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January 16, 2014

Subject: Request for Scheduling Exemption Regarding the Period for Submitting an Application for Design Certification Renewal and Duration of the **AP600™** Reactor Certified Design (Docket No. 52-003)

Dear Mr. Tracy:

Westinghouse Electric Company LLC (Westinghouse), the applicant for the **AP600¹** reactor design certification, requests scheduling exemptions with respect to the renewal of the **AP600** reactor design certification. With the current **AP600** reactor design certification set to expire on January 24, 2015, the deadline for submission of an application for renewal is currently January 24, 2014. Rather than allow the current application deadline to pass, Westinghouse is seeking an exemption that, if granted, will extend the current duration of certification until January 24, 2020. In addition, Westinghouse also seeks permission through this exemption request to file an application for renewal of the **AP600** reactor certified design between January 24, 2017, and January 24, 2019. If granted, this would establish a new timely renewal period that would effectively permit the currently certified **AP600** reactor design to remain valid and referencable until Westinghouse submits a renewal application and the Commission has determined whether to renew the certification.

The requirements for the duration of a certified design and for submitting an application for renewal are administrative in nature, and granting exemptions in this instance would have no adverse impact on safety. These exemptions are authorized under the law, there is no undue risk to the public health and safety or common defense and security, and all other requirements justifying an exemption are met.

Westinghouse acknowledges that a change in business circumstances, including recent international interest in the **AP600** reactor design, has contributed to the need for this exemption request. While these circumstances could not have been predicted, the result is fortuitous in that Westinghouse, our potential customers, and the NRC could all benefit by reaping significant efficiencies and associated resource savings that would be realized through the granting of this request. These benefits could be achieved without any corresponding adverse impact on safety.

¹ **AP600** and **AP1000** are trademarks or registered trademarks of Westinghouse Electric Company LLC, its affiliates and/or its subsidiaries in the United States of America and may be registered in other countries throughout the world. All rights reserved. Unauthorized use is strictly prohibited. Other names may be trademarks of their respective owners.

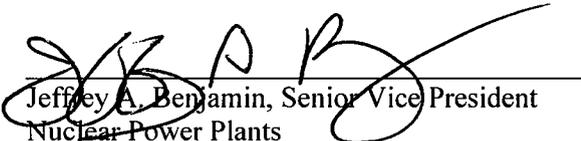
As demonstrated in the attached exemption request, extending the current certification duration until January 24, 2020, and permitting the submission of an application for renewal between January 2017 and January 2019 would allow Westinghouse to take advantage of the opportunity to incorporate lessons learned from the ongoing **AP1000**® reactor construction projects taking place at the Vogtle and V.C. Summer sites. Since the certified **AP1000** reactor design is based on the certified **AP600** reactor design, the lessons learned from the licensing and construction of the **AP1000** plants are largely applicable to the certified **AP600** reactor design. Westinghouse believes that improvements to the **AP600** reactor design could be realized by incorporation of these lessons learned, as appropriate. Though Westinghouse has already begun the process of accumulating lessons learned from the **AP1000** reactor licensing and construction experiences, this process is still underway. As a result, Westinghouse will not have developed a complete picture until the first **AP1000** units in the United States approach commercial operation. The NRC's granting of Westinghouse's exemption request enables it to have the opportunity to consider these lessons thus benefiting Westinghouse because of the potential increased efficiencies in the design certification renewal process.

Accounting for these lessons learned in the **AP600** reactor design will also benefit our potential customers and the NRC. Incorporating lessons learned into the design control document (DCD) for the **AP600** reactor design, rather than forcing customers to address these lessons by seeking departures from the DCD, would be an obvious improvement in the efficiency of the licensing process that would benefit our customers. The NRC could also see significant benefits with a later renewal application because the agency can expect previously identified issues to be addressed in the renewal application, including those issues that have been raised by current renewal applications. Finally, this approach supports the NRC's goal of standardization because an applicant referencing the renewed **AP600** reactor certification would have less need to seek departures from the certified design.

Westinghouse appreciates the NRC's consideration of its request, and is confident that the request is supported by a sound and practical regulatory basis. If granted, Westinghouse believes that all interested stakeholders will benefit.

Please feel free to contact me at 412-374-6655 or benjamja@westinghouse.com if you have any questions or concerns.

Very truly yours,


Jeffrey A. Benjamin, Senior Vice President
Nuclear Power Plants

Enclosures:

- 1) Westinghouse Request for Scheduling Exemption Regarding the Period for Submitting an Application for Design Certification Renewal and Duration of the **AP600** Reactor Certified Design.
- 2) Westinghouse Environmental Assessment for its Request for Scheduling Exemption Regarding the Period for Submitting an Application for Design Certification Renewal and Duration of the **AP600** Reactor Certified Design.

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Enclosure 1

Westinghouse's Request for Scheduling Exemptions Regarding the Period for Submitting an Application for Design Certification Renewal and Duration of the AP600 Reactor Certified Design

I. Background:

The NRC issued the current certification for the **AP600** reactor design by final rule on December 23, 1999,² and it became effective on January 24, 2000. In accord with 10 C.F.R. § 52.55(a) and Section VII of Appendix C to Part 52, the **AP600** reactor certification will only be valid and referencable until January 24, 2015.³ NRC regulations at 10 C.F.R. § 52.57(a) permit the design certification applicant or any other person to apply for renewal of the certification “not less than 12 nor more than 36 months before the expiration of the initial 15 year period...” thus requiring submittal of an application for renewal for the **AP600** reactor design no later than January 24, 2014.

Until recently, Westinghouse did not have any potential customers for the **AP600** reactor design and did not have any reason to file an application for renewal of the **AP600** reactor design. However, business circumstances have recently changed, making renewal of the **AP600** reactor certified design desirable. Given the timing of these recent changes, Westinghouse is not able to prepare an application for renewal of the **AP600** reactor certified design by January 24, 2015. Even if it were feasible to assemble an acceptable renewal application, Westinghouse believes that it would be imprudent, inefficient, and impractical to submit a renewal application by the January 24, 2014 deadline because of ongoing licensing and construction activities that could prove beneficial to the design.

II. The Specific Exemption Requests

As further explained below, Westinghouse seeks the following exemptions. First, Westinghouse requests that the **AP600** reactor design certification at Appendix C to 10 C.F.R. Part 52 be exempted from the duration of certification found at § 52.55(a), specifying that a standard design certification is only valid for 15 years from the date of issuance. Westinghouse specifically requests that the **AP600** reactor certified design remain valid and in effect until January 24, 2020. Second, based on this new date for certification, Westinghouse requests that it be exempted from the renewal application filing period at § 52.57(a) to enable Westinghouse to file an application for renewal of the **AP600** reactor design certification between January 24, 2017, and January 24, 2019. This time period is consistent with the current timely renewal application provision at 10 C.F.R. § 52.57(a), but adjusted based on a new certification period of January 24, 2020. Finally, Westinghouse also

² Final Rule, “**AP600** Design Certification,” 64 Fed. Reg. 72002 (Dec. 23, 1999).

³ Section 52.55(a) states that “a standard design certification issued under this subpart is valid for 15 years from the date of issuance.” Section VII to Appendix C of Part 52 states that “This appendix may be referenced for a period of 15 years from January 24, 2000.”

requests that a Westinghouse renewal application submitted between January 24, 2017, and January 24, 2019, be treated as “timely” for purposes of 10 C.F.R. § 52.55(b), § 52.57(b), and Section VII of Appendix C to Part 52, so that the **AP600** reactor certified design remains valid and referencable until Westinghouse submits an application for renewal and the NRC determines that the **AP600** reactor certified design should be renewed.

III. Regulatory Requirements for Exemptions under Part 50 and Part 52

The applicable exemption provisions are found at 10 C.F.R. § 52.7 and 10 C.F.R. § 50.12. Section 52.7 permits the NRC to grant exemptions from Part 52 if the criteria of Section 50.12 are met. Section 50.12, in turn, provides for the granting of exemptions that are “authorized by law, will not present an undue risk to the public health and safety, and are consistent with the common defense and security.” In addition to satisfying these criteria, Section 50.12 requires that an applicant for an exemption demonstrate at least one “special circumstance” is present, as outlined at § 50.12(a)(2). All of the criteria justifying an exemption are present, as demonstrated below.

A. The 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 (10 C.F.R. § 50.12(a)(1))

First, Westinghouse’s proposed exemptions are authorized by law. The Atomic Energy Act of 1954 (the Act) does not address the period of a design certification or timing of an application for renewal of a design certification. The 15 year certification period at 10 C.F.R. § 52.55(a) was established by the NRC pursuant to the agency’s broad discretion under the Act. Neither the Act nor any other law prohibits the NRC from extending the period of duration of a design certification or for filing an application for its renewal. Similarly, the Act does not require the NRC to limit a design certification to a specified period, let alone a specific duration of 15 years. In fact, the rulemaking record for Part 52 suggests that the design certification duration is entirely discretionary and not based on any specific statutory or other legal requirement. When the original Part 52 rule was proposed in 1988, the NRC proposed a certification duration of 10 years.⁴ In the Final Rule issued in 1989, however, the NRC modified the duration to its current period of 15 years, without any reference to any overarching legal requirement associated with that issue.⁵ In other words, there is no legal prohibition against a design certification continuing to be valid after 15 years.

Second, no undue risk to the public health and safety or the common defense and security would be presented by extending the duration of certification for the **AP600** reactor design or the period for filing an application for renewal of the **AP600** reactor design certification to

⁴ See Proposed Rule, Early Site Permits, Standard Design Certifications; and Combined Licenses for Nuclear Power Reactors, 53 Fed. Reg. 32060, 32074 (Aug. 23, 1988).

⁵ See Final Rule, Early Site Permits, Standard Design Certifications; and Combined Licenses for Nuclear Power Reactors, 54 Fed. Reg. 15372, 15382 (Apr. 18, 1989).

January 24, 2019. Westinghouse's request is, in essence, a request for a schedular exemption, not an exemption from any substantive safety or security requirements. As noted above, the rulemaking record for Part 52 does not suggest that the NRC imposed a specific design certification duration out of a safety or security concern. Rather, the record reflects that the period of certification appears to be primarily administrative in nature. As further support for this conclusion, it should be noted that 10 C.F.R. § 52.55(b) provides that a design certification that is referenced by a combined license remains valid for the period of the COL, which could be more than 40 years.

B. Westinghouse's request is justified by several Special Circumstances (10 C.F.R. § 50.12(a)(2))

In addition to Westinghouse's request being authorized by law, and not presenting any safety or security concerns, the requirements of 10 C.F.R. § 50.12(a)(2) are met because several special circumstances are present that justify granting Westinghouse's exemption request. Though Section 50.12(a) only requires the satisfaction of one of these criteria, Westinghouse believes that three of the criteria are met.

1) 10 C.F.R. § 50.12(a)(2)(ii) - - *“Application of the regulation in the particular circumstances would not serve the underlying purpose of the rule or is not necessary to achieve the underlying purpose of the rule.”*

Subsection 50.12(a)(2)(ii) is met because strict application of 10 C.F.R. §§ 52.55, 52.57 and Section VII of Appendix C to Part 52 in these particular circumstances would not serve the underlying purpose of those regulations. The current duration of certification originated in 1989 in the rulemaking that codified many of the current design certification standards found in Part 52. Although there is no discussion of the basis for the 10 year certification period in the Proposed Rule published in 1988, as noted above, the Commission did modify the duration to 15 years in the Final Rule. In the Final Rule, the Commission explained that it was extending the period of certification to 15 years “to permit more operating experience with a given design to accumulate before the certification comes up for renewal or ceases to be available to applicants for combined licenses.”⁶ Application of this rationale to the present situation with the **AP600** reactor design justifies extending the period for filing an application for renewal of the **AP600** reactor design certification.

Although the **AP600** reactor design has not been built, and thus has no accumulated operating experience, the design is substantially similar to the **AP1000** reactor design that is currently under construction at multiple sites in the United States and China. Westinghouse is currently collecting and evaluating the lessons learned from those construction projects, and considering their applicability to the **AP600** reactor design

⁶ *Id.*

certification. However, Westinghouse will not be able to make a full assessment until the construction of the **AP1000** reactors and the Inspections, Test, Analysis, and Acceptance Criteria (ITAAC) implementation process approach completion. In the United States, that is not expected until 2017-2018. Therefore, allowing Westinghouse to submit an application for renewal between January 24, 2017, and January 24, 2019, is a reasonable measure that permits Westinghouse to accumulate experience that is applicable to the **AP600** reactor design certification, assess the accumulated changes needed to update the design, and develop and submit an acceptable application for renewal.

2) *Section 50.12(a)(2)(iii) - - "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."*

Section 50.12(a)(2)(iii) is satisfied because both Westinghouse and the NRC would incur undue hardships and unnecessary additional costs if the current **AP600** reactor design certification were allowed to expire on January 24, 2015, and If Westinghouse were required to submit and NRC needed to review a new design certification application.

In the absence of an exemption request, Westinghouse is only left with two untenable options with the current deadline for submitting an application for renewal quickly approaching: allow the application period to expire, or attempt to assemble an acceptable application before the deadline. By allowing the current application deadline to pass, Westinghouse would be required to submit an entirely new certification application if it ultimately decided to maintain the referencability of the **AP600** reactor design. Submitting an entirely new certification application, however, would result in an undue hardship and substantial additional cost. For many of the issues that are considered resolved in the current **AP600** reactor design certification, there is likely to be little change in an application for renewal. However, a new application for certification of the **AP600** reactor design would require all of these previously resolved issues to be reopened and reexamined in a new application and therefore needlessly be subject to further review by the NRC without any appreciable safety benefit. This would undoubtedly result in an unnecessary use of resources and time by both Westinghouse and the NRC.

With respect to the second option of attempting to submit a renewal application by January 24, 2015, this would result in an equally undue hardship because Westinghouse could not feasibly put together an acceptable application meeting the requirements of 10 C.F.R. § 52.57.⁷ Recent changes in business circumstances have led Westinghouse to reevaluate the need to preserve all available options regarding the **AP600** reactor design. For example, recent international interest in the **AP600** reactor design caused

⁷ Section 52.57 requires that an applicant include in its application "all information necessary to bring up to date the information and data contained in the previous application," as well as information necessary to satisfy 10 C.F.R. § 50.150, the aircraft impact assessment rule.

Westinghouse to re-examine the desirability of maintaining the **AP600** reactor design certification. Though the timing of these events has created a regulatory challenge, Westinghouse believes it to be imperative to preserve all of its future options.

Additionally, as the NRC's ongoing reviews of renewal applications for the Advanced Boiling Water Reactor (ABWR) has demonstrated, significant resources and time can be expended on processing a renewal application that does not meet the NRC's expectations. These ABWR renewal applications were the first of their kind, and it is apparent that there are a number of lessons that can be learned that, if properly addressed, could result in a significant increase in efficiencies in future renewal application reviews. It is Westinghouse's intent to account for these lessons and submit a robust renewal application that minimizes the time and resources required for an NRC review. Having to submit a renewal application by January 24, 2014, would not enable Westinghouse to account for the lessons learned in the certification renewal process.

In addition to the impracticality and inefficiency of submitting an application by January 24, 2014, Westinghouse believes that it would be imprudent for it to do so without the opportunity to re-evaluate the **AP600** reactor design in light of lessons learned on the licensing and construction of the **AP1000** reactor design currently underway. Westinghouse expects that the **AP1000** reactor design licensing and construction lessons-learned evaluation will result in improvements to the efficiency of the licensing and construction of an **AP600** reactor design. The ability to consider and incorporate these lessons learned will result in significant cost and resource savings by Westinghouse, COL applicants and licensees referencing the **AP600** reactor design, and the NRC. Furthermore, Westinghouse anticipates that the time and effort associated with licensing, construction, and oversight issues would be lower for all parties if the **AP600** reactor design certification renewal application reflected lessons learned from the **AP1000** reactor design and licensing experience.

In summary, Westinghouse's request for exemption is a prudent way to preserve all of its future regulatory options regarding the **AP600** reactor design with very little impact on the NRC and no appreciable impact on public health and safety. On the other hand, allowing the application period to needlessly expire without action could result in a significant undue hardship on Westinghouse, future applicants and licensees, and the NRC without any corresponding benefit.

- 3) ***10 C.F.R. § 50.12(a)(2)(v) - - "The exemption would provide only temporary relief from the applicable regulation and the licensee or applicant has made good faith efforts to comply with the regulation."***

Extending the period for submitting an application for renewal of the design certification of the **AP600** reactor design to January 24, 2019, would only result in temporary relief from the NRC's regulations. Westinghouse would continue to comply with all

substantive requirements associated with the design certification and would satisfy all of the renewal application requirements when that time comes. Furthermore, Westinghouse has made a good faith effort to comply with the NRC's regulations and has proactively engaged with the NRC as the application deadline approached, including the timely filing of this request for exemption. It was not originally Westinghouse's intent to seek renewal of the **AP600** reactor design. However, the current business climate, as well as the renewed interest in smaller capacity reactor designs, prompted Westinghouse to reconsider the desirability of maintaining the current certification for the **AP600** reactor design. Westinghouse proactively engaged with the NRC as soon as it was feasible to do so, and it believes it has developed a reasonable solution that will ultimately have a positive impact on future licensing and construction of an **AP600** plant, as well as on the public health and safety.

IV. Basis for the New Period for a Timely *AP600* Reactor Renewal Application

Providing an opportunity for timely renewal of the **AP600** reactor design certification between January 24, 2017, and January 24, 2019, is reasonable and supported by a sound basis. As previously explained, a key driver of Westinghouse's exemption request is the ongoing **AP1000** reactor licensing, and construction processes at the Vogtle and V.C. Summer sites. Based on current schedules, these projects are not anticipated to begin commercial operation until late 2017 to early 2018. Though Westinghouse has already begun the process of accumulating lessons learned from the **AP1000** reactor licensing and construction experiences, there are likely still additional lessons to learn. Westinghouse will therefore not have developed a complete picture of the appropriate design changes to the **AP600** reactor design until the first **AP1000** units in the United States approach commercial operation. Once this picture is developed, Westinghouse anticipates that it may take up to approximately 12 months to assemble a comprehensive and robust renewal application for the **AP600** reactor design certification that fully benefits from the experiences gained during construction. Consideration of all of these factors leads to the conclusion that the appropriate time frame for submitting an application for renewal would be January 2017 to January 2019. This time period is consistent with the current timely renewal application provision of 36 to 12 months prior to expiration of the certification found at 10 C.F.R. § 52.57(a), but adjusted based on a new certification period expiring on January 24, 2020.

V. Continued Effectiveness of the Certified *AP600* Reactor Design

Section VII to Appendix C to Part 52 provides that the **AP600** certified design "may be referenced for a period of 15 years from January 24, 2000, *except as provided in 10 C.F.R. § 52.55(b) and 52.57(b).*" (emphasis added) Section 52.57(b) provides that "A design certification, either original or renewed, for which a timely application for renewal has been filed remains in effect until the Commission has determined whether to renew the

certification.”⁸ Westinghouse’s request for exemption, if granted, would extend the current date of certification for the **AP600** reactor design until January 24, 2020, and provide a new period of time during which Westinghouse could file an application for renewal, i.e. between January 24, 2017, and January 24, 2019. A Westinghouse application for renewal submitted during this new period should be treated as timely for purposes of §§ 52.55(b) and 52.57(b), and as such, the certified **AP600** reactor design should remain valid and in effect until Westinghouse has submitted its renewal application, and the Commission has determined whether to renew the certification.

VI. Conclusion:

In sum, Westinghouse has satisfied all of the criteria justifying exemptions from the provisions of 10 C.F.R. §§ 52.55(a) and 52.57(a), and the NRC should grant the exemptions. If the NRC grants Westinghouse’s requests for exemption, the duration of the certification for the **AP600** reactor design would be extended to January 24, 2020, and Westinghouse would have until January 24, 2019, to file an application for renewal. In addition, an application for renewal submitted in accord with the NRC’s granting of an exemption authorizing this new timeline should be considered timely for purposes of § 52.55(b), § 52.57(b), and Section VII to Appendix C to Part 52, and as such, the **AP600** reactor design certification should continue to be valid and in effect until Westinghouse has submitted its renewal application, and the Commission has determined whether to renew the certification.

⁸ Section 52.55(b) similarly provides that “A standard design certification continues to be valid beyond the date of expiration ... if a timely application for renewal of the certification has been filed.”

Enclosure 2

Westinghouse's Environmental Assessment for its Request for Scheduling Exemption Regarding the Period for Submitting an Application for Design Certification Renewal and Duration of the AP600 Reactor Certified Design

Westinghouse's proposed exemption meets the eligibility criterion for categorical exclusion set forth in 10 C.F.R. § 51.22(c)(25), because the proposed exemption involves: (i) no significant hazards consideration; (ii) no significant change in the types or significant increase in the amounts of any effluents that may be released offsite; (iii) no significant increase in individual or cumulative public or occupational radiation exposure; (iv) no significant construction impact; (v) no significant increase in the potential for or consequences from radiological accidents; and (vi) the requirements from which the exemption is sought involve scheduling requirements or other requirements of an administrative, managerial or organizational nature. Therefore, pursuant to 10 C.F.R. § 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed exemption.

(i) No Significant Hazards Consideration Determination. Westinghouse has evaluated the proposed exemption to determine whether or not a significant hazards consideration is involved by focusing on the three standards set forth in 10 C.F.R. § 50.92. The proposed exemption is purely administrative, and would effectively only extend the period during which Westinghouse can submit an application for renewal and the currently certified AP600 reactor design remains valid. The proposed exemption does not involve modification of the AP600 reactor design or any of its underlying analyses, or a physical alteration to a facility referencing the design. As explained in the exemption request, the 15 year duration for a design certification is primarily administrative, and not tied to any safety concerns. Therefore, none of the three criteria for the existence of a significant hazard consideration are present in this exemption request.

(ii) There would be no significant change in the types or significant increase in the amounts of any effluents that may be released offsite. Because this exemption request is of a scheduling nature, there are no expected changes in the types, characteristics, or quantities of effluents discharged to the environment associated with the proposed exemption.

(iii) There would be no significant increase in individual or cumulative public or occupational radiation exposure. Because this exemption request is of a scheduling nature, the exemption would result in no expected increases in individual or cumulative occupational radiation exposure on either the workforce or the public. There are no expected changes in normal occupational doses.

(iv) There would be no significant construction impact. Because this exemption request is of a scheduling nature, it will not result in any change in design or the manner of construction. Therefore, there will be no change in the environmental impacts of construction as a result of the exemption.

(v) There would be no significant increase in the potential for consequences from radiological accidents. Because this exemption request is of a scheduling nature, there would be no significant increase in the potential for consequences from radiological accidents.

(vi) The requirements from which exemptions are sought involve scheduling requirements or other requirements of an administrative, managerial or organizational nature. In its

exemption request, Westinghouse is effectively seeking schedular exemptions to preserve the existing **AP600** reactor design certification until such time that Westinghouse can determine the need for and content of an application to renew the certification. As discussed, the 15 year period for certification of a certified design under 10 C.F.R. § 52.55 and Section VII of Appendix C to 10 C.F.R. Part 52 and the renewal application requirements are primarily administrative, and permitting Westinghouse additional time during which it may file an application for renewal essentially amounts to a schedular exemption.

In sum, Westinghouse's request for exemption meets the criteria outlined at 10 C.F.R. § 51.22(c)(25) for categorical exclusion, and no environmental impact statement or environmental assessment need be prepared in connection with the proposed exemption.