SUPPORTING STATEMENT FOR INFORMATION COLLECTIONS CONTAINED IN THE APPENDIX F TO 10 CFR PART 52 DESIGN CERTIFICATION RULE FOR THE APR1400 DESIGN

(3150-XXXX) NEW

Description of the Information Collection

The U.S. Nuclear Regulatory Commission (NRC or Commission) is amending its regulations at Title 10 of the *Code of Federal Regulations* (10 CFR), Part 52 to certify the Advanced Power Reactor 1400 (APR1400) standard design. Applicants or licensees intending to construct and operate an APR1400 design may do so by referencing this design certification (DC) rule and need not demonstrate in its application the safety of the certified design as amended. Subpart B of 10 CFR Part 52 establishes the process for obtaining design certifications. The addition of Appendix F to 10 CFR Part 52 allows interested parties to reference the APR1400 design in an application for a combined license (COL). The information collection requirements of 10 CFR Part 52 were based largely on the requirements for licensing nuclear facilities under 10 CFR Part 50. Therefore, the burden for 10 CFR Part 52 resulting from the addition of a design certification is minimal.

A. JUSTIFICATION

Part 52 of 10 CFR, "Licenses, Certifications, and Approvals for Nuclear Power Plants," Subpart B, presents the process for obtaining standard design certifications. Section 52.63, "Finality of standard design certifications," provides criteria for determining when the Commission may amend the certification information for a previously certified standard design in response to a request for amendment from any person.

On December 23, 2014 (80 FR 5792), Korea Electric Power Corporation and Korea Hydro & Nuclear Power Co., Ltd (KEPCO/KHNP) tendered its application for certification of the APR1400 standard design with the NRC in accordance with Subpart B of 10 CFR Part 52. The NRC formally accepted and docketed the application on March 12, 2015 (80 FR 13035). The NRC is certifying revision 3 of the APR1400 standard design, as reviewed in the staff's final safety evaluation report dated September 28, 2018 (ML18087A364).

1. Need for and Practical Utility of the Collection of Information

This new Appendix F to 10 CFR Part 52 constitutes design certification for the APR1400 standard design, under Subpart B of 10 CFR Part 52, and allows interested parties to reference this design in an application for a COL. This new appendix represents an increase in burden, some of which is covered under 10 CFR Parts 50 and 52, as described below and shown in Tables 1 and 2.

Section IV.A.2.a

requires a plant-specific design control document (DCD) as part of the COL application. This section partially fulfills the requirements for contents of applications for a COL (10 CFR 52.79) and ensures that the

COL applicant commits to complying with the DCD.

Section IV.A.2.b requires reports on departures from and updates to the DCD, under Section X.B of Appendix F, as part of the COL application. This section

ensures that the COL application is up-to-date.

Section IV.A.2.c requires plant-specific technical specifications (10 CFR 50.36 and 50.36a) as part of the COL application. This information collection is the same as

for 10 CFR 50.36, but the timing of the burden is earlier (10 CFR 52.79).

Section IV.A.2.d requires information demonstrating compliance with site parameters and interface requirements as part of the COL application. This section fulfills

part of the requirements for a COL (10 CFR 52.79).

Section IV.A.2.e requires the COL applicant to address COL items in the generic DCD as

part of the COL application. This section fulfills part of the requirements

for a COL (10 CFR 52.79).

Section IV.A.2.f requires information required by 10 CFR 52.47(a), that is not within the

scope of this design certification, as part of the COL application. This

section fulfills part of the requirements for a COL (10 CFR 52.79).

Section IV.A.3 requires the COL applicant to include, in the plant-specific DCD, the

proprietary and safeguards information referenced in the generic DCD to ensure that the applicant has actual notice of these requirements. This section fulfills part of the requirements for contents of applications for a

COL (10 CFR 52.79).

<u>Section IV.A.4</u> requires the COL applicant to include, as part of the COL application,

information demonstrating that an entity other than KEPCO/KHNP is qualified to supply the APR1400 design, unless KEPCO/KHNP supplies

the design for the COL applicant's use.

Section X.A.1 requires the applicant for this design certification to maintain the generic

DCD and the sensitive unclassified non-safeguards information (including proprietary information) and safeguards information for the period that this certification may be referenced. This section ensures that the design information will be available to applicants that may reference this design

certification and is similar to the requirements in 10 CFR 50.71(e).

Section X.A.2 requires an applicant or licensee who references this design certification

to maintain the plant-specific DCD throughout the period of the

application and for the term of the license. This section is similar to the

requirements in 10 CFR 50.71(e).

Section X.A.3 requires an applicant or licensee who references this design certification

to prepare and maintain the bases for its changes to this design

certification throughout the period of the application and the term of the

license. This section is similar to the requirements in 10 CFR 50.59(d).

Section X.A.4.a

requires the applicant for this design certification to maintain a copy of the aircraft impact assessment (AIA) performed to comply with the requirements of 10 CFR 50.150(a) for the term of the certification (including any period of renewal).

Section X.A.4.b

requires COL applicants or licensees who references this design certification to maintain a copy of the AIA performed to comply with the requirements of 10 CFR 50.150(a) throughout the pendency of the application and for the term of the license (including any period of renewal).

Section X.B.1

requires COL applicants or licensees who reference this design certification to submit reports on departures from the plant-specific DCD. This section is similar to the requirements in 10 CFR 50.59(d)(2).

Section X.B.2

requires COL applicants or licensees who reference this design certification to submit updates to its plant-specific DCD that reflect generic changes to and plant-specific departures from the generic DCD. This section is similar to the requirements in 10 CFR 50.71(e).

Section X.B.3.a

requires submittal of reports and updates to the generic DCD with the initial COL application. This requirement ensures that the initial application is up-to-date and partially fulfills the requirements contents of applications in 10 CFR 52.79.

Section X.B.3.b

requires that during the period of review of the application and construction of a facility that references this design certification, summary reports on changes to the design must be submitted semi-annually. These reports are needed to provide timely notification of design changes during the critical period of application review and facility construction.

Section X.B.3.c

states that after the Commission has authorized operation of the nuclear plant, the frequency for submitting reports and updates returns to the frequency required by 10 CFR 50.59 and 50.71, respectively.

2. Agency Use of Information

In general, the information collections required by the above sections partially fulfills the requirements for a COL application that references this design certification and requires the applicant or licensee to maintain records in the same manner as 10 CFR Part 50. This information is needed by the NRC in order to fulfill its responsibilities in the licensing of nuclear power plants. The requirement to report changes to the certified design, during the interval from the application for a COL until an authorization to operate is issued, is to provide for NRC monitoring of changes to the facility and a common understanding of how the as-built facility conforms to the certified design. In addition, the NRC must make a finding, pursuant to 10 CFR 52.103(g), that the inspections, tests,

analyses, and acceptance criteria (ITAAC), that are described in the DCD, are met in the as-built design. To make its finding, the NRC will tailor its inspection program to monitor the construction and initial testing of the facility and will adjust its program to accommodate these changes.

3. Reduction of Burden through Information Technology

There are no legal obstacles to reducing the burden associated with this information collection. The proposed rule would not prescribe the manner in which the information is reported. The licensee is at liberty to utilize advanced information technology to reduce the burden. The NRC encourages respondents to use automated information technology when it would be beneficial to them. NRC issued a regulation (68 FR 58792; October 10, 2003), consistent with the Government Paperwork Elimination Act, that allows its licensees, vendors, applicants, and members of the public the option to make submissions electronically via CD-ROM, e-mail, special Web-based interface, or other means. It is estimated that 100 percent of the applications will be submitted electronically.

4. Effort to Identify Duplication and Use Similar Information

There is no duplication of requirements and this information is not available from any source other than the applicants involved. The information required by the NRC in applications, reports, or records concerning the licensing of nuclear power plants does not duplicate other Federal information collection requirements.

5. <u>Effort to Reduce Small Business Burden</u>

The information collection required by this regulation is not expected to be a burden on small business because only large companies appear to have the technical and financial resources to support the large capital investment required to design and construct these nuclear power plants. Therefore, small businesses are not expected to be seeking a design certification, COL, or manufacturing license made available by 10 CFR Part 52. No small entities are expected to be impacted by the proposed rule.

6. <u>Consequences to Federal Program or Policy Activities if the Collection is not Conducted or is Conducted Less Frequently</u>

This information is not collected on a repetitive basis from a single applicant. Indeed, the idea of design certification is to make it unnecessary to collect the same information from multiple applicants for COLs. Thus, the rule provides for less frequent collection. However, the NRC cannot collect the information any less frequently than provided in this rule. Less frequent collection of the information required by this regulation would compromise NRC ability to make appropriate licensing decisions and adversely affect the administration of the duties of the NRC under the law. Applications, and thus information collections, are required only when licensing is sought.

7. <u>Circumstances Which Justify Variation from OMB Guidelines</u>

The information collections mentioned in this rule contain no variation from the Office of Management and Budget (OMB) guidelines contained in 5 CFR 1320.6.

8. Consultations Outside the NRC

Opportunity for public comment on the information collection requirements for this clearance package was published in the *Federal Register*. Any comments received will be addressed with the submission of the final rule.

9. Payments or Gifts to Respondents

Not applicable.

10. <u>Confidentiality of Information</u>

Confidential and proprietary information is protected in accordance with NRC regulations at 10 CFR 9.17(a) and 10 CFR 2.390(b).

11. <u>Justification for Sensitive Questions</u>

No sensitive questions are asked in this rule.

12. Estimate of Annualized Burden and Burden Hour Cost

See the attached tables. Most of the information collection requirements for licensing nuclear plants are covered under 10 CFR Part 50 (3150-0011) and 10 CFR Part 52 (3150-0151). The reporting requirements for a design certification, under 10 CFR Part 52, are for the COL applicants who reference this design. There are no reporting requirements for the design certification applicant since this rule certifying the design comes after the design application has been submitted and reviewed. A design certification rule does maintain recordkeeping requirements for both the design certification applicant and the COL applicants who reference this design. Therefore, the only burden associated with this rule will be for the applicant for this design certification regarding recordkeeping under Sections X.A.1 and X.A.4(a). The remaining burden is associated with the operations phase of the license and will be captured under the 10 CFR Part 50 clearance. The APR1400 design certification is not anticipated to be referenced in any COL applications¹ during the period of this clearance or in the foreseeable future.

Total Burden and Burden Hour Cost

The burden for the annualized reporting burden is given in Table 1. The burden for the annualized recordkeeping burden is given in Table 2. The total annualized burden for all information collections is 37 hours, broken down as follows:

¹A COL application review period is estimated to be 2.5 years and the construction period is estimated to be 4 years in duration.

- 0 hours for annual reporting burden
- 37 hours for annual recordkeeping burden

The annual estimated cost for the collection is \$10,175 (37 hours x \$275/hr).

The \$275 hourly rate used in the burden estimates is based on the Nuclear Regulatory Commission's fee for hourly rates as noted in 10 CFR 170.20 "Average cost per professional staff-hour." For more information on the basis of this rate, see the final rule "Revision of Fee Schedules; Fee Recovery for Fiscal Year 2018," (83 FR 29622; June 25, 2018).

13. Estimate of Other Additional Costs

The NRC has determined that the records storage cost is roughly proportional to the recordkeeping burden cost. Based on a typical clearance, the recordkeeping storage cost has been estimated to be equal to .0004 percent of the recordkeeping burden. Therefore, the annual recordkeeping storage cost for this collection is estimated to be \$4 (37 recordkeeping hours x \$275 x 0.0004).

14. Estimated Annualized Cost to the Federal Government

The NRC anticipates that zero COL applicants will reference this design certification over the next 3 years. The information collection requirements for this proposed rule would fulfill a portion of the information collections for a COL, which is covered under OMB Clearance Nos. 3150-0011 and 3150-0151. Therefore, the majority of the cost to the Federal Government is covered under other clearances. The NRC's review of the information collected under this proposed rule is a portion of those estimates and the cost is recovered through fee assessments to the applicant under 10 CFR Parts 170 and 171.

15. Reasons for Change in Burden or Cost

This proposed rulemaking constitutes design certification for the APR1400 standard design through the addition of Appendix F to 10 CFR Part 52. This appendix allows interested parties to reference the APR1400 design in an application for a COL. The respondent is the KEPCO/KHNP (the design certification applicant) who will incur 37 hours of recordkeeping burden at a cost of \$10,175 (37 hours x \$275/hr.).

16. Publication for Statistical Use

This information is not published for statistical use.

17. Reason for Not Displaying Expiration Date

The requirement will be contained in a regulation. Amending the *Code of Federal Regulations* to display information that, in an annual publication, could become obsolete would be unduly burdensome and too difficult to keep current.

18. Exceptions to the Certification Statement

None.

COLLECTION OF INFORMATION EMPLOYING STATISTICAL METHODS

Not applicable.

TABLE 1

ANNUALIZED REPORTING BURDEN FOR APPENDIX F TO 10 CFR PART 52

Section	No. of Respondents	Responses / Respondent	Total No. of Responses	Burden per Response	Total Annual Burden (Hrs)	Cost @ \$275/Hr
IV.A.2.a (Burden covered under 10 CFR 52.79) (COL applicant)						
IV.A.2.b (Burden included in X.B below) (COL applicant)						
IV.A.2.c (Burden covered under 10 CFR 52.79) (COL applicant)						
IV.A.2.d (Burden covered under 10 CFR 52.79) (COL applicant)						
IV.A.2.e (Burden covered under 10 CFR 52.79) (COL applicant)						
IV.A.2.f (Burden covered under 10 CFR 52.79) (COL applicant)						
IV.A.2.g (Burden covered under 10 CFR 52.79) (COL applicant)						
IV.A.2.h (Burden covered under 10 CFR 52.79) (COL applicant)						
IV.A.3 (Burden covered under 10 CFR 52.79) (COL applicant)						
X.B.1 (COL applicant)	0	0.67*	0	8	0	\$0
X.B.2 (COL applicant)	0	0.33**	0	500	0	\$0
X.B.3.a (Burden covered under 10 CFR 52.79)						
X.B.3.b (Burden covered under X.B.1, X.B.2)						
X.B.3.c (Burden covered under 10 CFR 50.59(d) + 10 CFR 50.71(e))						
Total	0***		0		0	\$0

TABLE 2

ANNUALIZED RECORDKEEPING BURDEN FOR APPENDIX F TO 10 CFR PART 52

Section	No. of Recordkeepers	Burden Hours per Recordkeeper	Total Annual Burden Hours	Cost @ \$275/Hr
X.A.1(similar burden to 10 CFR 50.71(e)) (DCD applicant)	1	34	34*	\$9,350
X.A.2 (Burden covered under 10 CFR 50.71(e)) (COL applicant)				
X.A.3 (Burden covered under 10 CFR 50.59(d)) (DCD & COL applicant)				
X.A.4.a (DCD applicant)	1	3	3	\$825
X.A.4.b (COL applicant)	0	3	0	\$0
Total	1**		37	\$10,175

^{*} One recordkeeper incurring 103 burden hours over a period of three years, annualized at 34 hours.

TOTAL BURDEN HOURS: 37 hours (0 hours reporting plus 37 hours recordkeeping)

TOTAL RESPONSES: 1 (0 responses + 1 recordkeeper)

TOTAL RESPONDENTS: 1

^{*}One respondent submitting two responses over a period of three years is annualized to 0.67 responses per year.

^{**}One respondent submitting one response over a period of three years is annualized to 0.33 responses per year.

^{***}The respondents in X.B.1 and X.B.2 are the same entity and should not be double counted in the total.

^{**} The recordkeeper in X.A.1 and X.A.4.a are the same entity and should not be double counted in the total.