WAAP-13650,
“Pre-submittal Meeting AP1000® DCD Revision 20”
(Non-Proprietary)

Pre-submittal Meeting AP1000® DCD Revision 20

2/26/2026

Westinghouse

Agenda & Purpose

Meeting Purpose

- Pre-submittal Meeting for AP1000 DCD Revision 20

Agenda

- Introductions and Opening Remarks
- Reference Plant Approach
- DCD Revision 20 Plan
- DCD Revision 20 Discussion Topics
- Discussion / Closing Remarks

Reference Plant Approach for Future AP1000 Plants

- AP1000 New Plant Deployment in the US
  - Clean safe electricity demand
  - Vogtle 3&4 completion
  - Construction & Operational Experience
  - Executive Order 14302
- The AP1000 plant design is mature, safe, & predictable
  - Evolutionary passive systems are NRC approved
  - Design is complete
  - Supply chain has been established
  - First-of-a-kind challenges are resolved
  - Inspected and demonstrated all ITAAC met
  - Safely operating in the US today
- Reference Plant Alignment
  - The DCD will be aligned with the Reference Plant license
  - Changes at the Reference Plant are resolved
  - Consistent with EO 14302, Reinvigorating the Nuclear Industrial Base

The DCD will be aligned with the Reference Plant license to maintain consistency in future AP1000 COL Applications

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Efficient Path to Future AP1000 Plant Licensing

Licensing Path

DCD Revision 20

Vogtle 3&4 Licensing Changes

Standard COL Content

Site-Specific Information

Part 1: Admin & Financial Info.
Part 3: Environmental Report
Part 5: Emergency Plan
Part 6: Limited Work Auth.
Part 7: Departures & Exemptions
Part 8: Security Plan
Part 9: Withheld Info
Part 11: Enclosures (QA Plan)

Non-DCD Content

UNITED STATES NUCLEAR REGULATORY COMMISSION

COLA Approval

Construction

DCD Revision 20 provides an efficient path to COL approval by minimizing departures

AP1000 DCD Revision 20

- Westinghouse will submit DCD Revision 20 prior to March 31
  - It will contain all information necessary to bring the DCD up to date
- Application is anticipated to be reviewed/approved based on:
  - The information matches the VEGP 3&4 license, which is safely operating today
  - The design complies with the AEA and all regulations, as demonstrated at Vogtle 3&4
  - Reference Plant LARs and “50.59 like’ changes are resolved (separate slide)
  - Roadmap demonstrates the DCD changes align the Reference Plant (separate slide)
  - Precedence set during the AP1000 DC extension in 2021
- Anticipate NRC approval within 2026
  - Timeline supports future AP1000 new plant activities

Approach meets all regulations – Aligns with the Reference Plant in operation today

Content and Structure of DCD Revision 20

- The DCD will align with the Reference Plant to the maximum extent
  - DCD R20 chapters will be nearly identical to the Vogtle 3&4 licensing basis
  - Vast majority of all Vogtle 3&4 departures are directly applicable to the generic DCD R20
  - Standard COL content will be included – COL action to confirm applicability (separate slide)
  - Post Vogtle COD changes will be included (cutoff Oct 31, 2025)

- Administrative differences between the Vogtle 3&4 license and the DCD R20
  - Update Header and Footers
  - Remove Vogtle 3&4 site-specific information (separate slide)
  - Re-insert Conceptual Design Information, double brackets ([[ ]])
  - Close Piping DAC
  - Incorporate minor readability changes for the purpose of the DCD
  - Align COL Items
  - Incorporate the Vogtle 3&4 Tier 2* exemption (separate slide)
  - Relocate the endorsed ASME III alternatives to Code Case list
  - Relocate the Vogtle Tech Specs, Bases, and TRM into DCD R20 Chapter 16
  - Re-insert Information (e.g. Appendix 1B, DCD Introduction, and Inservice Testing Table)

Only administrative differences between Vogtle License and the DCD

Implementing Reference Plant Changes

- The last major AP1000 DCD amendment was in 2011
- To facilitate construction at Vogtle, multiple departures were implemented
- Many of these departures (LAR and '50.59 like') apply to future plants
- Westinghouse will include the lessons learned in DCD Revision 20
- For LARs, the technical review was performed with the Reference Plant
  - Precedent for referencing reference plant LARs in subsequent applications
- For '50.59 like' changes, Reg. Guide 1.206 establishes the NRC position:
  - Departures from Tier 2 made in compliance '50.59 like' process are considered resolved

Approach is consistent with NRC guidance, the ADVANCE Act Section 207, and Executive Orders

AP1000 DCD Revision 20 Roadmap

DCD Revision 20

Table 8.3.1-3
Component Data - Main AC Power System
(Nominal Values)

1.	Main Stepup Transformer	3 single phase, FOA, 65°C rise, liquid filled
2.	Unit Auxiliary Transformers (UAT 2A/2B)	3 phase, 3 winding H = 76 MVA, OA, 65°C X = 38 MVA, OA, 65°C Y = 38 MVA, OA, 65°C
	Unit Auxiliary Transformer (UAT 2C)	3 phase, 2 winding 33 MVA, OA, 65°C

Matches

Reference Plant License

Table 8.3.1-3
Component Data - Main AC Power System
(Nominal Values)

1.	Main Stepup Transformer	3 single phase, FOA, 65°C rise, liquid filled
2.	Unit Auxiliary Transformers (UAT 2A/2B)	3 phase, 3 winding H = 76 MVA, OA, 65°C X = 38 MVA, OA, 65°C Y = 38 MVA, OA, 65°C
	Unit Auxiliary Transformer (UAT 2C)	3 phase, 2 winding 33 MVA, OA, 65°C
	Reserve Auxiliary Transformers (RAT)	3 phase, 3 winding H = 76 MVA, OA, 65°C X = 38 MVA, OA, 65°C Y = 38 MVA, OA, 65°C
		medium voltage metal-clad switchgear Interrupting current rating – 63kA vacuum-type circuit breaker

Index No.	DCD R20 Applicable	Title	Change Proc	NRC Approval
145	Yes	Consolidating the HP Counting Room with an Adjoining Office in the Annex B	VIII B.5.b	N/A
146	Yes	Concrete Outline Changes for Six Shield Building Pipe Penetrations	VIII B.5.b	N/A
147	Yes	Component Interface Module (CIM) / Diverse Actuation System (DAS) Divers	LAR	ML14329A298
148	Yes	Increase UAT and RAT Sizes to Accommodate All Plant Auxiliary Loads	VIII B.5.b	N/A
149	Yes	PCS Recirculation Pump Head Changed	VIII B.5.b	N/A
150	Yes	PCS Modification for Added Flow Control Capability	VIII B.5.b	N/A
151	Yes	Changes to CA55 Floor	VIII B.5.b	N/A
152	Yes	MP50 Air Operated Double Diaphragm Pumps DCD Discrepancies	VIII B.5.b	N/A
153	Yes	Structural Module Clarifications	VIII B.5.b	N/A
154	Yes	Central Chilled Water Service (VWS) Chiller Relocation	VIII B.5.b	N/A
155	Yes	Pressure Control for EDI Reject Radiation Monitor	VIII B.5.b	

Demonstrates DCD Revision 20 Changes Match the Reference Plant

Standard COL Content - Example

COL Information Item From DCD Rev. 19

Table 1.8-2 (Sheet 6 of 14)

SUMMARY OF AP1000 STANDARD PLANT
COMBINED LICENSE INFORMATION ITEMS

Item No.	Subject	Subsection	Addressed by Westinghouse Document	Action Required by COL Applicant	Action Required by COL Holder
6.1-2	Coating Program	6.1.3.2	N/A	Yes	–
6.2-1	Containment Leak Rate Testing	6.2.6	N/A	Yes	–
6.3-1	Containment Cleanliness Program	6.3.8.1	N/A	Yes	–

6.2.6 Combined License Information for Containment Leak Rate Testing

The Combined License applicant is responsible for developing a "Containment Leakage Rate Testing Program" which will identify which Option is to be implemented under 10 CFR 50, Appendix J. Option A defines a prescriptive-based testing approach whereas option B defines a performance-based testing program.

STD COL Commitment included in DCD R20

6.2.6 Combined License Information for Containment Leak Rate Testing

The Containment Leakage Rate Testing Program is addressed in Subsections 6.2.5.1 and 6.2.5.2.2.

6.2.5.1 Design Basis

Leak rate testing requirements are defined by 10 CFR 50 Appendix J, "Primary Reactor Containment Leakage Testing for Water Cooled Power Reactors," (Reference 14) which classifies leak tests as Types A, B and C. The system design provides testing capability consistent with the testing requirements of ANSI-56.8 (Reference 13). The system design accommodates the test methods and frequencies consistent with requirements of 10 CFR 50 Appendix J, Option A or Option B.

The Containment Leak Rate Test Program using 10 CFR Part 50, Appendix J Option B is established in accordance with NEI 94-01 (Subsection 6.2.7, Reference 30), as modified and endorsed by the NRC in Regulatory Guide 1.163. Table 13.4-201 provides milestones for containment leak rate testing implementation.

Standard content will be included in DCD R20 (color coded) - Action assigned to licensee to confirm alignment

Site Specific COL Content - Example

COL Information Item Reinserted into DCD R20

10.4-1	Circulating Water Supply	10.4.12.1	N/A
10.4-2	Condensate, Feedwater and Auxiliary Steam System Chemistry Control	10.4.12.2	N/A
10.4-3	Potable Water	10.4.12.3	N/A

10.4.12.1 Circulating Water System

The Combined License applicant will address the final configuration of the plant circulating water system including piping design pressure, the cooling tower or other site-specific heat sink.

Vogtle 3&4 Site-Specific Info Removed from DCD R20

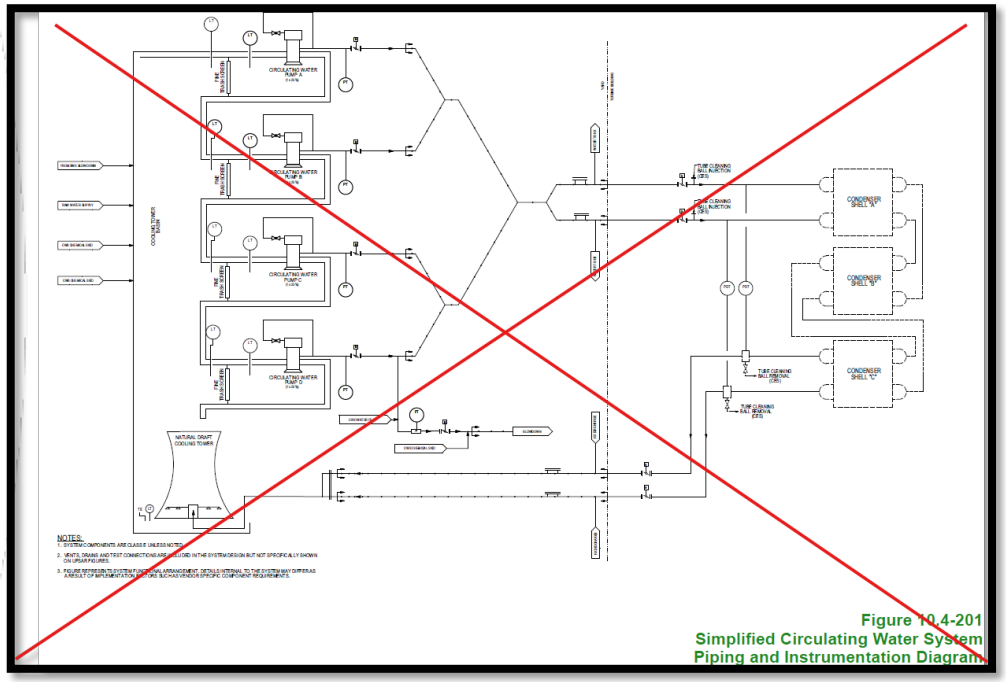

Figure 10.4-201
Simplified Circulating Water System
Piping and Instrumentation Diagram

Site specific information will be not be included in DCD Revision 20

DCD Tier 2* Designation

- Certain information in the AP1000 DCD is designated Tier 2*
  - NRC approval to modify
- During Vogtle construction, additional Tier 2* criteria was created for the AP1000 plant through an exemption
- This criteria will be translated into the DCD (Intro Section 3.5) to reduce exemptions by future applicants and holders

Discussion