exemption from the Requirements of 10 CFR 54.17(A) (EPID L-2020-LLE-0089), dated July 13, 2020 (ML20171A292)
4. Nine Mile Point Nuclear Station, Unit 1 – Exemption from the Requirements of 10 CFR Part 2, Section 2.109(b) Related to Submission of Subsequent License Renewal Application (EPID L-2020-LLE-0146), dated April 9, 2021 (ML21061A050)

Attachment
Request for Exemption from 10 CFR 2.109(b)

5. R.E. Ginna Nuclear Power Plant - Exemption from the Requirements of 10 CFR 2.109(b) Related to Submission of Subsequent License Renewal Application (EPID L-2020-LLE-0144), dated April 14, 2021 (ML21063A003)
6. Dresden Nuclear Power Station, Units 2 and 3 – Exemption from the Requirements Related to Submission of Subsequent License Renewal Application (EPID L-2021-LLE-0048), dated March 15, 2022 (ML21305A027)

The Oyster Creek exemption allowed AmerGen Energy Company, LLC to submit an LRA approximately 44 months prior to the expiration of the operating license, while maintaining the timely renewal protection provided in 10 CFR 2.109(b). The Clinton, Perry, Nine Mile Point, Ginna, and Dresden exemptions allowed submitting license renewal applications no later than 3 years from the expiration of these licenses while maintaining the protection of the timely renewal provision in 10 CFR 2.109(b).

6.0 ENVIRONMENTAL ASSESSMENT

CEG has determined that the proposed exemption request meets the categorical exclusion provision in 10 CFR 51.22(c)(25), "Granting of an exemption from the requirements of any regulation of this chapter." Specifically, the requested licensing action is an exemption from the requirements of the Commission's regulations and (1) there is no significant hazards considerations; (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 the exemption are sought involve scheduling requirements and 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.

6.1 No Significant Hazards Consideration

CEG has evaluated whether a significant hazards consideration is involved with the proposed exemption in accordance with the three standards set forth in 10 CFR 50.92, "Issuance of amendment," as discussed below.

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

Response: No

The proposed exemption would allow CEG to submit SLRAs for Quad Cities, Units 1 and 2 less than five years before expiration of the renewed operating license, while still maintaining timely renewal protection under 10 CFR 2.109(b). The proposed exemption does not involve a significant increase in the probability or consequences of an accident previously evaluated because it does not involve a change to the design configuration or operation of the facilities. The proposed exemption does not affect the source term,

Attachment
Request for Exemption from 10 CFR 2.109(b)

containment isolation, or radiological release assumptions used in evaluating the radiological consequences of an accident previously analyzed in the Quad Cities, Units 1 and 2 Updated Final Safety Analysis Reports (UFSAR).

Therefore, the proposed exemption does not involve a significant increase in the probability or consequences of an accident previously evaluated.

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

Response: No

The proposed exemption would allow CEG to submit SLRA for Quad Cities, Units 1 and 2 less than five years before expiration of the renewed operating licenses, while still maintaining timely renewal protection under 10 CFR 2.109(b). The proposed exemption does not involve physical alteration of plant systems, structures, or components (SSCs), or changes in parameters governing the manner in which the plants are operated and maintained.

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 exemption involve a significant reduction in a margin of safety?

Response: No

The proposed exemption would allow CEG to submit the SLRA for Quad Cities, Units 1 and 2 less than five years before expiration of the renewed operating licenses, while still maintaining timely renewal protection under 10 CFR 2.109(b). No physical changes are being made to the design features or operation of the facilities.

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 has no impact on the margin of safety and robustness provided in the design and construction of these facilities. In addition, the proposed exemption will not relax any of the criteria used to establish safety limits, nor will the proposed exemption relax safety system settings or limiting conditions of operation as defined in the Technical Specifications.

Therefore, the proposed exemption does not involve a significant reduction in a margin of safety.

Based on the above evaluation, CEG concludes that the proposed exemption presents no significant hazards considerations under the standards set forth in 10 CFR 50.92 and, accordingly, a finding that the exemption involves "no significant hazards consideration" is justified.

Attachment
Request for Exemption from 10 CFR 2.109(b)

6.2 There is no significant change in the types or significant increases in the amounts of any effluents that may be released offsite

There are no expected changes in the types, characteristics, or quantities of effluents discharged to the environment associated with the proposed exemption. The exemption will not cause any materials or chemicals to be introduced into the plant that could affect the characteristics or types of effluents released offsite. In addition, the method of operation of waste processing systems will not be affected by the exemption. The proposed exemption will not result in changes to the design basis requirements of SSCs that function to limit or monitor the release of effluents. All the SSCs associated with limiting the release of effluents will continue to be able to perform their functions. 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.

6.3 There is no significant increase in individual or cumulative public or occupational radiation exposure

The proposed exemption does not involve any physical alterations to the plants' configurations or any changes to the operation of the facilities that could lead to a significant increase in individual or cumulative occupational radiation exposure.

6.4 There is no significant construction impact

No construction activities are associated with the proposed exemption.

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

See the no significant hazards considerations discussion in Section 6.1 above.

6.6 The requirements from which the exemption is sought involves § 51.22(c)(25)(vi)(G) (Scheduling requirements), and § 51.22(c)(25)(vi)(I) (Other requirements of an administrative, managerial, or organizational nature)

The underlying purpose of the timely renewal requirement in 10 CFR 2.109(b) from which this exemption is sought is to protect a licensee who is engaged in an ongoing licensed activity and who has complied with agency rules in applying for a renewed or new license from facing license expiration as the result of delays in the administrative process. The requested exemption, if granted, would allow CEG to submit the SLRA for Quad Cities Units 1 and 2 with less than five years remaining before expiration of the operating license while maintaining the protections of the timely renewal provision in 10 CFR 2.109(b), and allowing sufficient time for NRC review of the SLRA.

7.0 CONCLUSION

As demonstrated above, the request for an exemption from the requirements of 10 CFR 2.109(b) meet the criteria of 10 CFR 54.15 and 10 CFR 50.12 for specific exemption.

Attachment
Request for Exemption from 10 CFR 2.109(b)

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 M.P. Gallagher (Exelon Generation Company, LLC) to U.S. NRC, "Notice of Intent to Pursue License Renewal," dated July 29, 2019 (ML19210C877)
2. Letter from C.D. Wilson (Constellation Energy Generation, LLC) to U.S. NRC, "Notice of Intent to Pursue Subsequent License Renewal Applications," dated November 9, 2022 (ML22313A073)