



Westinghouse

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Your ref: Project Number 740
Our ref: DCP/NRC1912

May 26, 2007

Subject: Westinghouse Application to Amend the AP1000 Design Certification Rule

Westinghouse is pleased to submit its application to amend the AP1000 Design Certification Rule (10 CFR 52 Appendix D) pursuant to the changes in 10 CFR 52.63 included in the re-write of 10 CFR 52 developed as part of the recently completed rulemaking.

Pursuant to 10 CFR 50.30(b), electronic files providing APP-GW-GL-700, AP1000 Design Control Document, Revision 16, are submitted as Enclosures 1 and 2 under the attached Oath of Affirmation (Attachment 1).

Enclosure 1 contains sensitive material relative to the physical protection of an AP1000 Nuclear Plant that should be withheld from public disclosure pursuant to 10 CFR 2.390(d). Enclosure 2 is the redacted version of Enclosure 1 with the sensitive material relative to the physical protection of an AP1000 Nuclear Plant withheld from public disclosure pursuant to 10 CFR 2.390(d). The files for the two versions are provided on separate CD-ROMS to facilitate handling by the public document room. The files and directory structure on the CD-ROMS are intended to satisfy the NRC requirements for electronic submittals.

The following rationale is provided for this application being submitted in advance of the official publication of the revised 10 CFR 52 rule:

- NRC has issued the Staff Requirements Memorandum for the proposed 10 CFR 52 rulemaking on April 11, 2007 (SECY-06-0220), and the final draft rule language has been posted on the NRC rulemaking website. Both documents provide rule language in 10 CFR 52.63 that permits the amending of existing design certification rules.
- Generic amendments to the Design Certification including additional design information to resolve Design Acceptance Criteria and design-related COL Information Items, as well as design information to make corrections and changes, will result in furthering standardization and improved licensing efficiency for the multiple COL applications referencing the AP1000 Design Certification Rule (DCR) that are planned for submittal in late 2007 and early 2008.
- Westinghouse, in conjunction with NuStart, has been preparing Technical Reports since late 2005. These Technical Reports have been developed with input, review, comment and other technical oversight provided by NuStart members including the prospective AP1000 COL applicants. Submittal of these Technical Reports to the NRC was initiated in March 2006. These

Technical Reports contain the predominance of the technical changes and supplemental information that is in the enclosed Design Control Document (DCD) Revision 16. The COL applications currently being finalized, are based on the content of DCD Revision 16 and will incorporate DCD Revision 16 by reference. Successful completion of an amendment to the DCR is expected to result in successful implementation of the NRC's design-centered review approach, thereby making the reviews of those COL applications referencing the AP1000 DCR more efficient.

- NRC staff review of the Technical Reports is underway with Westinghouse providing responses to Requests for Additional Information as they are issued. For a number of the Technical Reports, NRC staff has indicated that a safety evaluation has been prepared. NRC safety evaluations for the remainder of those Technical Reports submitted by April 2007 are expected by December 31, 2007. Therefore, the staff safety evaluations for the technical content of DCD Revision 16 is well-underway.

Attachment 2 provides a listing of all Technical Reports generated or planned to be generated to support DCD Revision 16. The majority of Technical Reports have been submitted for NRC review in advance of this application request. For those Technical Reports that are still outstanding, Attachment 2 provides the schedule date for submittal.

Westinghouse has included a roadmap in the DCD Revision 16 that identifies the source of change for each change made in the revision (including supplemental information). For each technical change and addition, the roadmap identifies the appropriate Technical Report by the APP-XX-XXX-XXX number. For ease of NRC review, Attachment 2 provides a cross-reference between the shorthand technical report identifiers and the official APP number. In addition, Attachment 2 provides the appropriate 10 CFR 52.63(a)(1) criteria that justifies the Technical Report information inclusion in the amendment request. Following is a summary of the types of technical changes and additions that are included:

- Supplemental information directed at generically addressing COL Information Items that are related to AP1000 design is included in DCD Revision 16. In the Table in Attachment 2, these items include a reference to the appropriate COL Information Item. The criterion in 10 CFR 52.63(a)(1)(vii) (contributes to increased standardization of the certification information) is identified as the rationale for including these items in the amendment application.
- Supplemental information directed at generically resolving Design Acceptance Criteria in the areas of Piping, Safety-Related Instrumentation and Control Systems, and the Human-Factors Engineering Program is included in DCD Revision 16. The Table in Attachment 2 identifies the criterion in 10 CFR 52.63(a)(1)(iv) (allows for generic resolutions of Design Acceptance Criteria) as the rationale for including these items in the amendment application.
- DCD Revision 16 includes those changes to the certified design information that have resulted from the detailed design activities performed during First-of-a-Kind Engineering (FOAKE). The majority of these types of changes identify 10 CFR 52.63(a)(1)(vii) (contributes to increased standardization of the certification information) as the rationale for including these items in the amendment application. A small subset of these changes identify 10 CFR 52.63(a)(1)(v) (generic resolutions of material errors in the certification). These material errors surfaced in either the identification of errors in Tier 1 information or areas where existing certified design information was invalidated by detailed design efforts in another design area (e.g., the pressurizer physical configuration required a change to support the piping analysis of the automatic depressurization valve configuration located on the top of the pressurizer).

- DCD Revision 16 includes those changes to the certified design information that have resulted from inputs provided by the COL applicants that will reference the AP1000 DCR. These changes have all been confirmed by the consensus group of AP1000 COL applicants. 10 CFR 52.63(a)(1)(vii) (contributes to increased standardization of the certification information) is identified as the rationale for including these changes in the amendment application.

Although many of the DCD Revision 16 changes and supplemental information identify 10 CFR 52.63(a)(1)(vii) (contributes to increased standardization of the certification information) as the rationale for inclusion in the amendment, it is expected that inclusion of these supplements and changes in Revision 16 will also often result in reducing unnecessary regulatory burden while maintaining protection to the public health and safety and the common defense and security. This is consistent with the Statement of Considerations (SOC) section discussing 10 CFR 52.63(a)(1)(vii) which states:

“This paragraph will allow applicants and licensees to request corrections or changes to certification information through a generic process rather than through individual licensing actions.”

The SOC also indicates that:

“In determining whether to codify a proposed amendment under this paragraph, the Commission will give special consideration to comments from applicants or licensees who referenced the DCR...”

The changes and supplemental information included in DCD Revision 16 have been prepared in conjunction with NuStart including those COL applicants who have indicated that they will reference the AP1000 DCR. Therefore, these proposed changes and supplements are all expected to be referenced by the COL applications referencing the AP1000 DCR.

In addition to the technical changes and supplements, DCD Revision 16 includes editorial changes. These editorial changes include typographical errors and consistency reconciliations. These editorial changes are included for completeness and are not expected to impact the existing FSER.

As part of this application, Westinghouse is formally requesting that the NRC identify an AP1000 DCR amendment docket number. NRC is also requested to provide the schedule for acceptance of the application as well as the schedule and budgetary estimate for completing the Final Safety Evaluation Report. To facilitate these actions, NRC is requested to schedule a meeting in mid to late June to discuss the plan going forward.

Westinghouse looks forward to continued NRC progress reviewing the technical content provided in the Technical Reports (and therefore included in DCD Revision 16), as well as the successful generation of the NRC Final Safety Evaluation Report.

Please direct any questions related to this amendment application to Andrea Sterdis, Manager, AP1000 Licensing and Customer Interface.

Very truly yours,



A. Sterdis, Manager
Licensing and Customer Interface
Regulatory Affairs and Standardization

/Attachments

1. "Oath of Affirmation," dated May 26, 2007
2. AP1000 Technical Reports Listing

/Enclosures

1. CD-ROM Containing APP-GW-GL-700, AP1000 Design Control Document, Revision 16, Sensitive Version
2. CD-ROM Containing APP-GW-GL-700, AP1000 Design Control Document, Revision 16, Public Version

cc:	D. Jaffe	- U.S. NRC	1E	1A
	E. McKenna	- U.S. NRC	1E	1A
	G. Curtis	- TVA	1E	1A
	P. Grendys	- Westinghouse	1E	1A
	P. Hastings	- Duke Power	1E	1A
	C. Ionescu	- Progress Energy	1E	1A
	D. Lindgren	- Westinghouse	1E	1A
	A. Monroe	- SCANA	1E	1A
	M. Moran	- Florida Power & Light	1E	1A
	C. Pierce	- Southern Company	1E	1A
	E. Schmiech	- Westinghouse	1E	1A
	G. Zinke	- NuStart/Entergy	1E	1A

ATTACHMENT 1

“Oath of Affirmation”

May 26, 2007

ATTACHMENT 1

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of:)

Westinghouse Application to Amend)

Design Certification Rule for the AP1000 Design)

APPLICATION FOR REVIEW OF
"AP1000 DESIGN CONTROL DOCUMENT REVISION16"
FOR AP1000 DESIGN CERTIFICATION AMENDMENT REVIEW

W. E. Cummins, being duly sworn, states that he is Vice President, Regulatory Affairs & Standardization, for Westinghouse Electric Company; that he is authorized on the part of said company to sign and file with the Nuclear Regulatory Commission this document; that all statements made and matters set forth therein are true and correct to the best of his knowledge, information and belief.



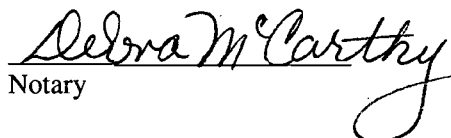
W. E. Cummins
Vice President
Regulatory Affairs & Standardization

Subscribed and sworn to
before me this 26th day
of May 2007.

COMMONWEALTH OF PENNSYLVANIA

Notarial Seal
Debra McCarthy, Notary Public
Monroeville Boro, Allegheny County
My Commission Expires Aug. 31, 2009

Member, Pennsylvania Association of Notaries


Notary

ATTACHMENT 2

“AP1000 Technical Reports Listing”

AP1000 DCD Rev. 16 Technical Reports

Shorthand TR Identifier	AP1000 Document Number	COL Information Item	Subject	NRC Transmittal Letter	Transmittal Date	10 CFR 52.63(a)(1) Criterion
1	APP-GW-GLR-036	1.1-1	Construction and Startup Schedule	DCP/NRC1768	8/7/06	10 CFR 52.63(a)(1)(vii)
03 Rev. 0	APP-GW-S2R-010	NA	Extension of NI Structures Seismic Analysis to Soil Sites	DCP/NRC1751 DCP/NRC1765	6/14/06 7/28/06	10 CFR 52.63(a)(1)(vii)
03 Rev. 1	APP-GW-S2R-010 Rev. 1	NA	Extension of NI Structures Seismic Analysis to Soil Sites	DCP/NRC TBD	PENDING 6/15/07	10 CFR 52.63(a)(1)(vii)
05 Rev. 2	APP-GW-GLR-020 Rev. 2	3.3-1	Wind and Tornado Site Interface Criteria	DCP/NRC TBD	PENDING 6/15/07	10 CFR 52.63(a)(1)(vii)
6	APP-GW-GLR-021	3.6-1	Pipe Break Hazards Analysis (As-Built Report)	DCP/NRC1746	6/5/06	10 CFR 52.63(a)(1)(iv)
6	APP-GW-GLR-021	3.6-3	Leak-Before-Break Evaluation of as-Built Piping (As-Built Report)	DCP/NRC1746	6/5/06	10 CFR 52.63(a)(1)(iv)
6	APP-GW-GLR-021	3.7-3	Seismic Interaction Review (As-Built Report)	DCP/NRC1746	6/5/06	10 CFR 52.63(a)(1)(vii)
6	APP-GW-GLR-021	3.7-4	Reconciliation of Seismic Analyses of Nuclear Island Structures (As-Built Report)	DCP/NRC1746	6/5/06	10 CFR 52.63(a)(1)(vii)
6	APP-GW-GLR-021	3.8-2	Passive Containment Cooling System Water Storage Tank Examination (As-Built Report)	DCP/NRC1746	6/5/06	10 CFR 52.63(a)(1)(vii)
6	APP-GW-GLR-021	3.8-3	As-Built Summary Report (As-Built Report)	DCP/NRC1746	6/5/06	10 CFR 52.63(a)(1)(vii)
6	APP-GW-GLR-021	3.8-4	In-Service Inspection of Containment Vessel (As-Built Report)	DCP/NRC1746	6/5/06	10 CFR 52.63(a)(1)(vii)
6	APP-GW-GLR-021	3.9-2	Design Specification and Reports (As-Built Report)	DCP/NRC1746	6/5/06	10 CFR 52.63(a)(1)(vii)
6	APP-GW-GLR-021	5.3-1	Reactor Vessel Pressure - Temperature Limit Curves (As-Built Report)	DCP/NRC1746	6/5/06	10 CFR 52.63(a)(1)(vii)
6	APP-GW-GLR-021	5.3-4	Reactor Vessel Materials Properties Verification (As-Built Report)	DCP/NRC1746	6/5/06	10 CFR 52.63(a)(1)(vii)
6	APP-GW-GLR-021	10.2-1	Turbine Maintenance and Inspection (As-Built Report)	DCP/NRC1746	6/5/06	10 CFR 52.63(a)(1)(vii)
6	APP-GW-GLR-021	13.6-2	Vital Equipment Verification (As-Built Report)	DCP/NRC1746	6/5/06	10 CFR 52.63(a)(1)(vii)
6	APP-GW-GLR-021	14.4-6	First-Plant-Only and Three-Plant-Only Tests (As-Built Report)	DCP/NRC1746	6/5/06	10 CFR 52.63(a)(1)(vii)
6	APP-GW-GLR-021	19.59.10-1	As-Built SSC HCLPF Comparison to Seismic Margin Evaluation (As-Built Report)	DCP/NRC1746	6/5/06	10 CFR 52.63(a)(1)(vii)
6	APP-GW-GLR-021	19.59.10-2	Baseline PRA (As-Built Report)	DCP/NRC1746	6/5/06	10 CFR 52.63(a)(1)(vii)

AP1000 DCD Rev. 16 Technical Reports

Shorthand TR Identifier	AP1000 Document Number	COL Information Item	Subject	NRC Transmittal Letter	Transmittal Date	10 CFR 52.63(a)(1) Criterion
6	APP-GW-GLR-021	19.59.10-3	Internal Fire and Internal Flood Analyses (As-Built Report)	DCP/NRC1746	6/5/06	10 CFR 52.63(a)(1)(vii)
6	APP-GW-GLR-021	19.59.10-5	Equipment Survivability (As-Built Report)	DCP/NRC1746	6/5/06	10 CFR 52.63(a)(1)(vii)
7	APP-GW-GLR-074	3.6-1	Pipe Break Hazards Analysis	DCP/NRC1820	1/26/07	10 CFR 52.63(a)(1)(iv)
8	APP-GW-GLR-022	3.6-2	Leak-Before-Break Evaluation of as-Designed Piping	DCP/NRC1747	6/5/06	10 CFR 52.63(a)(1)(iv)
08 Rev. 1	APP-GW-GLR-022 Rev. 1	3.6-2	Leak-Before-Break Evaluation of as-Designed Piping	DCP/NRC1763	7/19/06	10 CFR 52.63(a)(1)(iv)
08 Rev. 2	APP-GW-GLR-022 Rev. 2	NA	LBB DCD Correction	DCP/NRC1848	3/15/07	10 CFR 52.63(a)(1)(iv)
9	APP-GW-GLR-005	3.8-1	Containment Vessel Design Adjacent to Large Penetrations	DCP/NRC1734	5/22/06	10 CFR 52.63(a)(1)(vii)
09 Rev. 1	APP-GW-GLR-005 Rev. 1	3.8-1	Containment Vessel Design Adjacent to Large Penetrations	DCP/NRC TBD	PENDING 6/15/07	10 CFR 52.63(a)(1)(vii)
10	APP-GW-GLR-046	3.9-1	Reactor Internal Vibration Response	DCP/NRC1856	3/29/07	10 CFR 52.63(a)(1)(vii)
11a	APP-GW-GLR-048	3.9-2	Core Makeup Tank Design Specification and Reports Summary	DCP/NRC1789	10/6/06	10 CFR 52.63(a)(1)(vii)
11b	APP-GW-GLR-049	3.9-2	Accumulator Design Specification and Reports Summary	DCP/NRC1790	10/6/06	10 CFR 52.63(a)(1)(vii)
11c	APP-GW-GLR-050	3.9-2	Reactor Vessel Internals Design Specification and Reports Summary	DCP/NRC1825	2/1/07	10 CFR 52.63(a)(1)(vii)
11d	APP-GW-GLR-051	3.9-2	Pressurizer Design Specification and Reports Summary	DCP/NRC1841	3/9/07	10 CFR 52.63(a)(1)(vii)
11e	APP-GW-GLR-052	3.9-2	Reactor Coolant Pump Design Specification and Reports Summary	DCP/NRC1872	4/27/07	10 CFR 52.63(a)(1)(vii)
11f	APP-GW-GLR-053	3.9-2	Passive RHR Heat Exchanger Design Specification and Reports Summary	DCP/NRC1864	4/13/07	10 CFR 52.63(a)(1)(vii)
11g	APP-GW-GLR-054	3.9-2	In-Core Instrumentation Guide Tube Design Specification and Design Reports Summary	DCP/NRC1849	3/15/07	10 CFR 52.63(a)(1)(vii)
11h	APP-GW-GLR-055	3.9-2	Reactor Vessel Design Specification and Reports Summary	DCP/NRC1876	5/9/07	10 CFR 52.63(a)(1)(vii)
11i	APP-GW-GLR-056	3.9-2	Steam Generator Design Specification and Reports Summary	DCP/NRC TBD	PENDING 6/4/07	10 CFR 52.63(a)(1)(vii)
11j	APP-GW-GLR-057	3.9-2	Control Rod Drive Mechanism Design Specification and Reports Summary	DCP/NRC1833	2/16/07	10 CFR 52.63(a)(1)(vii)

AP1000 DCD Rev. 16 Technical Reports

Shorthand TR Identifier	AP1000 Document Number	COL Information Item	Subject	NRC Transmittal Letter	Transmittal Date	10 CFR 52.63(a)(1) Criterion
12	APP-GW-GLR-035 WCAP-16620-P WCAP-16620-NP	3.9-2	Design Specification and Reports (Void Swelling)	DCP/NRC1767	7/31/06	10 CFR 52.63(a)(1)(vii)
13	APP-GW-GLR-013	3.9-2	Safety Class Piping Design Specifications and Design Reports Summary	DCP/NRC1829	2/12/07	10 CFR 52.63(a)(1)(iv)
15	APP-GW-GLR-006	3.9-6	Piping Benchmark Program	DCP/NRC1728	3/31/06	10 CFR 52.63(a)(1)(iv)
16	APP-GW-GLR-031	3.10-1	Experience-Based Qualification	DCP/NRC1774	9/8/06	10 CFR 52.63(a)(1)(vii)
18	APP-GW-GLR-059	4.2-1	Core and Fuel Design Technical Report	DCP/NRC1794	10/31/06	10 CFR 52.63(a)(1)(vii)
18	APP-GW-GLR-059	4.3-1	Core and Fuel Design Technical Report	DCP/NRC1794	10/31/06	10 CFR 52.63(a)(1)(vii)
18	APP-GW-GLR-059	4.4-1	Core and Fuel Design Technical Report	DCP/NRC1794	10/31/06	10 CFR 52.63(a)(1)(vii)
18	APP-GW-GLR-059	4.4-2	Core and Fuel Design Technical Report	DCP/NRC1794	10/31/06	10 CFR 52.63(a)(1)(vii)
23	APP-GW-GLR-023	5.3-3	Surveillance Capsule Lead Factor and Azimuthal Location Confirmation	DCP/NRC1782	9/22/06	10 CFR 52.63(a)(1)(vii)
24	APP-GW-GLR-060	5.3-4	Reactor Vessel Insulation System - Verification of In-Vessel Retention Design Bases	DCP/NRC1824	2/8/07	10 CFR 52.63(a)(1)(vii)
24	APP-GW-GLR-060	5.3-5	Reactor Vessel Insulation System - Verification of In-Vessel Retention Design Bases	DCP/NRC1824	2/8/07	10 CFR 52.63(a)(1)(vii)
26	APP-GW-GLR-079	6.3-2	Verification of Water Sources for Long Term Recirculation Cooling Following a LOCA	DCP/NRC1877	5/7/07	10 CFR 52.63(a)(1)(vii)
27	APP-GW-GLR-007	6.4-3	Main Control Room Inleakage Test Frequency	DCP/NRC1728	3/31/06	10 CFR 52.63(a)(1)(vii)
27 Rev. 1	APP-GW-GLR-007 Rev. 1	6.4-3	Main Control Room Inleakage Test Frequency	DCP/NRC1832	2/16/07	10 CFR 52.63(a)(1)(vii)
28	APP-GW-GLR-024 WCAP-16361-P WCAP-16361-NP	7.1-1	Setpoint Calculations for Protective Functions	DCP/NRC1744 DCP/NRC1745 DCP/NRC1752	5/31/06	10 CFR 52.63(a)(1)(vii)
29	APP-GW-GLN-012 WCAP-16716-NP	NA	AP1000 Reactor Internals Design Changes	DCP/NRC1830	2/13/07	10 CFR 52.63(a)(1)(vii)
29 Rev. 2	APP-GW-GLN-012-NP Rev. 2 WCAP-16716-NP	NA	AP1000 Reactor Internals Design Changes	DCP/NRC1902	5/24/07	10 CFR 52.63(a)(1)(vii)
30	APP-GW-GLN-013	NA	Control Rod Drive System	DCP/NRC1800	11/15/06	10 CFR 52.63(a)(1)(vii)

AP1000 DCD Rev. 16 Technical Reports

Shorthand TR Identifier	AP1000 Document Number	COL Information Item	Subject	NRC Transmittal Letter	Transmittal Date	10 CFR 52.63(a)(1) Criterion
31	APP-GW-GLN-015, Rev. 1 WCAP-16624-P WCAP-16624-NP	NA	Reactor Internals Materials	DCP/NRC1766	7/31/06	10 CFR 52.63(a)(1)(vii)
32	APP-GW-GLN-002	NA	Zinc Addition	DCP/NRC1729	4/5/06	10 CFR 52.63(a)(1)(vii)
33	APP-GW-GLN-009	NA	Pressure Boundary Material Change	DCP/NRC1785	9/29/06	10 CFR 52.63(a)(1)(vii)
33 Rev. 1	APP-GW-GLN-009 Rev. 1	NA	Pressure Boundary Material Change	DCP/NRC1903	5/24/07	10 CFR 52.63(a)(1)(vii)
34	APP-GW-GLN-016	NA	Generic Reactor Coolant Pump	DCP/NRC1802	11/17/06	10 CFR 52.63(a)(1)(vii)
35	APP-GW-GLN-010	NA	Steam Generator Description Changes	DCP/NRC1803	11/29/06	10 CFR 52.63(a)(1)(v) See Note
36	APP-GW-GLR-016	NA	Pressurizer Configuration	DCP/NRC1749 DCP/NRC1764	6/5/06 7/20/06	10 CFR 52.63(a)(1)(v) See Note
37	APP-GW-GLN-003 (DCP/NRC1729)	NA	Hydrogen Igniter Locations	DCP/NRC1729	4/5/06	10 CFR 52.63(a)(1)(vii)
37 Rev. 1	APP-GW-GLN-003 Rev. 1	NA	Hydrogen Igniter Locations, Rev. 1	DCP/NRC1818	2/16/07	10 CFR 52.63(a)(1)(vii)
38	APP-GW-GLN-001	NA	PRHR Hx Design	DCP/NRC1729	4/5/06	10 CFR 52.63(a)(1)(vii)
39	APP-GW-GLN-004	NA	I&C Design Changes	DCP/NRC1737	5/22/06	10 CFR 52.63(a)(1)(v) See Note
42	APP-GW-GLR-017	7.1-2	Resolution of Generic Open Items and Plant-Specific Action Items	DCP/NRC1736	5/22/06	10 CFR 52.63(a)(1)(iv)
43	APP-GW-GLR-018	7.2-1	FMEA and SHA for Protection and Safety Monitoring System (Summary Report)	DCP/NRC1758	6/30/06	10 CFR 52.63(a)(1)(iv)
43	WCAP-16438-P, R1 WCAP-16438-NP, R1	7.2-1	FMEA for the Protection and Safety Monitoring System	DCP/NRC1756	6/30/06	10 CFR 52.63(a)(1)(iv)
43	WCAP-16592-P WCAP-16592-NP	7.2-1	SHA for the Protection and Safety Monitoring System	DCP/NRC1757	6/30/06	10 CFR 52.63(a)(1)(iv)
44	APP-GW-GLR-026	9.1-1	New Fuel Rack Design & Structural Analysis	DCP/NRC1740	5/29/06	10 CFR 52.63(a)(1)(vii)
45	APP-GW-GLR-027	9.5-5	Operator Actions Minimizing Spurious ADS Actuation	DCP/NRC1753	6/30/06	10 CFR 52.63(a)(1)(vii)
46	APP-GW-GLR-019	9.5-7	Fire Resistance Test Data	DCP/NRC1741	5/29/06	10 CFR 52.63(a)(1)(vii)
48	APP-GW-GLR-008	11.2-3	Identification of Ion Exchange and Adsorbent Media	DCP/NRC1728	3/31/06	10 CFR 52.63(a)(1)(vii)
48	APP-GW-GLR-008	11.3-2	Identification of Adsorbent Media	DCP/NRC1728	3/31/06	10 CFR 52.63(a)(1)(vii)

AP1000 DCD Rev. 16 Technical Reports

Shorthand TR Identifier	AP1000 Document Number	COL Information Item	Subject	NRC Transmittal Letter	Transmittal Date	10 CFR 52.63(a)(1) Criterion
49	APP-GW-GLR-062	13.6-1	AP1000 Security Enhancement Report	DCP/NRC1852	3/9/07	10 CFR 52.63(a)(1)(vii)
52	APP-GW-GLR-010	18.5-2	Main Control Room	DCP/NRC1731	4/6/06	10 CFR 52.63(a)(1)(iv)
52 Rev. 1	APP-GW-GLR-010 Rev. 1	18.5-2	Main Control Room	DCP/NRC TBD	PENDING 6/15/07	10 CFR 52.63(a)(1)(iv)
54	APP-GW-GLR-033	9.1-3	Spent Fuel Storage Racks Structural/Seismic Analysis	DCP/NRC1760 DCP/NRC1764	7/7/06 7/20/06	10 CFR 52.63(a)(1)(vii) 10 CFR 52.63(a)(1)(v) See Note
57	APP-GW-GLR-045	3.7-4	Evaluation of Critical Structures	DCP/NRC1847	4/5/07	10 CFR 52.63(a)(1)(vii)
57 Rev. 1	APP-GW-GLR-045 Rev. 1	3.7-4	Evaluation of Critical Structures	DCP/NRC TBD	PENDING 7/31/07	10 CFR 52.63(a)(1)(vii)
59	APP-GW-GLR-011	18.7-1	Execution and Documentation of the Human Reliability Analysis/Human Factors Engineering Integration	DCP/NRC1731	4/6/06	10 CFR 52.63(a)(1)(iv)
61	APP-GW-GLN-014	NA	Integrated Head Package Design	DCP/NRC1798	11/14/06	10 CFR 52.63(a)(1)(vii)
62	APP-GW-GLN-006	NA	Methodology for Qualifying AP1000 Safety Related Electrical and Mechanical Equipment	DCP/NRC1735	5/22/06	10 CFR 52.63(a)(1)(vii)
62 Rev. 1	APP-GW-GLN-006 Rev. 1	NA	Methodology for Qualifying AP1000 Safety Related Electrical and Mechanical Equipment, Revision 1	DCP/NRC1773	9/8/06	10 CFR 52.63(a)(1)(vii)
62 Rev. 2	APP-GW-GLN-006 Rev. 2	NA	Methodology for Qualifying AP1000 Safety Related Electrical and Mechanical Equipment, Revision 2	DCP/NRC1873	4/27/07	10 CFR 52.63(a)(1)(vii)
65	APP-GW-GLR-029	9.1-4	Criticality Analysis for Spent Fuel Racks	DCP/NRC1755	6/30/06	10 CFR 52.63(a)(1)(vii)
66	APP-GW-GLR-070	19.59.10-4	Development of Severe Accident Management Guidance	DCP/NRC1812	1/12/07	10 CFR 52.63(a)(1)(vii)
67	APP-GW-GLR-030	9.1-2	Criticality Analysis for New Fuel Rack	DCP/NRC1739	5/29/06	10 CFR 52.63(a)(1)(vii)
68	APP-GW-GLR-069	19.59.10-5	Equipment Survivability	DCP/NRC TBD	PENDING 6/15/07	10 CFR 52.63(a)(1)(vii)
70	APP-GW-GLR-040	18.9-1	Plant Operations, Maintenance and Surveillance Procedures	DCP/NRC1783	11/1/06	10 CFR 52.63(a)(1)(iv)
70 Rev. 1	APP-GW-GLR-040 Rev. 1	18.9-1	Plant Operations, Maintenance and Surveillance Procedures	DCP/NRC TBD	PENDING 6/29/07	10 CFR 52.63(a)(1)(iv)
71A	APP-GW-GLR-037	14.4-2	Test Specifications and Procedures	DCP/NRC1781	9/22/06	10 CFR 52.63(a)(1)(vii)

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71A Rev. 1	APP-GW-GLR-037 Rev. 1	14.4-2	Test Specifications and Procedures	DCP/NRC1886	5/11/07	10 CFR 52.63(a)(1)(vii)
71B	APP-GW-GLR-038	14.4-3	Conduct of Test Program	DCP/NRC1778	9/22/06	10 CFR 52.63(a)(1)(vii)
71B Rev. 1	APP-GW-GLR-038 Rev. 1	14.4-3	Conduct of Test Program	DCP/NRC1895	5/24/07	10 CFR 52.63(a)(1)(vii)
72	APP-GW-GLR-012	18.2-1	Execution of the NRC Approved Human Factors Engineering Program	DCP/NRC1731	4/6/06	10 CFR 52.63(a)(1)(iv)
72	APP-GW-GLR-012	18.5-1	Task Analysis (FBTA)	DCP/NRC1731	4/6/06	10 CFR 52.63(a)(1)(iv)
72	APP-GW-GLR-012	18.8-1	Execution and Documentation of the Human System Interface Design Implementation Plan	DCP/NRC1731	4/6/06	10 CFR 52.63(a)(1)(vii)
73	APP-GW-GLR-014	11.2-4	Dilution and Control of Boric Acid Discharge	DCP/NRC1728	3/31/06	10 CFR 52.63(a)(1)(vii)
74A	APP-GW-GLR-064	16.1-1	Technical Specification Preliminary Information	DCP/NRC1807	12/15/06	10 CFR 52.63(a)(1)(vii)
74A Rev. 1	APP-GW-GLR-064 Rev. 1	16.1-1	Technical Specification Preliminary Information	DCP/NRC1865	4/13/07	10 CFR 52.63(a)(1)(vii)
74B	APP-GW-GLN-074	16.3-1	Completion of Investment Protection Short-Term Availability Controls	DCP/NRC1835	2/19/07	10 CFR 52.63(a)(1)(vii)
74C	APP-GW-GLN-075	16.1-1	Technical Specifications for Design Changes	DCP/NRC1844	3/12/07	10 CFR 52.63(a)(1)(v) See Note
74C Sup. 1	APP-GW-GLN-075 Rev. 1	16.1-1	Technical Specifications for Design Changes	DCP/NRC TBD	PENDING 6/15/07	10 CFR 52.63(a)(1)(v) See Note
79	APP-GW-GLN-079	NA	Electrical System Design Changes	DCP/NRC TBD	PENDING 6/29/07	10 CFR 52.63(a)(1)(vii)
80	APP-GW-GLR-080	NA	Mark-up of DCD Chapter 7	DCP/NRC TBD	PENDING 6/29/07	10 CFR 52.63(a)(1)(iv)
81	APP-GW-GLR-081 WCAP-16768-P Rev. 1 WCAP-16768-NP Rev. 1	18.5-1	Task Analysis	DCP/NRC1904	5/24/07	10 CFR 52.63(a)(1)(iv)
82	APP-GW-GLR-082	18.8-1	Execution and Documentation of the Human System Interface Design Implementation Plan	DCP/NRC TBD	PENDING 6/4/07	10 CFR 52.63(a)(1)(iv)
84	APP-GW-GLR-084 WCAP-16796-P Rev. 0 WCAP-16796-NP Rev. 0	18.11-1	Verification and Validation of AP1000 Human Factors Engineering Program	DCP/NRC1905	5/25/07	10 CFR 52.63(a)(1)(iv)
85	APP-GW-GLR-044	3.7-4	Nuclear Island Basemat and Foundation	DCP/NRC1791	10/19/06	10 CFR 52.63(a)(1)(vii)
86	APP-GW-GLN-018	NA	Alternate Steam and Power Conversion Design	DCP/NRC1826	2/8/07	10 CFR 52.63(a)(1)(vii)

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88	APP-GW-GLR-065 WCAP-16674-P WCAP-16674-NP	NA	AP1000 Instrumentation & Control (I&C) Data Communication and Manual Control of Safety Systems and Components	DCP/NRC1808	12/13/06	10 CFR 52.63(a)(1)(iv)
89	APP-GW-GLR-071 WCAP-16675-P WCAP-16675-NP	NA	AP1000 Protection and Safety Monitoring System Architecture Technical Report	DCP/NRC1817	2/14/07	10 CFR 52.63(a)(1)(iv)
90	APP-GW-GLR-090 WCAP-16696-P WCAP-16696-NP	N/A	Strategy for the Closure of the AP1000 Design Control Document Chapter 18 Human Factors Engineering Combined Operating License Information Items	DCP/NRC1831	2/14/07	10 CFR 52.63(a)(1)(iv)
91	APP-GW-GLR-091	N/A	HSI Guidelines	DCP/NRC1846	3/20/07	10 CFR 52.63(a)(1)(iv)
92	APP-GW-GLN-021	NA	AP1000 Optimized Condenser Design	DCP/NRC1821	1/30/07	10 CFR 52.63(a)(1)(vii)
93	APP-GW-GLR-073	NA	Corrections to the Penetration Classification and Tag Numbers in Table 2.2.1-1 of the ITAAC	DCP/NRC1838	2/23/07	10 CFR 52.63(a)(1)(v) See Note
94	APP-GW-GLR-066	13.6-1	AP1000 Safeguards Report (Security)	DCP/NRC1878	5/4/07	10 CFR 52.63(a)(1)(vii)
95	APP-GW-GLR-068	13.6-3	Standard Security Plan	DCP/NRC1850	3/9/07	10 CFR 52.63(a)(1)(vii)
96	APP-GW-GLR-067	13.6-1	AP1000 Response to ICMs (Security)	DCP/NRC1851	3/9/07	10 CFR 52.63(a)(1)(vii)
97	APP-GW-GLN-022 Rev. 1	NA	DAS Platform Technology & Remote Indication Change	DCP/NRC1869	5/14/07	10 CFR 52.63(a)(1)(vii)
98	APP-GW-GLN-098	NA	AP1000 Compliance with 10CFR20.1406	DCP/NRC1863	4/10/07	10 CFR 52.63(a)(1)(vii)
100	APP-GW-GLN-020	NA	AP1000 Valve Inservice Testing Requirement Update	DCP/NRC1842 DCP/NRC1854	3/9/07 3/15/07	10 CFR 52.63(a)(1)(vii)
101	APP-GW-GLR-101	19.59.10-2	AP1000 PRA Evaluation of External Events	DCP/NRC1885	5/11/07	10 CFR 52.63(a)(1)(vii)
102	APP-GW-GLR-102	NA	AP1000 PRA Update Report	DCP/NRC1862	4/13/07	10 CFR 52.63(a)(1)(vii)
103	APP-GW-GLN-019	NA	System Arrangement and Configuration Design Changes	DCP/NRC TBD	PENDING 6/15/07	10 CFR 52.63(a)(1)(vii)
104	APP-GW-GLR-104	NA	Cyber Security	DCP/NRC TBD	PENDING 6/4/07	10 CFR 52.63(a)(1)(vii)
105	APP-GW-GLN-105	NA	Building and Structure Configuration, Layout and General Arrangement Design Updates	DCP/NRC TBD	PENDING 6/15/07	10 CFR 52.63(a)(1)(vii)
106	APP-GW-GLN-106	NA	Mechanical System and Component Design Updates	DCP/NRC TBD	PENDING 6/15/07	10 CFR 52.63(a)(1)(vii)

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107 Rev. 1	APP-GW-GLR-107 Rev. 1	NA	AP1000 Technical Support Center	DCP/NRC TBD	PENDING 6/7/07	10 CFR 52.63(a)(1)(iii)
108	APP-GW-GLN-108	NA	Site Interface Temperature Limits	DCP/NRC1896	5/24/07	10 CFR 52.63(a)(1)(vii)
109	APP-GW-GLR-109	NA	Revision of NQA-1 for AP1000	DCP/NRC1887	5/16/07	10 CFR 52.63(a)(1)(vii)
110	APP-GW-GLN-110	NA	Changes to the DCD Chapter 3.11, Environmental Qualification, and Appendix 3D	DCP/NRC1883	5/11/07	10 CFR 52.63(a)(1)(vii)
111	APP-GW-GLN-111	NA	CCS and SWS Changes Required for Increased Heat Loads	DCP/NRC1897	5/25/07	10 CFR 52.63(a)(1)(vii)
112	APP-GW-GLN-112	NA	Structural Verification for Enhanced Shield Building	DCP/NRC TBD	PENDING 7/31/07	10 CFR 52.63(a)(1)(vii)
113	APP-GW-GLN-113	NA	AP1000 Containment Vessel Shell Material Specification	DCP/NRC1882	5/11/07	10 CFR 52.63(a)(1)(vii)
114	APP-GW-GLN-114	NA	AP1000 Auxiliary Boiler Sizing and Design	DCP/NRC TBD	PENDING 6/15/07	10 CFR 52.63(a)(1)(vii)
115	APP-GW-GLR-115	N/A	Effects of High Frequency Seismic Content on SSCs	DCP/NRC TBD	PENDING 7/31/07	10 CFR 52.63(a)(1)(vii)
116	APP-GW-GLN-116	NA	Additional Liquid Radwaste Monitor Tanks and Radwaste Building Extension	DCP/NRC1908	5/25/07	10 CFR 52.63(a)(1)(vii)
117	APP-GW-GLR-117	N/A	Incorporation of the Maintenance Rule	DCP/NRC1898	5/24/07	10 CFR 52.63(a)(1)(vii)
118	APP-GW-GLN-118	NA	CVS PAMS Instrument Criteria	DCP/NRC1909	5/25/07	10 CFR 52.63(a)(1)(vii)
119	APP-GW-GLR-119	N/A	AP1000 Design Control Document Chapter 4 Tier 2* Information	DCP/NRC1900	5/24/07	10 CFR 52.63(a)(1)(iii)
120	APP-GW-GLR-120	NA	Cathodic Protection	DCP/NRC1906	5/25/07	10 CFR 52.63(a)(1)(vii)
121	APP-GW-GLN-121	N/A	Spent Fuel Pool Level and Dose	DCP/NRC1901	5/24/07	10 CFR 52.63(a)(1)(vii)
122	APP-GW-GLN-122	NA	Offsite and Control Room Dose Changes	DCP/NRC TBD	PENDING 6/29/07	10 CFR 52.63(a)(1)(vii)
123	APP-GW-GLN-123	N/A	Core Makeup Tank Narrow Level Instrumentation Change	DCP/NRC TBD	PENDING 6/15/07	10 CFR 52.63(a)(1)(vii)
124	APP-GW-GLN-124	NA	Removal of PWS and WWS Retention Basin and Associated Components from Westinghouse Scope of Design for AP1000	DCP/NRC TBD	PENDING 6/15/07	10 CFR 52.63(a)(1)(vii)
125	APP-GW-GLR-125	N/A	Correction to Tier 1 ITAAC 2.2.4	DCP/NRC1899	5/24/07	10 CFR 52.63(a)(1)(v) See Note

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126	APP-GW-GLR-126	NA	Nuclear Island Response to Aircraft Impact	DCP/NRC TBD	PENDING 7/31/07	10 CFR 52.63(a)(1)(vii)
127	APP-GW-GLR-127	N/A	PCS Tier 1 Diagram Correction	DCP/NRC1910	5/25/07	10 CFR 52.63(a)(1)(v) See Note
128	APP-MI01-GER-001	N/A	AP1000 Reactor Internals Flow-Induced Vibration Assessment Program	DCP/NRC TBD	PENDING 6/15/07	10 CFR 52.63(a)(1)(vii)
129	APP-GW-GLN-129	NA	Changes to Conformance with Regulatory Guidance and Criteria	DCP/NRC TBD	PENDING 6/15/07	10 CFR 52.63(a)(1)(vii)
130	APP-GW-GLR-130	N/A	Editorial Format Change Related to "COL applicant" and COL Information items	DCP/NRC TBD	PENDING 6/4/07	10 CFR 52.63(a)(1)(vii)
131	APP-GW-GLN-131	N/A	Incorporation of AP600 DCPs	DCP/NRC TBD	PENDING 6/29/07	10 CFR 52.63(a)(1)(vii)
132	APP-GW-GLN-132	N/A	Changes to DRAP Component List	DCP/NRC TBD	PENDING 6/15/07	10 CFR 52.63(a)(1)(vii)

Note: Items identified as material errors represent those changes where there were errors identified in Tier 1 information or when detailed design efforts in another area invalidated existing certified design information.

ENCLOSURE 1

APP-GW-GL-700, Revision 16

“AP1000 Design Control Document”

Sensitive Version

***Contains sensitive material relative to the physical protection of an AP1000 Nuclear Plant
That should be withheld from public disclosure pursuant to 10 CFR 2.390(d)***

ENCLOSURE 2

APP-GW-GL-700, Revision 16

“AP1000 Design Control Document”

Public Version

***Redacted version of Enclosure 1 with sensitive material relative to the physical protection of an
AP1000 Nuclear Plant withheld from public disclosure pursuant to 10 CFR 2.390(d)***