

April 3, 2019

Cindy Bladey
Office of Administration
Nuclear Regulatory Commission
Mail Stop 012H08
Washington, DC 20555-0001

Dear Ms. Bladey,

I approve the standard(s) for incorporation by reference into Title 10 of the *Code of Federal Regulations*, as listed in the attachment.

This approval is contingent upon the final rule containing any language changes that have been agreed upon by our staffs. The approval to incorporate by reference the publication(s) is effective on the effective date of your final rule. This approval will expire 2 years from the date of this letter unless you request an extension.

If you wish to enforce some other edition of the publication(s) approved, you must:

- 1. Publish notice of the change in the Federal Register, amend the Code of Federal Regulations; and
- 2. Ensure that a copy of that edition is on file at the Office of the Federal Register; and
- 3. Notify me in writing of the change.

If you have any questions concerning this incorporation by reference, please call Miriam Vincent, Staff Attorney, at 202-741-6024.

Sincerely

Oliver A. Potts

Director of the Federal Register

Federal Register Attorney: Ref#: IBR-2019-00001

**ATTACHMENT** 

# Material Approved for Incorporation By Reference IBR Request - IBR-2019-00001

# Combustion Engineering, Inc.

#### CEN-310-NP-A

CPC and Methodology Changes for the CPC Improvement Program dated April 1986

CFR Title, Part, Section

10, 52.appF

CEN-312-NP

Overview Description of the Core Operating Limit Supervisory System (COLSS)

dated November 1986

Rev. 01-NP

CFR Title, Part, Section

10, 52.appF

## Korea Electric Power Corporation and Korea Hydro & Nuclear Power Co., Ltd.

#### APR1400-E-B-NR-16001-NP

Evaluation of Main Steam and Feedwater Piping Applied to the Graded Approach for the APR1400

dated July 2017

Rev. 0

CFR Title, Part, Section

10, 52.appF

#### APR1400-E-B-NR-16002-NP

Evaluation of Safety Injection and Shutdown Cooling Piping Applied to the Graded Approach for the APR1400

dated May 2018

Rev. 1

CFR Title, Part, Section

10, 52.appF

#### APR1400-E-I-NR-14001-NP

Human Factors Engineering Program Plan

dated July 2018

Rev. 4

CFR Title, Part, Section

10, 52.appF

## APR1400-E-I-NR-14002-NP

Operating Experience Review Implementation Plan

dated January 2018

Rev. 2

CFR Title, Part, Section

10, 52.appF

#### APR1400-E-I-NR-14003-NP

Functional Requirements Analysis and Function Allocation Implementation Plan

dated January 2018

Rev. 2

CFR Title, Part, Section

10, 52.appF

## APR1400-E-I-NR-14004-NP

Task Analysis Implementation Plan

dated May 2018

Rev. 3

CFR Title, Part, Section

10, 52.appF

## APR1400-E-I-NR-14006-NP

Treatment of Important Human Actions Implementation Plan

dated May 2018

Rev. 3

CFR Title, Part, Section

10, 52.appF

# APR1400-E-I-NR-14007-NP

Human-System Interface Design Implementation Plan

dated May 2018

Rev. 3

CFR Title, Part, Section

10, 52.appF

### APR1400-E-I-NR-14008-NP

Human Factors Verification and Validation Implementation Plan

dated May 2018 Rev. 3

CFR Title, Part, Section

10, 52.appF

APR1400-E-I-NR-14010-NP

Human Factors Verification and Validation Scenarios dated January 2018 Rev. 2

CFR Title, Part, Section

10, 52.appF

APR1400-E-I-NR-14011-NP

Basic Human-System Interface

dated May 2018 Rev. 3

CFR Title, Part, Section

10, 52.appF

APR1400-E-I-NR-14012-NP

Style Guide

dated January 2018

Rev. 2

CFR Title, Part, Section

10, 52.appF

APR1400-E-J-NR-14001-NP

Component Interface Module

dated March 2017

Rev. 1

CFR Title, Part, Section

10, 52.appF

APR1400-E-J-NR-17001-NP

Secure Development and Operational Environment for APR1400 Computer-Based I&C Safety Systems

dated September 2017 Rev. 0

CFR Title, Part, Section

10, 52.appF

APR1400-E-N-NR-14001-NP

Design Features to Address GSI-191

dated February 2018 Rev. 3

CFR Title, Part, Section

10, 52.appF

APR1400-E-P-NR-14005-NP

Evaluations and Design Enhancements to Incorporate Lessons Learned from Fukushima Dai-Ichi Nuclear Accident

dated July 2017 Rev. 2

CFR Title, Part, Section

10, 52.appF

APR1400-E-S-NR-14004-NP

Evaluation of Effects of HRHF Response Spectra on SSCs

dated December 2017 Rev. 3

CFR Title, Part, Section

10, 52.appF

APR1400-E-S-NR-14005-NP

Evaluation of Structure-Soil-Structure Interaction (SSSI) Effects

dated December 2017 Rev. 2

CFR Title, Part, Section

10, 52.appF

APR1400-E-S-NR-14006-NP

Stability Check for NI Common Basemat

dated May 2018 Rev. 5

CFR Title, Part, Section

10, 52.appF

APR1400-E-X-NR-14001-NP

Equipment Qualification Program

dated July 2018 Rev. 4

CFR Title, Part, Section

10, 52.appF

APR1400-F-A-NR-14001-NP

Small Break LOCA Evaluation Model

dated March 2017 Rev. 1

CFR Title, Part, Section

10, 52.appF

APR1400-F-A-NR-14003-NP

Post-LOCA Long Term Cooling Evaluation Model

dated March 2017

Rev. 1

CFR Title, Part, Section

10, 52.appF

APR1400-F-A-TR-12004-NP-A

Realistic Evaluation Methodology for Large-Break LOCA of the APR1400

dated August 2018

CFR Title, Part, Section

10, 52.appF

APR1400-F-C-NR-14001-NP

CPC Setpoint Analysis Methodology for APR1400

dated June 2018

Rev. 3

CFR Title, Part, Section

10, 52.appF

APR1400-F-C-NR-14002-NP

Functional Design Requirements for a Core Operating Limit Supervisory System for APR1400

dated February 2017

Rev. 1

CFR Title, Part, Section

10, 52.appF

APR1400-F-C-NR-14003-NP

Functional Design Requirements for a Core Protection Calculator System for APR1400

dated March 2017

Rev. 1

CFR Title, Part, Section

10, 52.appF

APR1400-F-C-TR-12002-NP-A

KCE-1 Critical Heat Flux Correlation for PLUS7 Thermal Design

dated April 2017

CFR Title, Part, Section

10, 52.appF

APR1400-F-M-TR-13001-NP-A

PLUS7 Fuel Design for the APR1400

dated August 2018

CFR Title, Part, Section

10, 52.appF

APR1400-H-N-NR-14005-NP

Summary Stress Report for Primary Piping

dated September 2016

Rev. 2

CFR Title, Part, Section

10, 52.appF

APR1400-H-N-NR-14012-NP

Mechanical Analysis for New and Spent Fuel Storage Racks

dated August 2017

Rev. 3

CFR Title, Part, Section

10, 52.appF

APR1400-K-I-NR-14005-NP

Staffing and Qualifications Implementation Plan

dated February 2017

Rev. 1

CFR Title, Part, Section

10, 52.appF

APR1400-K-I-NR-14009-NP

Design Implementation Plan

dated February 2017

Rev. 1

CFR Title, Part, Section

10, 52.appF

APR1400-K-Q-TR-11005-NP-A

KHNP Quality Assurance Program Description (QAPD) for the APR1400 Design Certification

dated October 2016

Rev. 2

CFR Title, Part, Section

10, 52.appF

APR1400-K-X-FS-14002-NP, Ch1

APR1400 Design Control Document Tier 2: Chapter 1, Introduction and General Description of the Plant

dated August 2018

Revision 3

CFR Title, Part, Section

10, 52.appF

APR1400-K-X-FS-14002-NP, Ch10

APR1400 Design Control Document Tier 2: Chapter 10, Steam and Power Conversion System

dated August 2018

Revision 3

CFR Title, Part, Section

10, 52.appF

APR1400-K-X-FS-14002-NP, Ch11

APR1400 Design Control Document Tier 2: Chapter 11, Radioactive Waste Management

August 2018

CFR Title, Part, Section

10, 52.appF

APR1400-K-X-FS-14002-NP, Ch12

APR1400 Design Control Document Tier 2: Chapter 12, Radiation Protection

dated August 2018

Revision 3

CFR Title, Part, Section

10, 52.appF

APR1400-K-X-FS-14002-NP, Ch13

APR1400 Design Control Document Tier 2: Chapter 13, Conduct of Operations

dated August 2018

Revision 3

CFR Title, Part, Section

10, 52.appF

APR1400-K-X-FS-14002-NP, Ch14

APR1400 Design Control Document Tier 2: Chapter 14, Verification Programs

dated August 2018

Revision 3

CFR Title, Part, Section

10, 52.appF

APR1400-K-X-FS-14002-NP, Ch15

APR1400 Design Control Document Tier 2: Chapter 15, Transient and Accident Analyses

dated August 2018

Revision 3

CFR Title, Part, Section

10, 52.appF

APR1400-K-X-FS-14002-NP, Ch16

APR1400 Design Control Document Tier 2: Chapter 16, Technical Specifications

dated August 2018

Revision 3

CFR Title, Part, Section

10, 52.appF

APR1400-K-X-FS-14002-NP, Ch17

APR1400 Design Control Document Tier 2: Chapter 17, Quality Assurance and Reliability Assurance

dated August 2018

Revision 3

CFR Title, Part, Section

10, 52.appF

APR1400-K-X-FS-14002-NP, Ch18

APR1400 Design Control Document Tier 2: Chapter 18, Human Factors Engineering

dated August 2018

Revision 3

CFR Title, Part, Section

10, 52.appF

APR1400-K-X-FS-14002-NP, Ch19

APR1400 Design Control Document Tier 2: Chapter 19, Probabilistic Risk Assessment and Severe Accident Evaluation

dated August 2018

Revision 3

CFR Title, Part, Section

10, 52.appF

APR1400-K-X-FS-14002-NP, Ch2

APR1400 Design Control Document Tier 2: Chapter 2, Site Characteristics

dated August 2018

Revision 3

CFR Title, Part, Section

10, 52.appF

APR1400-K-X-FS-14002-NP. Ch3

APR1400 Design Control Document Tier 2: Chapter 3, Design of Structures, Systems, Components, and Equipment

dated August 2018 Revision 3

CFR Title, Part, Section

10, 52.appF

APR1400-K-X-FS-14002-NP, Ch4

APR1400 Design Control Document Tier 2: Chapter 4, Reactor

dated August 2018 Revision 3

CFR Title, Part, Section

10, 52.appF

APR1400-K-X-FS-14002-NP, Ch5

APR1400 Design Control Document Tier 2: Chapter 5, Reactor Coolant System and Connecting Systems

dated August 2018 Revision 3

CFR Title, Part, Section

10, 52.appF

APR1400-K-X-FS-14002-NP, Ch6

APR1400 Design Control Document Tier 2: Chapter 6, Engineered Safety Features

dated August 2018 Revision 3

CFR Title, Part, Section

10, 52.appF

APR1400-K-X-FS-14002-NP, Ch7

APR1400 Design Control Document Tier 2: Chapter 7, Instrumentation and Controls

dated August 2018 Revision 3

CFR Title, Part, Section

10, 52.appF

APR1400-K-X-FS-14002-NP, Ch8

APR1400 Design Control Document Tier 2: Chapter 8, Electric Power

dated August 2018 Revision 3

CFR Title, Part, Section

10, 52.appF

APR1400-K-X-FS-14002-NP, Ch9

APR1400 Design Control Document Tier 2: Chapter 9, Auxiliary Systems

dated August 2018 Revision 3

CFR Title, Part, Section

10, 52.appF

APR1400-K-X-IT-14001-NP

APR1400 Design Control Document Tier 1

dated August 2018 Revision 3

CFR Title, Part, Section

10, 52.appF

APR1400-Z-A-NR-14006-NP

Non-LOCA Safety Analysis Methodology

dated February 2017 Rev. 1

CFR Title, Part, Section

10, 52.appF

APR1400-Z-A-NR-14007-NP

Mass and Energy Release Methodologies for LOCA and MSLB

dated May 2018 Rev. 2

CFR Title, Part, Section

10, 52.appF

APR1400-Z-A-NR-14011-NP

Criticality Analysis of New and Spent Fuel Storage Racks

dated May 2018 Rev. 3

CFR Title, Part, Section

10, 52.appF

APR1400-Z-A-NR-14019-NP

CCF Coping Analysis

dated July 2018 Rev. 3

CFR Title, Part, Section

10, 52.appF

APR1400-Z-J-NR-14001-NP

Safety I&C System dated May 2018

Rev. 3

CFR Title, Part, Section 10, 52.appF

APR1400-Z-J-NR-14002-NP

Diversity and Defense-in-Depth

dated May 2018

Rev. 3

CFR Title, Part, Section

10, 52.appF

APR1400-Z-J-NR-14003-NP

Software Program Manual

dated May 2018

Rev. 3

CFR Title, Part, Section

10, 52.appF

APR1400-Z-J-NR-14004-NP

Uncertainty Methodology and Application for Instrumentation

dated January 2018

Rev. 2

CFR Title, Part, Section

10, 52.appF

APR1400-Z-J-NR-14005-NP

Setpoint Methodology for Safety-Related Instrumentation

dated January 2018

Rev. 2

CFR Title, Part, Section

10, 52.appF

APR1400-Z-J-NR-14012-NP

Control System CCF Analysis

dated May 2018

Rev. 3

CFR Title, Part, Section

10, 52.appF

APR1400-Z-J-NR-14013-NP

Response Time Analysis of Safety I&C System

dated January 2018

Rev. 2

CFR Title, Part, Section

10, 52.appF

APR1400-Z-M-NR-14008-NP

Pressure-Temperature Limits Methodology for RCS Heatup and Cooldown

dated January 2018

Rev. 1

CFR Title, Part, Section

10, 52.appF

APR1400-Z-M-TR-12003-NP-A

Fluidic Device Design for the APR1400

dated April 2017

CFR Title, Part, Section

10, 52.appF

Westinghouse

WCAP-10697-NP-A

Common Qualified Platform Topical Report

dated February 2013

Rev. 3

CFR Title, Part, Section

10, 52.appF

WCAP-17889-NP (APR1400-A-N-NR-17001-NP)

Validation of SCALE 6.1.2 with 238 Group ENDF/B-VII.0 Cross Section Library for APR1400 Design Certification

dated June 2014 Rev. 0

CFR Title, Part, Section

10, 52.appF