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# **Final Safety Evaluation Report**

Related to Certification of the  
AP1000 Standard Plant Design

Volume 3  
Supplement 2

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Supplement 2**

**Docket No. 52-006**

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## ABSTRACT

This report supplements the final safety evaluation report (FSER) for the AP1000 standard plant design. The FSER was issued by the U.S. Nuclear Regulatory Commission (NRC) as NUREG-1793 in September 2004, and NUREG-1793 Supplement 1 in December 2005, to document the NRC staff's technical review of the AP1000 design. The application for the AP1000 design was submitted on June 28, 2002, by Westinghouse Electric Corporation (Westinghouse) in accordance with Subpart B, "Standard Design Certifications," of Title 10 of the *Code of Federal Regulations* (10 CFR) Part 52, and Appendix 0, "Standardization of Design: Staff Review of Standard Designs." This supplement documents the NRC staff's review of Westinghouse's changes to the AP1000 design documentation in the design control document (DCD) since the issuance of Supplement 1 of the FSER. On the basis of the evaluation described in the AP1000 FSER (NUREG-1793, NUREG-1793 Supplement 1) and this report, the NRC staff concludes that the changes to the DCD (up to and including Revision 19 to the AP1000 DCD) are acceptable and that Westinghouse's application for design certification meets the requirements of Subpart B to 10 CFR Part 52 that are applicable and technically relevant to the AP1000 standard plant design.



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### A. CHRONOLOGY

This appendix contains a chronological listing of routine licensing correspondence between the staff of the U.S. Nuclear Regulatory Commission (NRC) and Westinghouse regarding the review of the amendment to the AP1000 passive plant design under Project No. 711 and Docket No. 52-006. Please note that Westinghouse Technical Reports are listed with the References in Appendix B.

Document Date	Accession Number	Title	Author Name	Author Affiliation	Case/Reference Number
3/28/06	ML061440082	Westinghouse Slides from the EPRI/NEI I&C Workshop Held on March 28, 2006.		Westinghouse	
3/30/06	ML060690365	AP1000 Design Certification - Summaries of Telephone Calls Held Between September 29, 2005, and November 3, 2005	Quinones-Navarro, L.	NRC/NRR/ADRA/ DNRL/NRBA	
3/31/06	ML060960221	Westinghouse AP1000 COL Technical Report Submittal.	Sterdis, A.	Westinghouse	DCP/NRC1728
3/31/06	ML060960229	AP1000 Standard Combined License Technical Report, Benchmark Program for Piping Analysis Computer Programs, APP-GW-GLR-006, Revision 0.		Westinghouse	
3/31/06	ML060960239	AP1000 Standard Combined License Technical Report, Main Control Room Inleakage Testing, APP-GW-GLR-007, Revision 0.		Westinghouse	
3/31/06	ML060960252	AP1000 Standard Combined License Technical Report, Request for Closure of COL Items in DCD Chapter 11 Identification of Adsorbent Media, APP-GW-GLR-008, Revision 0.		Westinghouse	

Chronology

Document Date	Accession Number	Title	Author Name	Author Affiliation	Case/Reference Number
3/31/06	ML060960261	AP1000 Standard Combined License Technical Report, Closure of COL Items in DCD Chapter 11 Dilution and Control of Boric Acid Discharge. APP-GW-GLR-014, Revision 0.		Westinghouse	
3/31/06	ML061030089	APP-GW-GLR-010, Rev 0, "AP1000 Standard Combined License Technical Report; AP1000 Main Control Room Staffing roles and Responsibilities."	Harmon, D. L.	Westinghouse	AP1000
3/31/06	ML061030092	APP-GW-GLR-011, Rev 0, "AP1000 Standard Combined License Technical Report; Execution and Documentation of the Human Reliability Analysis/Human Factors Engineering Integration."	Schulz, T.	Westinghouse	AP1000
3/31/06	ML061030093	APP-GW-GLR-012, Rev 0, "AP1000 Standard Combined License Technical Report; AP1000 Human Factors Engineering Program and Human System Interface Design."	Harmon, D. L.	Westinghouse	AP1000
3/31/06	ML061030102	APP-GW-GL-011, Rev 0, "AP1000 Identification of Critical Human Actions and Risk Important Tasks."	Schulz, T.	Westinghouse	AP1000
4/3/06	ML060950662	03/29/2005 Summary of Telephone Call With NuStart re Additional Information Needed for AP1000 COL Review.	Bloom, S. D.	NRC/NRR/ADRA/DNR L/NRBA	

Chronology

Document Date	Accession Number	Title	Author Name	Author Affiliation	Case/Reference Number
4/5/06	ML060970266	AP1000 COL Design Change Review.	Sterdis, A.	Westinghouse	DCP/NRC1729
4/5/06	ML060970270	APP-GW-GLN-002, Rev. 0, "Zinc Addition."	Lindgren, D. A. Meneely, T. K. Winters, J. W.	Westinghouse	
4/5/06	ML060970272	APP-GW-GLN-003, Rev. 0, "Hydrogen Igniter Locations."	Lindgren, D. A. Mandava, R. McDermott, D. J.	Westinghouse	
4/5/06	ML061020488	NuStart Organization Update: NRC Projects No. 740 and 744.	Kray, M. C.	NuStart Energy Development, LLC	
4/6/06	ML060970267	APP-GW-GLN-001, Rev. 0, "Passive Residual Heat Removal Heat Exchanger."	Quinn, K. Wiseman, D. A.	Westinghouse	
4/6/06	ML061030082	Westinghouse, AP1000 COL Technical Report Submittal (HFE Related).	Sterdis, A.	Westinghouse	DCP/NRC1731
4/7/06	ML060690383	AP1000 Design Certification - Drop-In Visit on September 29, 2005	Quinones, L. N.	NRC/NRR/ADRA/ DNRL/NRBA	
5/16/06	ML061360164	Letter to NuStart on the Status of Westinghouse Technical Reports.	Coffin, S. M.	NRC/NRR/ADRA/ DNRL	
5/18/06	ML061430014	NuStart Bellefonte COL Project, AP-1000 Pre-Application System.	Hastings, P. S.	NuStart Energy Development, LLC	AP-1000
5/22/06	ML061440346	Submittal of APP-GW-GLR-017, Rev. 0, "AP1000 Standard Combined License Technical Report: Resolution of Common Q NRC Items."	Sterdis, A.	Westinghouse	DCP/NRC1736

Chronology

Document Date	Accession Number	Title	Author Name	Author Affiliation	Case/Reference Number
5/22/06	ML061440381	Submittal of APP-GW-GLR-005, Rev. 0, "AP1000 Standard Combined License Technical Report: Containment Vessel Design Adjacent to Large Penetrations."	Sterdis, A.	Westinghouse	DCP/NRC1734
5/22/06	ML061440387	Submittal of APP-GW-GLN-006, Rev. 0, "Methodology for Qualifying AP1000 Safety Related Electrical & Mechanical Equipment."	Sterdis, A.	Westinghouse	DCP/NRC1735
5/22/06	ML061440479	AP1000 COL Standard Design Change Submittal. TR39	Sterdis, A.	Westinghouse	AP1000 DCP/NRC1737
5/26/06	ML061590366	NuStart Bellefonte COL Project - AP-1000 Pre-Application Submittals.	Hastings, P. S.	NuStart Energy Development, LLC	AP1000
5/29/06	ML061520152	AP1000 COL Standard Design Change Submittal. TR46	Sterdis, A.	Westinghouse	AP1000 DCP/NRC1741
5/29/06	ML061520154	AP1000 COL Standard Design Change Submittal. TR44	Sterdis, A.	Westinghouse	AP1000 DCP/NRC1740
5/29/06	ML061520157	AP1000 COL Standard Design Change Submittal. TR67	Sterdis, A.	Westinghouse	AP1000 DCP/NRC1739
5/30/06	ML061530083	AP100 COL Standard Design Change Submittal of Sensitive and Non-Sensitive Versions of APP-GW-GLR-016, Rev 0.	Sterdis, A.	Westinghouse	APP-GW-GLR-046, Rev. 0 DCP/NRC1742
5/30/06	ML061530093	APP-GW-GLR-016, Rev. 0, "AP1000 Standard Combined License Technical Report, AP1000 Pressurizer Design."		Westinghouse	DCP/NRC1742
5/30/06	ML061530485	WCAP-16361-P, Rev 0, "Westinghouse Setpoint Methodology for Protection Systems - AP1000."	Reagan, J. R. Solomon, D. K. Trozzo, R. W. Williams, T. P.	Westinghouse	AP1000



Chronology

Document Date	Accession Number	Title	Author Name	Author Affiliation	Case/Reference Number
5/31/06	ML061530087	APP-GW-GLR-016, Rev. 0, "AP1000 Standard Combined License Technical Report, AP1000 Pressurizer Design."		Westinghouse	
5/31/06	ML061530484	AP1000 COL Technical Report Submittal.	Sterdis, A.	Westinghouse	AP1000 AW-06-2155 DCP/NRC1744
5/31/06	ML061600440	APP-GW-GLR-016, Rev. 0, "AP1000 Pressurizer Design," Technical Report Number 36.		Westinghouse	DCP/NRC1749
5/31/06	ML061600443	APP-GW-GLR-016, Rev. 0, "AP1000 Pressurizer Design," Technical Report Number 36.		Westinghouse	DCP/NRC1749
5/31/06	ML061840577	WCAP-16361-NP, Revision 0, "Westinghouse Setpoint Methodology for Protection Systems - AP1000."	Reagan, J. R. Solomon, D. K. Trozzo, R. W. Williams, T. P.	Westinghouse	
5/31/06	ML070220072	CD-ROM File: APP-GW-GLR-016, Rev. 0, "AP1000 Standard Combined License Technical Report, AP1000 Pressurizer Design."		Westinghouse	
6/5/06	ML061580451	Transmittal of AP1000 COL Standard Design Change Submittal. TR6	Sterdis, A.	Westinghouse	DCP/NRC1746
6/5/06	ML061580629	AP1000 COL Standard Design Change Submittal. TR 8	Sterdis, A.	Westinghouse	DCP/NRC1747
6/5/06	ML061600439	AP1000 COL Standard Design Change Resubmittal of Sensitive and Non-Sensitive Versions of APP-GW-016, Revision 0.	Sterdis, A.	Westinghouse	APP-GW-GLR-016, Rev. 0 DCP/NRC1749

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6/5/06	ML0622230089	AP1000 COL Standard Design Change Resubmittal of Sensitive and Non-Sensitive Versions of APP-GW-GLR-016, Revision 0.	Sterdis, A.	Westinghouse	DCP/NRC1749
6/5/06	ML0622230094	AP1000 COL Standard Design Change Resubmittal of Sensitive and Non-Sensitive Versions of APP-GW-GLR-016, Revision 0.	Sterdis, A.	Westinghouse	DCP/NRC1749
6/14/06	ML061670158	AP1000 COL Standard Design Change Submittal. TR3	Sterdis, A.	Westinghouse	AP1000 DCP/NRC1751
6/30/06	ML061840457	Transmittal of AP1000 COL Standard Technical Report Submittal. TR43	Sterdis, A.	Westinghouse	AP1000 APP-GW-GLR-018, Rev 0 DCP/NRC1758
6/30/06	ML061840461	AP1000 Standard Combined License Technical Report, Failure Modes and Effects Analysis and Software Hazards Analysis for AP1000 Protection System, APP-GW-GLR-018, Rev. 0. TR43		Westinghouse	AP1000 DPC/NRC1758
6/30/06	ML061840472	Submittal of AP1000 COL Technical Report Submittal. TR45	Sterdis, A.	Westinghouse	AP1000 APP-GW-GLR-027, Rev 1 DCP/NRC1753
6/30/06	ML061840473	AP1000 Standard Combined License Technical Report, Operator Actions Minimizing Spurious ADS Actuation, APP-GW-GLR-027, Revision 1.		Westinghouse	AP1000 DCP/NRC1753
6/30/06	ML061840537	AP1000 COL Standard Technical Report Submittal. TR65	Sterdis, A.	Westinghouse	AP1000 DCP/NRC1755

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6/30/06	ML061840539	AP1000 Standard Combined License Technical Report, Spent Fuel Storage Racks Criticality Analysis, APP-GW-GLR-029, Revision 0.		Westinghouse	AP1000 DCP/NRC1755
6/30/06	ML061840573	AP1000 COL Technical Report Submittal. TR28	Sterdis, A.	Westinghouse	DCP/NRC1752
6/30/06	ML061860405	Transmittal of Proprietary and Non-Proprietary Technical Document Information, WCAP-16592-P Rev. 0 and WCAP-16592-NP Rev. 0, "Software Hazard Analysis of AP1000 Protection and Safety Monitoring System".	Winters, J. W.	Westinghouse	AP1000 AW-06-2172 DCP/NRC1757
6/30/06	ML061860412	WCAP-16592-NP, Revision 0, "Software Hazard Analysis of AP1000 Protection and Safety Monitoring System."	Burns, J. E. Erin, L. E. Senechal, R. R. Wilson, T. C.	Westinghouse	AP1000 APP-PMS-GER-001, Rev 0 AW-06-2171 DCP/NRC1757
6/30/06	ML061860421	WCAP-16592-P, Revision 0, "Software Hazard Analysis of AP1000 Protection and Safety Monitoring System."	Burns, J. E. Erin, L. E. Senechal, R. R. Wilson, T. C.	Westinghouse	AP1000 APP-PMS-GER-001, Rev 0 AW-06-2171 DCP/NRC1757
6/30/06	ML061860491	Transmittal of Proprietary and Non-Proprietary Technical Document Information, WCAP-16438-P Rev. 1 and WCAP-16438-NP Rev. 1, "FMEA of AP1000 Protection and Safety Monitoring System".	Winters, J. W.	Westinghouse	AP1000 AW-06-2171 DCP/NRC1756
6/30/06	ML061860498	WCAP-16438-NP, Revision 1, "FMEA of AP1000 Protection and Safety Monitoring System."	Cook, B. A. Erin, L. E. Senechal, R. R. Wilson, T. C.	Westinghouse	AP1000 AW-06-2171

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6/30/06	ML061860503	WCAP-16438-P, Revision 1, "FMEA of AP1000 Protection and Safety Monitoring System."	Cook, B. A. Erin, L. E. Senechal, R. R. Wilson, T. C.	Westinghouse	AP1000 APP-GW-JJ-002, Rev 1 AW-06-2171
6/30/06	ML070220073	CD-ROM File: APP-GW-GLR-021, Rev. 0, "AP1000 Standard Combined License Technical Report, AP1000 As-Build COL Information Items."		Westinghouse	
7/7/06	ML061920159	AP1000 COL Standard Approach for Reactor Design.	Sterdis, A.	Westinghouse	DCP/NRC1761
7/7/06	ML061920397	AP1000 COL Standard Technical Report Submittal. TR54	Sterdis, A.	Westinghouse	DCP/NRC1760
7/7/06	ML061920400	Enclosure 2, APP-GW-GLR-033, Revision 0 "Spent Fuel Storage Rack Structure/Seismic Analysis," Technical 54.		Westinghouse	
7/7/06	ML061920401	Enclosure 1, APP-GW-GLR-033, Revision 0, "Spent Fuel Storage Rack Structure/Seismic Analysis," Technical 54.		Westinghouse	
7/7/06	ML062230090	AP1000 COL Standard Technical Report Submittal of Sensitive and Non-Sensitive Versions of APP-GW-GLR-033, Revision 0.	Sterdis, A.	Westinghouse	DCP/NRC1760
7/7/06	ML062230098	AP1000 COL Standard Technical Report Submittal of Sensitive and Non-Sensitive Versions of APP-GW-GLR-033, Revision 0.	Sterdis, A.	Westinghouse	DCP/NRC1760

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7/14/06	ML062010136	Westinghouse Response to NRC Regulatory Issue Summary 06-06.	Sterdis, A.	Westinghouse	DCP/NRC1762 RIS-06-006 RIS-06-009
7/17/06	ML061980343	07/27/06 Notice of Meeting with AP1000 Design-Centered Working Group (DCWG) Regarding Pre-COL Activities.	Starefos, J. L.	NRC/NRR/ADRA/DNRL	
7/17/06	ML062000089	NuStart Bellefonte COL Project - NRC Project No. 740 Response to RIS 06-06, New Reactor Standardization Needed to Support the Design-Centered Licensing Review Approach.	Kray, M. C.	NuStart Energy Development, LLC	FOIA/PA-2008-0001 RIS-06-006
7/19/06	ML062020163	AP1000 Oath of Affirmation Submittal for Previously Submitted COL Technical Reports.	Sterdis, A.	Westinghouse	DCP/NRC1759
7/19/06	ML062020216	AP1000 COL Standard Technical Report Submittal of APP-GW-GLR-022, Revision 1 (Technical Report Number 8).	Sterdis, A.	Westinghouse	DCP/NRC1763
7/20/06	ML062230088	Transmittal of AP1000 COL Standard Technical Report Submittal of APP-GW-GLR-016 (Technical Report 36) and APP-GW-GLR-033 (Technical Report 54), Sensitive and Non-Sensitive Versions Electronically.	Sterdis, A.	Westinghouse	AP1000 APP-GW-GLR-016 APP-GW-GLR-033 DCP/NRC1764
7/21/06	ML061870562	Westinghouse AP1000 - Requests for Withholding Information from Public Disclosure, AW-06-2172.	Bloom, S. D.	NRC/NRR/ADRA/DNRL	AP1000 AW-06-2172 WCAP-16592-P

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7/21/06	ML061870615	Westinghouse, AP1000 - Request for withholding Information from Public Disclosure (AW-06-2171).	Bloom, S. D.	NRC/NRRR/ADRA/ DNRL	AW-06-2171 WCAP-16438-P, Rev 1
7/21/06	ML061950703	Westinghouse AP1000 Combined License (COL) Pre-Application Technical Report 36 - Request for Additional Information (TAC No. MD2109).	Bloom, S. D.	NRC/NRRR/ADRA/ DNRL	TAC MD2109
7/21/06	ML062000203	Westinghouse, Request for Withholding Information from Public Disclosure.	Bloom, S. D.	NRC/NRRR/ADRA/ DNRL	RIS-05-006
7/24/06	ML061990552	Westinghouse, Withholding from Public Disclosure, APP-GW-GLR-016, Revision 0, "AP1000 Pressurizer Design".	Bloom, S. D.	NRC/NRRR/ADRA/ DNRL	APP-GW-GLR-016, Rev 0 RIS-05-006
7/25/06	ML061870504	AP1000, Withholding From Public Disclosure, WCAP-16361-P, "Westinghouse Setpoint Methodology for Protection Systems - AP1000" (AW-06-2155).	Bloom, S. D.	NRC/NRRR/ADRA/ DNRL	AW-06-2155
7/28/06	ML062120598	AP1000 COL Standard Design Change Submittal, APP-GW-S2R-010, Rev. 0, "Extension of Nuclear Island Seismic Analysis to Soil Sites," Technical Report No. 03.	Sterdis, A.	Westinghouse	AP1000 APP-GW-S2R-010, Rev 0 DCP/NRC1765

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7/31/06	ML062130591	AP1000 COL Standard Technical Report, Submittal of Proprietary and Non-Proprietary Technical Document Information, WCAP-16620-P Rev. 0 and WCAP-16620-NP Rev. 0, "Consistency of Reactor Vessel Core Support Structure Materials Relative to Know Issues...."	Sterdis, A.	Westinghouse	AW-06-2183 DCP/NRC1767 WCAP-16620-NP, Rev 0 WCAP-16620-P, Rev 0
7/31/06	ML062130594	WCAP-16620-NP, Rev 0, "Consistency of Reactor Vessel Internals Core Support Structure Materials Relative to Known Issues of Irradiation-Assisted Stress Corrosion Cracking (IASCC) and Void Swelling for the AP1000 Plant." TR12	Altman, D. A. Forsyth, D. R. Singleton, N. R. Smith, R. E. Snyder, M. D.	Westinghouse	DCP/NRC1767
7/31/06	ML062130597	WCAP-16620-P, Rev 0, "Consistency of Reactor Vessel Internals Core Support Structure Materials Relative to Known Issues of Irradiation-Assisted Stress Corrosion Cracking (IASCC) and Void Swelling for the AP1000 Plant."	Altman, D. A. Forsyth, D. R. Gilmore, C. B. Harbison, L. S. Imbrogno, G. M. Kubes, J. E. Kuenzel, A. J. Singleton, N. R. Smith, R. E. Snyder, M. D.	Westinghouse	DCP/NRC1767

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7/31/06	ML062130602	AP1000 COL Standard Technical Report Submittal. Submittal of Proprietary and Non-Proprietary Technical Document Information, WCAP-16624-P Rev. 1 and WCAP-16624-NP Rev. 1, "Reactor Internals Materials Changes" TR24	Sterdis, A.	Westinghouse	DCP/NRC1766 WCAP-16624-NP, Rev 1 WCAP-16624-P, Rev 1
7/31/06	ML062130604	WCAP-16624-NP, Rev 1, "Reactor Internals Materials Changes for the AP1000 Plant."	Forsyth, D. R. Singleton, N. R.	Westinghouse	
7/31/06	ML062130609	WCAP-16624-P, Rev 1, "Reactor Internals Materials Changes for the AP1000 Plant."	Forsyth, D. R. Singleton, N. R.	Westinghouse	
8/1/06	ML062130077	Westinghouse AP1000 Combined License (COL) Pre-Application Technical Report 32 - Request for Additional Information (TAC NO. MD1432)	Bloom, S. D.	NRC/NRR/ADRA/ DNRL	TAC MD1432
8/7/06	ML062150407	Westinghouse AP1000 Combined License (COL) Pre-Application Technical Report 37 - Request for Additional Information (TAC NO. MD1433).	Bloom, S. D.	NRC/NRR/ADRA/ DNRL/NAPB	AP1000 TAC MD1433
8/7/06	ML062210422	AP1000 COL Standard Technical Report Submittal.	Sterdis, A.	Westinghouse	DCP/NRC1768
8/8/06	ML062150389	Westinghouse AP1000 Combined License (COL) Pre-Application Technical Report 6 - Request for Additional Information (TAC NO. MD2174).	Bloom, S. D.	NRC/NRR/ADRA/ DNRL/NAPB	AP1000 TAC MD2174



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8/14/06	ML063040677	NuStart Bellefonte COL Project, AP-1000 Pre-Application Submittals.	Hastings, P. S.	NuStart Energy Development, LLC	
8/21/06	ML062270662	Westinghouse AP1000 Combined License (COL) Pre-Application Technical Report 36 - Request for Additional Information (TAC MD2109).	Bloom, S. D.	NRC/NRR/ADRA/ NRL	TAC MD2109
8/29/06	ML062350450	Westinghouse AP1000 Combined License (COL) Pre-Application Technical Report 6 - Request for Additional Information (TAC NO. MD2174).	Bloom, S. D.	NRC/NRR/ADRA/ DNRL	TAC MD2174
8/29/06	ML062350476	Westinghouse AP1000 Combined License (COL) Pre-Application Technical Report 8 - Request for Additional Information (TAC MD2175).	Bloom, S. D.	NRC/NRR/ADRA/ DNRL	TAC MD2175
8/29/06	ML062550528	08/29/06 Meeting Slides on Overview of AP1000 COL Piping Analysis, Hazard Evaluation, and LBB Evaluation.		Westinghouse	
8/29/06	ML062550529	08/29/06 Meeting Slides on LBB Regulatory Issues.	Lindgren, D. A.	Westinghouse	
8/29/06	ML062550533	08/29/06 Meeting Slides on LBB and Piping Analysis.	Kotwicki, P. J.	Westinghouse	
8/31/06	ML062430452	09/12/06 - Forthcoming Meeting Closed Meeting with Westinghouse Regarding AP1000 Reactor Fuels.	Bloom, S. D.	NRC/NRR/ADRA/ DNRL	
9/1/06	ML062340261	AP1000 - Requests for Withholding Information From Public Disclosure (AW-06-2182).	Bloom, S. D.	NRC/NRR/ADRA/ DNRL	AW-06-2182

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9/7/06	ML062340224	AP1000 - Request for Withholding Information From Public Disclosure (AW-06-2183).	Bloom, S. D.	NRC/NRR/ADRA/DNRL	AW-06-2183
9/7/06	ML062490459	09/19/06 Notice of Forthcoming Closed Meeting with Westinghouse Regarding Security Issues.	Bloom, S. D.	NRC/NRR/ADRA/DNRL	
9/8/06	ML062560035	AP1000 COL Response to Request for Additional Information (TR #32).	Sterdis, A.	Westinghouse	DCP/NRC1772 TAC MD1432
9/8/06	ML062560036	Submittal of AP1000 COL Standard Technical Report. TR62	Sterdis, A.	Westinghouse	DCP/NRC1773
9/8/06	ML062560080	AP1000 COL Standard Technical Report Submittal. TR16	Sterdis, A.	Westinghouse	DCP/NRC1774
9/11/06	ML062500184	Westinghouse AP1000 Combined License (COL) Pre-application Technical Report 8 - Request for Additional Information (TAC NO. MD2175).	Bloom, S. D.	NRC/NRR/ADRA/DNRL/NAPB	TAC MD2175
9/12/06	ML062620374	09/12/06 Meeting Slides, "AP1000 COL Fuel Technical Report," Pre-submittal Meeting with NRC.		BNFL, Inc. Westinghouse	
9/12/06	ML062620382	09/12/06 Meeting Slides, "AP1000 COL Fuel Technical Report," Pre-submittal Meeting with NRC.		BNFL, Inc. Westinghouse	
9/12/06	ML062850171	Enclosure 4 - Transmittal of Non-Proprietary Presentation Material for AP1000 COL Fuel Technical Report Pre-Submittal Meeting with NRC.	Lindgren, D. A. Winters, J. W.	Westinghouse	AP1000 AW-06-2198

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9/12/06	ML062850174	Enclosure 3 - Transmittal of Proprietary Presentation Material for AP1000 COL Fuel Technical Report Pre-Submittal Meeting with NRC.	Lindgren, D. A. Winters, J. W.	Westinghouse	AP1000 AW-06-2198
9/18/06	ML062560269	08/10/06 Summary of Category 1 Meeting with Westinghouse to Discuss the AP1000 Technical Reports Related to Seismic Analyses and Structures.	Bloom, S. D.	NRC/NRR/ADRA/ DNRL	
9/18/06	ML062640426	09/20/06 AP1000 DCWG Meeting Handout - Draft ESBWR FSAR Examples.		NRC/NRR	
9/19/06	ML062500207	10/03-05/06 Notice of Meeting with Westinghouse Regarding Instrumentation and Control for the AP1000.	Bloom, S. D.	NRC/NRR/ADRA/ DNRL	
9/19/06	ML062840523	09/19/06 Meeting Slides, Westinghouse AP1000 Security Overview.		Westinghouse	
9/19/06	ML062840530	09/19/06 Meeting Slides, Westinghouse NSIR AP1000 Overview.		Westinghouse	
9/20/06	ML062640422	09/20/06 AP1000 DCWG MTG Handout - Slides.		NuStart Energy Development, LLC NRC/NRR	
9/20/06	ML062640427	09/20/06 AP1000 DCWG MTG Handout - Categories of Side Heads Drafts.			
9/21/06	ML062680032	AP1000 COL Standard Technical Report Submittal. TR71B	Sterdis, A.	Westinghouse	DCP/NRC1778
9/22/06	ML062680030	AP1000 COL Standard Technical Report Submittal. TR71A	Sterdis, A.	Westinghouse	DCP/NRC1781

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9/22/06	ML062690205	AP1000 COL Standard Technical Report Submittal. TR23	Sterdis, A.	Westinghouse	DCP/NRC1782
9/28/06	ML062700575	Westinghouse AP1000 Combined License (COL) Pre-application Technical Report 32 - Request for Additional Information (TAC No. MD1432).	Bloom, S. D.	NRC/NRR/ADRA/DNRL	TAC MD1432
9/29/06	ML062700538	AP1000 - Requests for Withholding Information from Public Disclosure (AW-06-2198).	Bloom, S. D.	NRC/NRR/ADRA/DNRL	AW-06-2198
9/29/06	ML062760234	AP1000 COL Standard Technical Report Submittal. TR33	Sterdis, A.	Westinghouse	AP1000 APP-GW-GLN-009, Rev. 0 DCP/NRC1785
10/2/06	ML062690162	Safety Evaluation Regarding AP1000 COL Technical Report 37 Related to Hydrogen Igniter Locations (TAC No.: MD1433).	Dennig, R. L.	NRC/NRR/ADES/DSS/SCVB	TAC MD1433
10/4/06	ML062850159	Transmittal of Proprietary and Non-Proprietary Presentation Material for AP1000 COL Fuel Technical Report Pre-Submittal Meeting with NRC, September 12, 06.	Winters, J. W.	Westinghouse	AP1000 AW-06-2198 DCP/NRC1788
10/5/06	ML062690217	08/29-30/06 Summary of Category 1 Meeting with Westinghouse Regarding AP1000 Technical Reports Related to Leak Before Break and Piping Analysis.	Bloom, S. D.	NRC/NRR/ADRA/DNRL/NAPB	AP1000
10/5/06	ML062690228	09/12/06 Summary of Closed Meeting with Westinghouse Regarding the AP1000 Technical Reports Related to Fuel.	Bloom, S. D.	NRC/NRR/ADRA/DNRL/NAPB	

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10/5/06	ML062850037	G060834 - D. Klein Memo Re: Short Summary for Meeting with Westinghouse on October 17, 06.	Klein, D. E.	NRC/Chairman	G060834
10/6/06	ML062790392	Request for Additional Information Regarding Westinghouse AP1000 Pre-Combined Operating License Application Work Technical Report APP-GW-GLR-027, Revision 1, "Operator Actions Minimizing Spurious Automatic Depressurization System (ADS) Actuation"	Weerakkody, S. D.	NRC/NRR/ADRA/DRA/AFPB	TAC MD2495
10/6/06	ML062850099	AP1000 COL Standard Technical Report Submittal.	Sterdis, A.	Westinghouse	AP1000 DCP/NRC1790
10/6/06	ML062850100	AP1000 COL Standard Technical Report Submittal.	Sterdis, A.	Westinghouse	AP1000 DCP/NRC1789
10/12/06	ML062890149	Transmittal of Proprietary and Non-Proprietary Presentation Material for AP1000 PMS Planning Activities Phase 1 NRC Inspection Meeting with NRC, October 3, 4, and 5, 06.	Sterdis, A.	Westinghouse	AP1000 AW-06-2208 DCP/NRC1787
10/12/06	ML062890150	Enclosure 4 - Transmittal of Non-Proprietary Presentation Material for AP1000 PMS Planning Activities Phase 1 NRC Inspection APP-PMS-GLY-001-NP.		Westinghouse	AP1000 APP-PMS-GLY-001-NP AW-06-2208 DCP/NRC1787
10/12/06	ML062890153	Enclosure 3 - Transmittal of Proprietary Presentation Material for AP1000 PMS Planning Activities Phase 1 NRC Inspection APP-PMS-GLY-001.		Westinghouse	AP1000 APP-PMS-GLY-001 AW-06-2208 DCP/NRC1787

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10/13/06	ML062860042	10/24/06-Forthcoming Joint Meeting with AP1000 and ESBWR DCWGs Regarding Pre-COL Activities.	Kevern, T. A.	NRC/NRR/ADRA/ DNRL/NESB	
10/16/06	ML062840413	Westinghouse AP1000 Combined License (COL) Pre-Application Technical Report 36 - Request for Additional Information (TAC NO. MD2109).	Bloom, S. D.	NRC/NRR/ADRA/ DNRL/NAPB	TAC MD2109
10/16/06	ML062850524	11/07-09/06 - Forthcoming Meeting with Westinghouse Regarding Human Factors Engineering For the AP1000.	Bloom, S. D.	NRC/NRR/ADRA/ DNRL	AP1000
10/19/06	ML062980276	AP1000 COL Standard Technical Report Submittal. TR85	Sterdis, A.	Westinghouse	DCP/NRC1791
10/19/06	ML063250311	AP1000RCP-06-009-NP, "Structural Analysis Summary for the AP1000 Reactor Coolant Pump High Inertia Flywheel," (Non-Proprietary).		Curtiss-Wright Electro-Mechanical Corp	DCP/NRC1802
10/19/06	ML063250314	AP1000RCP-06-009-P, "Structural Analysis Summary for the AP1000 Reactor Coolant Pump High Inertia Flywheel," (Proprietary).		Curtiss-Wright Electro-Mechanical Corp	DCP/NRC1802
10/20/06	ML062970113	AP1000 Piping Design Acceptance Criteria Completion and Deletion.	Sterdis, A.	Westinghouse	AP1000 DCP/NRC1793
10/24/06	ML062980485	Handouts, AP1000 DCWG, Public Category 2 Meeting, NuStart Energy, TSC and Leak Rate Testing.		Duke Energy Corp NuStart Energy Development, LLC Progress Energy Co South Carolina Electric and Gas Co Westinghouse	

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10/24/06	ML062980504	List of Attendees, AP1000 DCWG Public Category 2 Meeting, 24 October 06.		NRC/NRR/ADRA/ DNRL	
10/30/06	ML062910210	AP1000 - Requests For Withholding Information From Public Disclosure (AW-06-2208).	Bloom, S. D.	NRC/NRR/ADRA/ DNRL	AW-06-2208
10/31/06	ML062910491	10/03-05/06 Summary of Open and Closed Meeting with Westinghouse to Discuss AP1000 Instrumentation and Controls.	Bloom, S. D.	NRC/NRO/DNRL/ AP1000B1	
10/31/06	ML063060045	Transmittal of WCAP-16652-NP (Technical Report 18) Rev. 0, "AP1000 Core & Fuel Design".	Sterdis, A.	Westinghouse	AP1000 DCP/NRC1794 WCAP-16652-NP, Rev. 0
10/31/06	ML063060046	WCAP-16652-NP, Rev 0, "AP1000 Core & Fuel Design Technical Report."	Knott, R. P. Miller, R. W. Ray, S. Riggs, M. J. Sisk, R. B.	Westinghouse	APP-GW-GLR-059
11/1/06	ML063070473	Transmittal of AP1000 COL Standard Technical Report, APP-GW-GLR-040, Rev. 0, "AP1000 Standard Combined License Technical Report, Plant Operations, Surveillance, and Maintenance Procedures." TR70	Sterdis, A.	Westinghouse	DCP/NRC1783
11/13/06	ML063210350	Westinghouse Transmittal of Proprietary and Non-Proprietary Presentation Material for AP1000 HFE DCD Chapter 18 Meeting with the NRC on November 7, 8 and 9, 06.	Sterdis, A.	Westinghouse	DCP/NRC1795

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11/13/06	ML063210351	Westinghouse, Enclosure 4, NRC Human Factors Engineering Program Presentation (Non-Proprietary) APP-OCS-GLY-001-NP on November 7th through November 9th, 06.		NuStart Energy Development, LLC Westinghouse	AW-06-2212
11/13/06	ML063210353	Westinghouse, Enclosure 3, NRC Human Factors Engineering Program Presentation (Proprietary) APP-OCS-GLY-001-P on November 7th Through November 9th, 06.		NuStart Energy Development, LLC Westinghouse	AW-06-2212
11/14/06	ML063180085	Summary of Meeting with AP1000 and ESBWR DCWGs Regarding Pre-COL Activities.	Kevern, T. A.	NRC/NRO/DNRL	
11/14/06	ML063210447	AP1000 COL Standard Technical Report Submittal of Sensitive and Non-Sensitive Versions of APP-GW-GLN-014, Revision 0. TR61	Sterdis, A.	Westinghouse	DCP/NRC1798
11/15/06	ML063210420	AP1000 COL Standard Technical Report Submittal of APP-GW-GLN-013, Revision 0. TR30	Sterdis, A.	Westinghouse	APP-GW-GLN-013, Rev 0 DCP/NRC1800
11/16/06	ML063250056	Westinghouse AP1000 Rev. 15 DCD Table 1.8-2 Database Excerpt	Sterdis, A.	Westinghouse	AP1000 DCP/NRC1801
11/17/06	ML063250298	AP1000 COL Standard Technical Report Submittal of APP-GW-GLN-016, Revision 0. TR34	Sterdis, A.	Westinghouse	DCP/NRC1802



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11/21/06	ML063240260	12/12-15/06 Notice of Forthcoming Meeting with Westinghouse Regarding Seismic Analyses for the AP1000.	Bloom, S. D.	NRC/NRO/DNRL/ AP1000B1	
11/22/06	ML063070333	Westinghouse AP1000 Combined License (COL) Pre-Application Technical Report 59 - Request for Additional Information (TAC No. MD 1435).	Bloom, S. D.	NRC/NRO/DNRL/ AP1000B1	TAC MD1435 WCAP-16555
11/22/06	ML063240566	Westinghouse, Withholding From Public Disclosure, APP-GW-GLN-014, Revision 0, "AP1000 Integrated Head Package".	Bloom, S. D.	NRC/NRO/DNRL/ AP1000B1	APP-GW-GLN-014, Rev 0
11/22/06	ML063310048	Correction to AP1000 COL Standard Technical Report Submittal of APP-GW-GLN-016, Revision 0. TR34	Sterdis, A.	Westinghouse	APP-GW-GLN-016, Rev 0 DCP/NRC1804
11/24/06	ML063240208	12/07/06 Forthcoming Meeting with AP1000 and ESBWR Design-Centered Working Groups Regarding Pre-COL Activities.	Kevern, T. A.	NRC/NRO/DNRL	
11/27/06	ML062910275	11/27/06 Summary of Closed Meeting With Westinghouse To Discuss AP1000 Security Issues.	Bloom, S. D.	NRC/NRRR/ADRA/ DNRL	
11/29/06	ML063350051	AP1000 COL Standard Technical Report Submittal of APP-GW-GLN-010, Revision 0. TR35	Sterdis, A.	Westinghouse	AP1000 DCP/NRC1803
11/30/06	ML063210450	APP-GW-GLN-014-NS, Revision 0, "AP1000 Integrated Head Package" Technical Report 61.		Westinghouse	DCP/NRC1798

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11/30/06	ML063210462	APP-GW-GLN-014, Revision 0, "AP1000 Integrated Head Package" Technical Report 61.		Westinghouse	DCP/NRC1798
12/4/06	ML063340562	AP1000 Requests for Withholding Information from Public Disclosure (AW-06-112), AP1000RCP-06-009, "Structural Analysis Summary for the AP1000 Reactor Coolant Pump High Inertia Flywheel".	Miernicki, M. J.	NRC/NRO/DNRL/ AP1000B1	AP1000 AP1000RCP-06-009 AW-06-112
12/4/06	ML063380489	Safety Evaluation Regarding Westinghouse AP1000 Standard Combined License Technical Report for the New Fuel Storage Rack Criticality Analysis.	Cranston, G. V.	NRC/NRR/ADES/DSS/ SBWB	TAC MD2103
12/5/06	ML063330537	Westinghouse AP1000 Combined License Pre-Application Technical Report 3 - Request for Additional Information.	Bloom, S. D.	NRC/NRO/DNRL/ AP1000B1	APP-GW-S2R-010, Rev 0 TAC MD2358
12/5/06	ML063340669	Westinghouse AP1000 Combined License (COL) Pre-Application Technical Report 6 - Request for Additional Information (TAC NO. MD2174).	Bloom, S. D.	NRC/NRO/DNRL/ AP1000B1	TAC MD2174
12/5/06	ML063390648	AP-1000 Spent Fuel Storage Racks Criticality Analysis.	Landry, R. R.	NRC/NRR/ADES/DSS/ SNPB	TAC MD2492
12/6/06	ML063400351	12/18/06 Notice of Forthcoming Meeting with Westinghouse Regarding Piping Design Acceptance Criteria for the AP1000.	Bloom, S. D.	NRC/NRO/DNRL/ AP1000B1	AP1000

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12/7/06	ML063170166	10/24/06 Summary of Category 2 Meeting with AP1000 Design-Centered Working Group, Regarding Pre-Col Activities.	Bloom, S. D.	NRC/NRO/DNRL/ AP1000B1	RG-1.163
12/7/06	ML063450058	12/07/06 - Meeting Handout 1 - AP1000-ESBWR Design Centered Work Group Slides.		Dominion NuStart Energy Development, LLC	AP1000
12/12/06	ML063480072	AP1000 COL Response to Request for Additional Information (TR #32).	Sterdis, A.	Westinghouse	APP-GW-GLN-002, Rev 0 DCP/NRC1809 RAI-TR32-007 TAC MD1432
12/13/06	ML063520160	Submittal of AP1000 COL Standard Technical Report, and Proprietary and Non-Proprietary Technical Document Information, WCAP-16674-P Rev. 0 and WCAP-16674-NP Rev. 0, "AP1000 I&C Data Communication and Manual Control of Safety Systems and Components." TR88	Sterdis, A.	Westinghouse	DCP/NRC1808 WCAP-16674-NP Rev 00 WCAP-16674-P Rev 00
12/14/06	ML063250158	AP1000 - Requests for Withholding Information from Public Disclosure (AW-06-2212), Presentation material for AP1000 HFE DCD Chapter 18 Meetings with the NRC, November 7, 8, and 9, 06.	Bloom, S. D.	NRC/NRO/DNRL/ AP1000B1	AW-06-2212
12/15/06	ML063530015	AP1000 COL Standard Technical Report Number 49 Submittal.	Sterdis, A.	Westinghouse	DCP/NRC1810
12/15/2006	ML063530216	Subject: AP1000 COL Standard Technical Report Number 74A Submittal.	Sterdis, A.	Westinghouse	DCP/NRC1807

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12/18/2006	ML070040271	12/18/2006 - Viewgraphs from Meeting with NRC Regarding AP1000 Piping Design Acceptance Criteria.	Sterdis, A. L.	Westinghouse	
12/21/2006	ML070040379	New Reactor Licensing Activities as of December 21, 2006.		NRC/NRO/DNRL	
1/9/2007	ML063540143	Westinghouse AP1000 Combined License (COL) Pre-Application Technical Report 39 - Request for Additional Information (TAC MD1849).	Bloom, S. D.	NRC/NRO/DNRL/ AP1000B1	TAC MD1849
1/9/2007	ML063610203	11/07-09/2006 Summary of Open and Closed Meeting with Westinghouse to Discuss AP1000 Human Factors Engineering.	Bloom, S. D.	NRC/NRO/DNRL/ AP1000B1	
1/9/2007	ML063620055	Westinghouse AP1000 Combined License (COL) Pre-Application Technical Report 6 - Request for Additional Information (TAC MD2174).	Bloom, S. D.	NRC/NRO/DNRL/ AP1000B1	TAC MD2174
1/9/2007	ML070090075	01/26/2007 Notice of Forthcoming Meeting with Westinghouse and General Electric Company Regarding the Qualification Process for Electronic Submission of the Design Control Document.	Bloom, S. D.	NRC/NRO/DNRL/ AP1000B1	
1/9/2007	ML070180114	CD-ROM file: COL Application formatting.		- No Known Affiliation	
1/12/2007	ML070170176	AP1000 COL Standard Technical Report Submittal.	Sterdis, A.	Westinghouse	DCP/NRC1812
1/16/2007	ML063180156	Westinghouse AP1000 Technical Reports.	Bloom, S. D.	NRC/NRO/DNRL/ AP1000B1	

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1/17/2007	ML063560013	AP1000 Requests for Withholding Information from Public Disclosure (AW-06-2222).	Miernicki, M. J.	NRC/NRO/DNRL/AP1000B1	AW-06-2222 WCAP-16674-P, Rev. 0
1/17/2007	ML070090131	12/18/2006 Summary of Open Meeting with Westinghouse to Discuss AP1000 Piping Design Acceptance Criteria (DAC).	Bloom, S. D.	NRC/NRO/DNRL/AP1000B1	
1/18/2007	ML070170134	Safety Evaluation of Zinc Injection to AP1000 (TAC NO. MD1432).	Landry R R	NRC/NRR/ADES/DSS/SNPB	TAC MD1432
1/18/2007	ML070240432	AP1000 COL Response to Request for Additional Information (TR #3).	Sterdis, A.	Westinghouse	DCP/NRC1814
1/24/2007	ML070250111	Request for Additional Information for Westinghouse Technical Reports (TR) 71A-B (TAC NOS.: MD3056 and MD3057).	Hamzehee, H. G.	NRC/NRR/ADES/DE/EQVB	TAC MD3056 TAC MD3057
1/24/2007	ML090771212	E-Mail from Nilesh Chokshi, NRO to Robert B. Whorton, Subject Re: AP1000/NRC Meeting- January 31.	Chokshi, N. C.	NRC/NRO/DSER	FOIA/PA-2009-0035
1/26/2007	ML070300120	AP1000 COL Standard Technical Report Submittal, Revision 0.	Sterdis, A.	Westinghouse	AP1000 DCP/NRC1820
1/29/2007	ML070120250	Westinghouse AP1000 Combined License (COL) Pre-Application Technical Report 36 - Request for Additional Information (TAC NO. MD2109).	Miernicki, M. J.	NRC/NRO/DNRL/AP1000B1	DCP/NRC 1749 DCP/NRC 1769 TAC MD2109
1/29/2007	ML070330131	AP1000 COL Response to Request for Additional Information (TR #59).	Sterdis, A.	Westinghouse	AP1000 DCP/NRC1819 TAC MD1435

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1/29/2007	ML070330590	AP1000 COL Response to Request for Additional Information (TR #3).	Sterdis, A.	Westinghouse	AP1000 APP-GW-S2R-010, Rev 0 DCP/NRC1822
1/30/2007	ML070330064	AP1000 COL Standard Technical Report Submittal of APP-GW-GLN-021, Revision 0.	Sterdis, A.	Westinghouse	DCP/NRC1821
1/31/2007	ML070310188	12/07/2006 Summary of Meeting to Discuss Pre-Combined License Issues.	Starefos, J. L.	NRC/NRO/DNRL/ AP1000B1	
2/1/2007	ML070330588	Westinghouse, AP1000 COL Standard Technical Report Submittal.	Sterdis, A.	Westinghouse	AP1000 DCP/NRC1825
2/2/2007	ML070320299	02/21-22/2007 Notice of Forthcoming Meeting with Westinghouse Regarding Instrument and Controls for the AP1000.	Bloom, S. D.	NRC/NRO/DNRL/ AP1000B1	
2/5/2007	ML070090190	12/12-14/2006 Summary of the Open and Closed Meeting with Westinghouse to Discuss AP1000 Seismic Analyses.	Bloom, S. D.	NRC/NRO/DNRL/ AP1000B1	
2/8/2007	ML070430288	AP1000 COL Standard Technical Report Submittal. TR24	Sterdis, A.	Westinghouse	DCP/NRC1824
2/8/2007	ML070430364	AP1000 COL Standard Technical Report Submittal of APP-GW-GLN-018, Revision 0. TR43	Sterdis, A.	Westinghouse	AP1000 DCP/NRC1826
2/12/2007	ML070450141	Submittal of AP1000 COL Standard Technical Report APP-GW-GLR-013, Rev 0, "Safety Class Piping Design Specifications and Design Reports Summary."	Sterdis, A.	Westinghouse	DCP/NRC1829

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2/13/2007	ML070460603	AP1000 COL Standard Technical Report Submittal of APP-GW-GLN-012, Revision 0. TR29	Sterdis, A.	Westinghouse	APP-GW-GLN-012, Rev 0 DCP/NRC1830 WCAP-16716-NP, Rev 0
2/13/2007	ML070460604	Enclosure 1, APP-GW-GLN-012, Revision 0, "AP1000 Reactor Internals Design Changes" Technical Report 29, WCAP-16716-NP.		Westinghouse	DCP/NRC1830
2/13/2007	ML070520285	Standard Technical Report Submittal AP-TR-NS01, "Containment Leak Rate Test Program."	Kray, M. C.	NuStart Energy Development, LLC	
2/13/2007	ML070520285	Standard Technical Report Submittal AP-TR-NS01, "Containment Leak Rate Test Program."	Kray, M. C.	NuStart Energy Development, LLC	
2/14/2007	ML070470034	AP1000 COL Standard Technical Report Submittal of WCAP-16696-P, Rev. 0 and WCAP-16696-NP, Rev. 0, "Strategy for Closure of the AP1000 Design Control Document, Chapter 18 Human Factors Engineering Combined Operating License Information Items." TR90	Sterdis, A.	Westinghouse	DCP/NRC1831
2/14/2007	ML070510529	Submittal of Proprietary and Non-Proprietary Technical Document Information, WCAP-16675-P, Rev. 0 and WCAP-16675-NP, Rev. 0, "Protection System Architecture". TR89	Sterdis, A.	Westinghouse	AP1000 DCP/NRC1817 WCAP-16675-NP WCAP-16675-P
2/15/2007	ML070460228	Westinghouse AP1000 Design Change Technical Report No. 61.	Dixon-Herrity, J. L.	NRC/NRO/DE	TAC MD3607

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2/15/2007	ML070640341	Updated Administrative List of AP1000 and ESBWR DCWG Action Items.	Borsh R	Dominion	
2/16/2007	ML070520174	AP1000 COL Standard Technical Report Submittal.	Sterdis, A.	Westinghouse	DCP/NRC1833
2/16/2007	ML070520281	AP1000 COL Standard Technical Report Submittal of APP-GW-GLR-007, Revision 1. TR27	Sterdis, A.	Westinghouse	DCP/NRC1832
2/16/2007	ML070520284	AP1000 COL Standard Technical Report Submittal of APP-GW-GLN-003, Revision 1. TR37	Sterdis, A.	Westinghouse	DCP/NRC1818
2/19/2007	ML070530202	AP1000 COL Standard Technical Report Submittal of APP-GW-GLN-074, Revision 0. TR74B	Sterdis, A.	Westinghouse	DCP/NRC1835
2/19/2007	ML070580467	Transmittal of Proprietary and Non-Proprietary Presentation Material for Meeting with NRC re Instrumentation and Controls (I&C) for the AP1000, February 21 and 22, 2007.	Sterdis, A.	Westinghouse	AW-07-2245 DCP/NRC1834
2/21/2007	ML070580469	APP-PMS-GLY-002, "AP1000 I&C NRC Meeting, February 21 & 22, 2007."		Westinghouse	
2/21/2007	ML070580470	APP-PMS-GLY-002, "AP1000 I&C NRC Meeting, February 21 & 22, 2007."		Westinghouse	
2/23/2007	ML070570441	AP1000 COL Standard Technical Report Submittal of APP-GW-GLR-073, Revision 0. TR93	Sterdis, A.	Westinghouse	DCP/NRC1838



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2/26/2007	ML070330582	Westinghouse AP1000 Combined License (COL) Pre-Application Technical Report 12 - Request for Additional Information (TAC NO. MD2694).	Bloom, S. D.	NRC/NRO/DNRL/ AP1000B1	TAC MD2694 WCAP-16620-P, Rev 0
2/26/2007	ML070400030	Westinghouse AP1000 Combined License (COL) Pre-Application Technical Reports 71A and 71B - Request for Additional Information (TAC NOS. MD3056 and MD3057).	Bloom, S. D.	NRC/NRO/DNRL/ AP1000B1	APP-GW-GLR-037, Rev 0 APP-GW-GLR-038, Rev 0 TAC MD3056 TAC MD3057
2/28/2007	ML070470038	WCAP-16696-NP, Rev. 0, "Strategy for the Closure of the AP1000 Design Control Document, Chapter 18 Human Factors Engineering Combined Operating License Information Items."	Hunton, P. J.	Westinghouse	APP-GW-GLR-090
2/28/2007	ML070470042	WCAP-16696-P, Rev. 0, "Strategy for the Closure of the AP1000 Design Control Document, Chapter 18 Human Factors Engineering Combined Operating License Information Items."	Hunton, P. J.	Westinghouse	APP-GW-GLR-090
2/28/2007	ML070510532	WCAP-16675-NP, Rev 0, "AP1000 Protection and Safety Monitoring System Architecture Technical Report."	Drake, A. P. Hayes, T. P. Vitalbo, C. A.	Westinghouse	AP1000 APP-GW-GLR-071 DPC/NRC1817
2/28/2007	ML070510536	WCAP-16675-P, Rev 0, "AP1000 Protection and Safety Monitoring System Architecture Technical Report."	Drake, A. P. Hayes, T. P. Vitalbo, C. A.	Westinghouse	AP1000 APP-GW-GLR-071 DCP/NRC1817

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2/28/2007	ML071380082	WCAP-16650-NP, Revision 0, "Analysis of the Probability of the Generation of Missiles from Fully Integral Nuclear Low Pressure Turbines."	Corletti, M. M. Schwab, E. K.	Westinghouse	DCP/NRC1889
2/28/2007	ML071380083	WCAP-16651-NP, Revision 0, "Probabilistic Evaluation of Turbine Valve Test Frequency."	Corletti, M. M. Haessler, R. L.	Westinghouse	DCP/NRC1889
2/28/2007	ML071380085	WCAP-16650-P, Rev. 0, "Analysis of the Probability of the Generation of Missiles from Fully Integral Nuclear Low Pressure Turbines."	Corletti, M. M. Schwab, E. K.	Westinghouse	DCP/NRC1889
2/28/2007	ML071380086	WCAP-16651-P, Rev 0, "Probabilistic Evaluation of Turbine Valve Test Frequency."	Corletti, M. M. Haessler, R. L.	Westinghouse	DCP/NRC1889
3/1/2007	ML070670317	AP1000 Design-Centered Working Group, Seismic Discussions.		NuStart Energy Development, LLC	AP1000
3/1/2007	ML070670321	Bellefonte, Units 3 and 4, Westinghouse AP1000.		NuStart Energy Development, LLC	
3/1/2007	ML070670322	William States Lee Nuclear Station, Westinghouse AP1000 Units 1 and 2.		Duke Energy Carolinas, LLC	AP1000
3/1/2007	ML070670323	Virgil C. Summer, Units 2 and 3, (Westinghouse AP1000).		South Carolina Electric and Gas Co	AP1000
3/1/2007	ML070670330	AP1000 Structural Evaluation of Hard Rock Sites.	Tunon-Sanjur, L.	Westinghouse	AP1000 AP600 AP1000
3/1/2007	ML070670333	Vogtle AP1000 Seismic Assessment Status.	Moore, D.	Southern Nuclear Operating Co, Inc.	
3/2/2007	ML070650347	Westinghouse, AP1000 Design-Centered Working Group Meeting on February 15, 2007.	Sterdis, A.	Westinghouse	DCP/NRC1839

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3/6/2007	ML070670260	AP1000 and ESBWR DOWA Pre-Application Interaction Topics.	Hastings, P. S.	Duke Energy Carolinas, LLC	
3/8/2007	ML070790610	NuStart Bellefonte COL Project - AP-1000 Pre-Application Submittals.	Hastings, P. S.	NuStart Energy Development, LLC	
3/9/2007	ML070720521	AP1000 COL Standard Technical Report Submittal. TR112	Sterdis, A.	Westinghouse	DCP/NRC1841
3/9/2007	ML070720536	AP1000 COL Standard Technical Report Submittal of APP-GW-GLN-020. Revision 0. TR100	Sterdis, A.	Westinghouse	DCP/NRC1842
3/9/2007	ML070920506	AP1000 COL Standard Technical Report Submittal of APP-GW-GLR-068, Revision 0. TR95	Sterdis, A.	Westinghouse	DCP/NRC 1850
3/9/2007	ML070920508	AP1000 COL Standard Technical Report Submittal of APP-GW-GLR-067, Revision 0. TR96	Sterdis, A.	Westinghouse	AP1000 APP-GW-GLR-067, Rev 0 DPC/NRC1851
3/9/2007	ML070930078	AP 1000 COL Standard Technical Report Submittal of APP-GW-GLR-062, Revision 1. TR49	Sterdis, A.	Westinghouse	DCP/NRC1852
3/10/2007	ML070510374	AP1000 Requests for Withholding Information from Public Disclosure (AW-07-2242).	Bloom, S. D.	NRC/NRO/DNRL	AP1000 AW-07-2242
3/10/2007	ML070510638	AP1000 Requests for Withholding Information from Public Disclosure (AW-07-2241).	Bloom, S. D.	NRC/NRO/DNRL/ AP1000B1	AW-07-2241

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3/10/2007	ML070570591	Westinghouse, Withholding From Public Disclosure, "Transmittal of Proprietary Presentation Material Regarding Instrumentation and Controls (I&C) for the AP1000 Meeting with NRC, February 21 and 22, 2007."	Bloom, S. D.	NRC/NRO/DNRL/ AP1000B1	AW-07-2245
3/11/2007	ML070540106	Westinghouse AP1000 Combined License (COL) Pre-Application Technical Report 31 - Request for Additional Information (TAC NO. MD2695).	Bloom, S. D.	NRC/NRO/DNRL/ AP1000B1	TAC MD2695
3/11/2007	ML070570563	Westinghouse AP1000 Combined License (COL) Pre-Application Technical Report 43 - Request for Additional Information (TAC MD2496).	Bloom, S. D.	NRC/NRO/DNRL/ AP1000B1	TAC MD2496
3/12/2007	ML070730653	AP1000 COL Standard Technical Report Submittal of APP-GW-GLN-075, Revision 0.	Sterdis, A.	Westinghouse	APP-GW-GLN-075 DCP/NRC 1844
3/14/2007	ML070710574	Safety Evaluation Input Regarding AP1000 COL Technical Report 36 Related to AP1000 Pressurizer Design (TAC No. MD2109).	Dennig, R. L.	NRC/NRR/ADES/DSS	TAC MD2109
3/14/2007	ML070750100	Correction to AP1000 COL Standard Technical Report Submittals of Rev. 1 to APP-GW-GLR-062, Rev. 0 to APP-GW-GLR-067 and Rev. 0 to APP-GW-GLR-068.			

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3/15/2007	ML070780076	AP1000 COL Standard Technical Report Submittal of APP-GW-GLR-054, Revision 0. TR11g			
3/15/2007	ML070780101	AP1000 COL Standard Technical Report Submittal of APP-GW-GLN-020, Revision 0. TR100			
3/15/2007	ML070780427	Westinghouse AP1000 COL Standard Technical Report Submittal of APP-GW-GLR-022, Revision 2. TR8			
3/20/2007	ML070800483	AP1000 COL Standard Combined License Technical Report Submittal of APP-GW-GLR-091, Rev. 0. TR91			
3/25/2007	ML070750025	02/21/2007 - 02/22/2007 Summary of Meeting with Westinghouse to Discuss AP10000 Instrumentation and Control.			
3/26/2007	ML070800740	Westinghouse AP1000 Combined License (COL) Pre-Application Technical Report 42 and 88 - Request for Additional Information (TAC Nos. MD1850 and MD3831).			
3/28/2007	ML070890298	Westinghouse Requesting Approval for the Use of Encryption Software for Electronic Transmission of Safeguards Information.			

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3/29/2007	ML070790327	Westinghouse AP1000 Combined License (COL) Pre-Application Technical Reports 54 - Request for Additional Information (TAC NOS. MD2551).	Bloom, S. D.	NRC/NRO/DNRL/ AP1000B1	TAC MD2551
3/29/2007	ML070850160	Westinghouse AP1000 Combined License (COL) Pre-Application Technical Report 61 - Request for Additional Information (TAC No. MD3607).	Bloom, S. D.	NRC/NRO/DNRL/ AP1000B1	APP-GW-GLR-014, Rev 0 TAC MD3607
3/29/2007	ML070870672	04/11-12/2007 Notice of Meeting with Westinghouse Regarding Procedures for the AP1000.	Bloom, S. D.	NRC/NRO/DNRL/ AP1000B1	
3/29/2007	ML070940092	AP1000 COL Standard Technical Report Submittal of Proprietary and Non-Proprietary WCAP-16687-P, Rev. 1 and WCAP-16687-NP, Rev. 1.	Sterdis, A.	Westinghouse	AP1000 DCP/NRC1856
3/30/2007	ML070670301	02/15/2007 Summary of Category 1 Meeting with Westinghouse Regarding Probabilistic Risk Assessment Status for the AP1000 Reactor Design.	Miernicki, M. J.	NRC/NRO/DNRL/ AP1000B1	
3/30/2007	ML070800573	Westinghouse AP1000 Combined License (COL) Pre-application Technical Report 45 - Request for Additional Information (TAC NO. MD2495)	Bloom, S. D.	NRC/NRO/DNRL/ AP1000B1	TAC MD2495

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3/31/2007	ML070940094	WCAP-16687-NP, Revision 1, "AP1000 Reactor Internals Expected and Acceptable Responses During Preoperational Vibration Measurement Program." TR10	Altman, D. A. Bhandari, D. R. Forsyth, D. R. Good, B. F. Imbrogno, G. M. Kubes, J. E. Law, Y. K. Schwirian, R. E. Singleton, N. R. Snyder, M. D. Yang, J. Yu, C.	Westinghouse	AP1000 DCP/NRC1856
3/31/2007	ML070940097	WCAP-16687-P, Revision 1, "AP1000 Reactor Internals Expected and Acceptable Responses During Preoperational Vibration Measurement Program." TR10	Altman, D. A. Bhandari, D. R. Forsyth, D. R. Good, B. F. Imbrogno, G. M. Kubes, J. E. Law, Y. K. Schwirian, R. E. Singleton, N. R. Snyder, M. D. Yang, J. Yu, C.	Westinghouse	AP1000 DCP/NRC1856
4/2/2007	ML070920133	4/16-20/2007 Notice of Forthcoming Meetings with Westinghouse Regarding Seismic Analyses for the AP1000.	Miernicki, M. J.	NRC/NRO/DNRL/ AP1000B1	

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4/4/2007	ML070990593	Submittal of Standard Technical Reports, AP-TR-NS01, Rev. 1, "Containment Leak Rate Test Program Description," AP-TR-NS02, Rev. 1, "Reactor Vessel Material Surveillance Program Description," and AP-TR-NS03, Rev. 1, "Equipment Qualification Program...."	Kray, M. C.	NuStart Energy Development, LLC	
4/5/2007	ML070990251	Westinghouse AP1000 COL Standard Technical Report Submittal of APP-GW-GLR-045, Revision 0. TR57	Sterdis, A.	Westinghouse	DCP/NRC1847
4/6/2007	ML070920438	Westinghouse, RAI, AP1000 Combined License (COL) Pre-Application Technical Report 44 (TAC MD2104).	Bloom, S. D.	NRC/NRO/DNRL/AP1000B1	TAC MD2104
4/9/2007	ML071000291	Results of the Health Physics Branch's Review of Westinghouse AP1000 Standard Combined License Technical Report TR-36 (AP1000 Pressurizer Design).	Frye, T. J.	NRC/NRR/ADRO/DIRS/IHPB	TAC MD2109
4/9/2007	ML071010114	AP1000 COL Response to Request for Additional Information (TR #54).	Sterdis, A.	Westinghouse	DCP/NRC1860
4/10/2007	ML071010532	AP1000 COL Response to Request for Additional Information (TR #54).	Sterdis, A.	Westinghouse	APP-GW-GLR-033, Rev 0 DCP/NRC1861 TAC MD2551
4/10/2007	ML071010536	AP1000 COL Standard Technical Report Submittal of APP-GW-GLN-098, Revision 0.	Sterdis, A.	Westinghouse	DCP/NRC1863



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4/11/2007	ML071100210	04/11/2007, Meeting Slides - AP1000 Plant Operating Procedures.	Lindgren, D. A. Long, S. Williams, M.	Westinghouse	
4/13/2007	ML071060327	AP1000 COL Standard Technical Report Submittal of APP-GW-GLR-053, Revision 0.	Hutchings, D. F. Sterdis, A.	Westinghouse	DCP/NRC1864
4/13/2007	ML071060328	AP1000 COL Standard Technical Report Submittal of APP-GW-GLR-102, Rev. 0. TR102	Hutchings, D. F. Sterdis, A.	Westinghouse	APP-GW-GLR-102, Rev. 0 DCP/NRC1862
4/13/2007	ML071060332	AP1000 COL Standard Technical Report Submittal of APP-GW-GLR-064, Revision 1. TR74a	Hutchings, D. F. Sterdis, A.	Westinghouse	DCP/NRC1865
4/19/2007	ML071060336	Westinghouse AP1000 Combined License (COL) Pre-Application Technical Report 28 - Request for Additional Information (TAC MD2126).	Bloom, S. D.	NRC/NRO/DNRL/ AP1000B2	TAC MD2126
4/19/2007	ML071070236	Westinghouse AP1000 Combined License (COL) Pre-Application Technical Report 35 - Request for Additional Information (TAC NO. MD3727).	Bloom, S. D.	NRC/NRO/DNRL/ AP1000B2	AP1000 TAC MD3727
4/19/2007	ML071100212	04/11/2007 Meeting Slides, "Overview of Technical Report 70, Revision 1."	Long, S. Williams, M.	Westinghouse	
4/20/2007	ML071360258	04/16-20/2007 Slide Presentation, "AP1000 Seismic Analyses Review."	Lindgren, D. A. Turon-Sanjur, L.	Westinghouse	

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4/23/2007	ML070860205	Westinghouse AP1000 Combined License (COL) Pre-application Technical Report 1, Construction Plan and Startup Schedule (APP-GW-GLR-036).	Miernicki, M. J.	NRC/NRO/DNRL/ AP1000B1	APP-GW-GLR-036
4/23/2007	ML071070099	03/22/2007 - 03/23/2007, Summary of Meeting with AP1000 and ESBWR Design-Centered Working Groups to Discuss Pre-Combined License Application Issues.	Kevern, T. A.	NRC/NRO/DNRL	
4/24/2007	ML071070567	Westinghouse AP1000 Technical Reports.	Bloom, S. D.	NRC/NRO/DNRL/ AP1000B2	AP1000
4/26/2007	ML071080405	Letter, Westinghouse, Re: Acceptance of Individual Related to Access to Safeguards Information	Matthews, D. B.	NRC/NRO/DNRL	
4/26/2007	ML071200220	AP1000 Piping Design Acceptance Criteria (DAC) Plan.	Sterdis, A.	Westinghouse	DCP/NRC1871
4/27/2007	ML070860414	Westinghouse AP1000 Combined License (COL) Pre-Application Technical Report 6 - Request for Additional Information (TAC NO. MD2174).	Bloom, S. D.	NRC/NRO/DNRL/ AP1000B2	TAC MD2174
4/27/2007	ML071210088	AP1000 COL Standard Technical Report Submittal of APP-GW-GLN-006, Revision 2.	Sterdis, A.	Westinghouse	AP1000 DCP/NRC1873

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4/27/2007	ML071210096	AP1000 COL Standard Technical Report Submittal of APP-GW-GLR-052, Revision 0.	Sterdis, A.	Westinghouse	AP1000 DCP/NRC1872
4/30/2007	ML071170239	Westinghouse AP1000 Combined License (COL) Pre-Application Technical Report 74a - Request for Additional Information (TAC NO. MD3838).	Bloom, S. D.	NRC/NRO/DNRL/ AP1000B2	TAC MD3838
4/30/2007	ML071290174	APP-GW-GLR-079, Rev. 0, "AP1000 Verification of Water Sources for Long-Term Recirculation Cooling Following a LOCA." TR26	Keegan, C. P.	Westinghouse	DCP/NRC1877
4/30/2007	ML071290174	APP-GW-GLR-079, Rev. 0, "AP1000 Verification of Water Sources for Long-Term Recirculation Cooling Following a LOCA." TR26	Keegan, C. P.	Westinghouse	DCP/NRC1877
5/1/2007	ML071270039	Second Request for Additional Information on Westinghouse AP1000 Document No. APP-GW-GLR-021, COL Information Items 5.3-1 and 5.3-4 (TAC No. MD2174).	Mitchell, M. A.	NRC/NRR/ADES/DCI/ CVIB	APP-GW-GLR-021 TAC MD2174
5/1/2007	ML071270039	Second Request for Additional Information on Westinghouse AP1000 Document No. APP-GW-GLR-021, COL Information Items 5.3-1 and 5.3-4 (TAC No. MD2174).	Mitchell, M. A.	NRC/NRR/ADES/ DCI/CVIB	APP-GW-GLR-021 TAC MD2174
5/2/2007	ML070871086	Westinghouse, RAI, Westinghouse AP1000 Combined License (COL) Pre-Application Technical Report 34 (TAC No. MD3648).	Miernicki, M. J.	NRC/NRO/DNRL/ AP1000B1	TAC MD3648

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5/4/2007	ML071170284	Westinghouse, RAI, Westinghouse AP1000 Combined License (COL) Pre-Application Technical Report 45. (TAC No. MD2495).	Bloom, S. D.	NRC/NRO/DNRL/ AP1000B2	DCP/NRC1753 TAC MD2495
5/4/2007	ML071290312	AP1000 COL Standard Technical Report Submittal of APP-GW-GLR-066, Revision 0. TR94	Sterdis, A.	Westinghouse	AP1000 APP-GW-GLR-066, Rev 0 DCP/NRC1878
5/7/2007	ML071290170	AP1000 COL Standard Technical Report Submittal of Sensitive and Non-Sensitive APP-GW-GLR-079, Revision 0. TR26	Sterdis, A.	Westinghouse	DCP/NRC1877
5/7/2007	ML071290172	APP-GW-GLR-079-NS, Rev. 0, "AP1000 Verification of Water Sources for Long-Term Recirculation Cooling Following a LOCA." Redacted Version. TR26		Westinghouse	DCP/NRC1877
5/8/2007	ML071080320	Change of Project Manager and Branch Assignment for AP1000 Design Certification Amendment - (Project Number 740).	Bergman, T. A.	NRC/NRO/DNRL	
5/8/2007	ML071080359	Change of Project Manager and Branch Assignment for AP1000 Design Certification Amendment - (Project Number 0740).	Bergman, T. A.	NRC/NRO/DNRL	
5/9/2007	ML071310068	AP1000 COL Standard Technical Report Submittal of APP-GW-GLR-055, Revision 0. TR11h	Sterdis, A.	Westinghouse	AP1000 DCP/NRC1876

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5/10/2007	ML071270737	Westinghouse AP1000 Combined License (COL) Pre-Application Technical Report 93 - Request for Additional Information (TAC No. MD4624).	Bloom, S. D.	NRC/NRO/DNRL/AP1000B2	TAC MD4624
5/11/2007	ML071160237	04/11-12/2007 Summary of the Meeting to Discuss AP1000 Plant Operating Procedures.	Bloom, S. D.	NRC/NRO/DNRL/AP1000B1	
5/11/2007	ML071340345	AP1000 COL Standard Technical Report Submittal of APP-GW-GLN-113, Revision 0, "AP1000 Containment Vessel Shell: Material Specification." TR113	Sterdis, A.	Westinghouse	DCP/NRC1882
5/11/2007	ML071340349	Westinghouse AP1000 COL Standard Technical Report Submittal of APP-GW-GLR-037, Revision 1, "AP1000 Test Specifications & Procedures." TR718	Sterdis, A.	Westinghouse	DCP/NRC1886
5/11/2007	ML071340353	Submittal of AP1000 COL Standard Technical Report Submittal of APP-GW-GLR-101, Revision 0. TR101	Sterdis, A.	Westinghouse	AP1000 DCP/NRC1885
5/11/2007	ML071350139	AP1000 COL Standard Technical Report Submittal of APP-GW-GLN-110, Revision 0. TR110	Sterdis, A.	Westinghouse	DCP/NRC1883

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5/14/2007	ML071200211	Acceptance for Review of Topical Report No. AP-TR-NS01, Containment Leak Rate Test Program Description, Revision 1 (Project No. 740; TAC MD5136).	Coffin, S. M.	NRC/NRO/DNRL/ AP1000B1	AP-TR-NS01 TAC MD5136
5/14/2007	ML071370085	AP1000 COL Standard Technical Report Submittal of Sensitive and Non-Sensitive APP-GW-GLN-022, Revision 1. TR97	Sterdis, A.	Westinghouse	DCP/NRC1869
5/14/2007	ML071370086	APP-GW-GLN-022-NS, Revision 1, "AP1000 Standard Combined License Technical Report DAS Platform Technology and Remote Indication Change." TR97	Cernuska, M. J.	Westinghouse	DCP/NRC1869
5/15/2007	ML071230370	Westinghouse, RAI, Westinghouse AP1000 Combined License Pre-Application Technical Report 3 - Request for Additional Information (TAC No. MD2358).	Miernicki, M. J.	NRC/NRO/DNRL/ AP1000B2	DCP/NRC1751 TAC MD2358
5/15/2007	ML071350512	SRM-SECY-07-0076 - Proposed Plan for Cooperation with China on the AP1000.	Vietti-Cook, A. L.	NRC/SECY	SECY-07-0076
5/15/2007	ML071360371	VR-SECY-07-0076, "Proposed Plan for Cooperation with China on the AP1000."	Jaczko, G. B. Klein, D. E. Lyons, P. B. McGaffigan, E. Merrifield, J. S. Vietti-Cook, A. L.	NRC/Chairman NRC/OCM NRC/SECY	SECY-07-0076
5/16/2007	ML071060250	AP1000 Requests for Withholding Information from Public Disclosure (AW-07-2261).	Bloom, S. D.	NRC/NRO/DNRL/ AP1000B2	AW-07-2261

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5/16/2007	ML071370715	AP1000 COL Standard Technical Report Submittal of APP-GW-GLR-109, Revision 0.	Sterdis, A.	Westinghouse	AP1000 DCP/NRC1887
5/16/2007	ML071380080	Westinghouse Transmittal of Proprietary and Non-Proprietary Reports Related to Turbine Reliability.	Sterdis, A.	Westinghouse	DCP/NRC1889 WCAP-16650-P
5/17/2007	ML071370450	G20070319, Briefing Package Memo, Drop-In Visit by Westinghouse Officials, May 29-30, 2007.	McKenna, E. M.	NRC/NRO/DNRL/ AP1000B2	G20070319
5/17/2007	ML071410075	AP1000 COL Response to Request for Additional Information (TR #54).	Hutchings, D. F. Sterdis, A.	Westinghouse	APP-GW-GLR-033, Rev 0 DCP/NRC1890
5/17/2007	ML071410145	AP1000 COL Response to Request for Additional Information (TR #54).	Sterdis, A.	Westinghouse	DCP/NRC1891 TAC MD2551
5/17/2007	ML071410146	Enclosure 2, "Response to Request for Additional Information on Technical Report No. 54."		Westinghouse	DCP/NRC1891 RAI-TR54-021
5/18/2007	ML071290470	Westinghouse AP1000 Combined License Pre-Application Technical Report 9 - Request for Additional Information (TAC NO. MD1857).	Miernicki, M. J.	NRC/NRO/DNRL/ AP1000B2	TAC MD1847
5/18/2007	ML071410278	AP1000 COL Standard Technical Report Submittal of APP-GW-GLR-013, Revision 1.	Sterdis, A.	Westinghouse	AP1000 DCP/NRC1893
5/22/2007	ML071360008	04/16-20/2007 Summary of Open and Closed Meeting with Westinghouse to Discuss AP1000 Seismic Analyses.	Miernicki, M. J.	NRC/NRO/DNRL/ AP1000B1	

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5/24/2007	ML071500040	AP1000 COL Standard Technical Report Submittal of APP-GW-GLN-121, Revision 0.	Sterdis, A.	Westinghouse	AP1000 DCP/NRC1901
5/24/2007	ML071500041	AP1000 COL Standard Technical Report Submittal of APP-GW-GLN-012-NP, Revision 2 (WCAP-16716-NP, Revision 2).	Sterdis, A.	Westinghouse	AP1000 DCP/NRC1902
5/24/2007	ML071500042	AP1000 COL Standard Technical Report Submittal of APP-GW-GLN-009, Revision 1.	Sterdis, A.	Westinghouse	AP1000 DCP/NRC1903
5/24/2007	ML071500105	AP1000 COL Standard Technical Report Submittal of APP-GW-GLN-108, Revision 0.	Sterdis, A.	Westinghouse	DCP/NRC1896
5/24/2007	ML071500130	AP1000 COL Standard Technical Report Submittal of APP-GW-GLR-117, Revision 0. TR117	Sterdis, A.	Westinghouse	DCP/NRC1898
5/24/2007	ML071500141	AP1000 COL Standard Technical Report Submittal of APP-GW-GLR-038, Revision 1. TR71B	Sterdis, A.	Westinghouse	AP1000 DCP/NRC1895
5/24/2007	ML071500148	AP1000 COL Standard Technical Report Submittal of APP-GW-GLR-125, Revision 0. TR125	Sterdis, A.	Westinghouse	AP1000 DCP/NRC1899
5/24/2007	ML071500154	AP1000 COL Standard Technical Report Submittal of APP-GW-GLR-119, Revision 0. TR119	Sterdis, A.	Westinghouse	AP1000 DCP/NRC1900



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5/24/2007	ML071500583	AP1000 COL Standard Technical Report Submittal of APP-GW-GLR-081 and Submittal of Proprietary and Non-Proprietary Technical Document Information, WCAP-16768-P Rev. 1 and WCAP-16768-NP Rev. 1, "Closure of COL Information Item 18.5-1, Task Analysis". TR72	Sterdis, A.	Westinghouse	AP1000 APP-GW-GLR-081 AW-07-2288 DCP/NRC1904 WCAP-16768-NP, Rev. 1 WCAP-16768-P, Rev. 1
5/24/2007	ML071500586	WCAP-16768-NP, Rev. 1, "Closure of COL Information Item 18.5-1, Task Analysis," dated May 2007, Enclosure 4.	Drake, A. P. Hunton, P. J. Kolb, W. C. Reed, J. I. Shaffer, M. C.	Westinghouse	AP1000 APP-GW-GLR-081 DCP/NRC1904
5/24/2007	ML071500589	WCAP-16768-P, Rev. 1, "Closure of COL Information Item 18.5-1, Task Analysis," dated May 2007, Enclosure 3.	Drake, A. P. Hunton, P. J. Kolb, W. C. Reed, J. I. Shaffer, M. C.	Westinghouse	AP1000 APP-GW-GLR-081 DCP/NRC1904
5/25/2007	ML071410398	AP1000 Request for Withholding Information from Public Disclosure (DCP/NRC1891).	Miernicki, M. J.	NRC/NRO/DNRL/ AP1000B2	DPC/NRC1891
5/25/2007	ML071410447	Westinghouse AP1000 Combined License (COL) Pre-application Technical Report 57 - Request for Additional Information (TAC MD5168).	Miernicki, M. J.	NRC/NRO/DNRL/ AP1000B2	TAC MD5168
5/25/2007	ML071500373	AP1000 COL Standard Technical Report Submittal of APP-GW-GLR-120, Revision 0. TR120	Sterdis, A.	Westinghouse	

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5/25/2007	ML071500384	AP1000 COL Standard Technical Report Submittal of APP-GW-GLR-127, Revision 0. TR127	Sterdis, A.	Westinghouse	AP1000 DCP/NRC1910
5/25/2007	ML071500563	AP1000 COL Standard Technical Report Submittal of APP-GW-GLN-111, Rev 0. TR111	Sterdis, A.	Westinghouse	AP1000 DCP/NRC1897
5/25/2007	ML071500596	AP1000 COL Standard Technical Report Submittal of APP-GW-GLN-116, Revision 0. TR116	Sterdis, A.	Westinghouse	AP1000 APP-GW-GLN-116, Rev 0 DCP/NRC1908
5/25/2007	ML071500600	APP-GW-GLN-116, Rev 0, "Additional Liquid Radwaste Monitor Tanks and Radwaste Building Extension," Enclosure 2. TR116	Meneely T K	Westinghouse	DCP/NRC1908
5/25/2007	ML071500602	APP-GW-GLN-116, Rev 0, "Additional Liquid Radwaste Monitor Tanks and Radwaste Building Extension," Enclosure 1. TR116	Meneely T K	Westinghouse	DCP/NRC1908
5/25/2007	ML071510019	AP1000 COL Standard Technical Report Submittal of APP-GW-GLR-084, Submittal of Proprietary and Non-Proprietary Technical Document Information, WCAP-16796-P, Rev 0 and WCAP-16796-NP, Rev 0, "AP1000 Human Factors Engineering Verification and Validation".	Sterdis, A.	Westinghouse	AP1000 APP-GW-GLR-084 AW-07-2289 DCP/NRC1905

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5/25/2007	ML071510020	WCAP-16796-NP, Rev 0, "AP1000 Human Factors Engineering Verification and Validation," Enclosure 4.	Drake, A. P. Hunton, P. J. Kolb, W. C. Reed, J. I. Shaffer, M. C.	Westinghouse	AP1000 APP-GW-GLR-084 DCP/NRC1905
5/25/2007	ML071510021	WCAP-16796-P, Revision 0, "AP1000 Human Factors Engineering Verification and Validation," Enclosure 3.	Drake, A. P. Hunton, P. J. Kolb, W. C. Reed, J. I. Shaffer, M. C.	Westinghouse	AP1000 APP-GW-GLR-084 DCP/NRC1905
5/25/2007	ML071660306	White Paper - Testing of Dynamic Soil Properties for Nuclear Power Plant COL Application - Prepared by 5/25/2007NEI.	Winebrenner, N. G.	MACTEC Engineering & Consulting, Inc.	
5/26/2007	ML071580412	Westinghouse AP1000 Cover Letter Rev. 16 - Oath and Affirmation Letter	Sterdis, A.	Westinghouse	APP-GW-GL-700.CVR.S APP-GW-GL-700.CVR.S.16 DCP/NRC1912 WESTINGHOUSE
5/26/2007	ML071580630	Westinghouse AP1000 Cover Letter Rev. 16 - Oath and Affirmation Letter.	Sterdis, A.	Westinghouse	APP-GW-GL-700.CVR.S APP-GW-GL-700.CVR.S.16 DCP/NRC1912 WESTINGHOUSE
5/26/2007	ML071580755	Westinghouse AP1000 Cover Letter Rev. 16 - Packing Slip	Sterdis, A.	Westinghouse	APP-GW-GL-700.CVR.P APP-GW-GL-700.CVR.P.16 APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.16 WESTINGHOUSE
5/26/2007	ML071580756	Westinghouse AP1000 Cover Letter Rev. 16 - Cover Sheet	Sterdis, A.	Westinghouse	APP-GW-GL-700.CVR.P APP-GW-GL-700.CVR.P.16 DCP/NRC1912 WESTINGHOUSE
5/29/2007	ML071410417	AP1000 Request for Withholding Information from Public Disclosure (DCP/NRC1881).	Miernicki, M. J.	NRC/NRO/DNRL/ AP1000B2	

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5/30/2007	ML071520070	AP1000 COL Response to Requests for Additional Information (TR #43) Non-Proprietary Responses.	Sterdis, A.	Westinghouse	AP1000 APP-GW-GLR-018, Rev 0 DCP/NRC1913 TAC MD2496
5/31/2007	ML071550094	Westinghouse AP1000 Response to NRC Regulatory Issue Summary 2007-08, Updated Licensing Submittal Information to Support the Design-Centered Licensing Review Approach.	Sterdis, A.	Westinghouse	AP1000 DCP/NRC1917 RIS-07-008
5/31/2007	ML071590190	WCAP-16801-NP, APP-GW-GLR-082, Revision 0, "Execution and Documentation of the Human System Interface Design Implementation Plan."	Reed, J. I.	Westinghouse	DCP/NRC1915
5/31/2007	ML071590193	WCAP-16801-P, Rev. 0, "Execution and Documentation of the Human System Interface Design Implementation Plan."	Reed, J. I.	Westinghouse	DCP/NRC1915
5/31/2007	ML071970048	WCAP-16791-NP, Rev. 0, "AP1000 Cyber Security Implementation."		Westinghouse	APP-GW-GLR-104 DCP/NRC1916
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5/29/2007	ML071410417	AP1000 Request for Withholding Information from Public Disclosure (DCP/NRC1881).	Miernicki, M. J.	NRC/NRO/DNRL/ AP1000B2	

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5/30/2007	ML071520070	AP1000 COL Response to Requests for Additional Information (TR #43) Non-Proprietary Responses.	Sterdis, A.	Westinghouse	AP1000 APP-GW-GLR-018, Rev 0 DCP/NRC1913 TAC MD2496
5/30/2007	ML071560541	Input to Safety Evaluation Report for Westinghouse AP1000 Combined License (COL) Pre-Application, AP1000 Pressurizer Design, Westinghouse Technical Report APP-GW-GLR-016, REV.0 (TR036) (TAC # md 2109).	Thomas, B. E.	NRC/NRO/DE/SEB1	TAC MD2109 TRO36
5/31/2007	ML071520521	Exelon Generation Company, LLC - Response to Regulatory Issue Summary 2007-08, "Updated Licensing Submittal Information to Support the Design-Centered Licensing Review Approach."	Ainger, K. A.	Exelon Generation Co, LLC	FOIA/PA-2008-0001 RIS-07-008
5/31/2007	ML071550094	Westinghouse AP1000 Response to NRC Regulatory Issue Summary 2007-08, Updated Licensing Submittal Information to Support the Design-Centered Licensing Review Approach.	Sterdis, A.	Westinghouse	AP1000 DCP/NRC1917 RIS-07-008
5/31/2007	ML071590190	WCAP-16801-NP, APP-GW-GLR-082, Revision 0, "Execution and Documentation of the Human System Interface Design Implementation Plan."	Reed, J. I.	Westinghouse	DCP/NRC1915

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5/31/2007	ML071970048	WCAP-16791-NP, Rev. 0, "AP1000 Cyber Security Implementation."		Westinghouse	APP-GW-GLR-104 DCP/NRC1916
6/1/2007	ML071550407	AP1000 COL Standard Technical Report Submittal of APP-GW-GLR-056, Revision 0.	Sterdis, A.	Westinghouse	DCP/NRC1907
6/6/2007	ML071580730	AP1000 COL Standard Technical Report Submittal of APP-GW-GLN-123, (TR 123), Revision 0.	Sterdis, A.	Westinghouse	DCP/NRC1920
6/6/2007	ML071580732	AP1000 COL Standard Technical Report Submittal of APP-GW-GLR-130, Revision 0, TR 130.	Sterdis, A.	Westinghouse	DCP/NRC1922
6/6/2007	ML071580754	Westinghouse, AP1000 COL Standard Technical Report Submittal of APP-GW-GLN-075, Rev. 1, (TR #74C Supplement 1).	Sterdis, A.	Westinghouse	DCP/NRC1919 TR #74C
6/6/2007	ML071590183	AP1000 COL Standard Technical Report Submittal of APP-GW-GLR-082, (TR #82), Submittal of Proprietary and Non-Proprietary Technical Document Information, WCAP-16801-P Rev. 0 and WCAP-16801-NP Rev. 0, "Execution and Documentation of the Human System...."	Sterdis, A.	Westinghouse	DCP/NRC1915
6/11/2007	ML071650132	AP1000 COL Standard Technical Report Submittal of APP-GW-GLN-129, (TR 129), Revision 0.	Sterdis, A.	Westinghouse	AP1000 DCP/NRC1931 TR 129

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6/12/2007	ML071660022	AP1000 COL Standard Technical Report Submittal of APP-GW-GLN-124, (TR 124), Revision 0.	Sterdis, A.	Westinghouse	AP1000 DCP/NRC1934 TR 124
6/12/2007	ML071660089	AP1000 COL Standard Technical Report Submittal of APP-GW-GLN-106, (TR 106), Revision 0.	Sterdis, A.	Westinghouse	AP1000 TR 106
6/12/2007	ML071660136	AP1000 COL Standard Technical Report Submittal of APP-GW-GLN-105, (TR 105), Revision 0.	Sterdis, A.	Westinghouse	APP-GW-GLN-105, Rev 0 DCP/NRC1933 TR 105
6/13/2007	ML071660025	Westinghouse. - Submittal of a Revised Copy of the "AP1000 Nuclear Plant Project Control of Safeguards Information," Procedures Numbered APP-GW-GAP-300 Revision 3.	Sterdis, A.	Westinghouse	AP1000 APP-GW-GAP-300, Rev 3 DCP/NRC1936
6/14/2007	ML071580192	Response to Westinghouse AP1000 Design Centered Working Group Letter of March 2, 2007.	Miernicki, M. J.	NRC/NRO/DNRL/ AP1000B2	DPC/NRC1839
6/14/2007	ML071690417	AP1000 COL Standard Technical Report Submittal of APP-GW-GLR-020, Revision 2, (TR 05).	Letter Report, Technical	Sterdis, A.	Westinghouse
6/14/2007	ML071690475	AP1000 COL Standard Technical Report Submittal of APP-GW-GLN-114, (TR 114), Revision 0.	Letter Report, Technical	Sterdis, A.	Westinghouse
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6/19/2007	ML071730377	06/19/2007 Westinghouse Meeting Presentation on AP1000 Design Control Document, Revision 16.	Sterdis, A.	Westinghouse	AP1000
6/20/2007	ML071900166	WCAP-15949-P (APP-MI01-GER-001) Revision 2, "AP1000 Reactor Internals Flow-Induced Vibration Assessment Program."	Altman, D. A. Eggleston, E. A. Forsyth, D. R. Imbrogno, G. M. Schwirian, R. E. Singleton, N. R. Yu, C.	Westinghouse	
6/21/2007	ML071730540	AP1000 COL Standard Technical Report Submittal of APP-GW-GLR-079, (TR 26), Revision 1.	Sterdis, A.	Westinghouse	AP1000 DCP/NRC1921 TR 26
6/22/2007	ML071790301	WCAP-15949-NP (APP-MI01-GER-001, Rev. 2) Revision 2, "AP1000 Reactor Internals Flow-Induced Vibration Assessment Program."	Altman, D. A. Eggleston, E. A. Forsyth, D. R. Imbrogno, G. M. Schwirian, R. E. Singleton, N. R. Yu, C.	Westinghouse	APP-MI01-GER-001, Rev 2
6/25/2007	ML071790301	Revision 1 to AP1000 COL Standard Technical Report Submittal of APP-GW-GLN-018, (TR 86).	Sterdis, A.	Westinghouse	AP1000 DCP/NRC1948 TR 86
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6/26/2007	ML071900159	06/26-27/2007 Westinghouse Meeting Handout, "NRC Review of Safety-related Piping and ASME Component Design and Analysis."	Meeting Briefing Package/Handouts Slides and Viewgraphs	Westinghouse	Westinghouse
7/5/2007	ML071970047	AP1000 COL Standard Technical Report Submittal of APP-GW-GLN-019, Revision 0 (TR 103), "Fluid System Changes."	Sterdis, A.	Westinghouse	APP-GW-GLN-019, Rev 0 DCP/NRC1944 TR 103
7/5/2007	ML072010044	AP1000 COL Standard Technical Report Submittal of APP-MI01-GER-001, (TR 128) - Submittal of Proprietary and Non-Proprietary Technical Document Information, WCAP-15949-P Rev. 2 and WCAP-15949-NP Rev. 2, "AP1000 Reactor Internals Flow- Induced...	Sterdis, A.	Westinghouse	AP1000 APP-MI01-GER-001 DCP/NRC1951 TR 128 WCAP-15949-NP, Rev. 2 WCAP-15949-P, Rev. 2
7/12/2007	ML072040016	Westinghouse, AP1000 COL Standard Technical Report Submittal of APP-GW-GLR-104, (TR #104).	Sterdis, A.	Westinghouse	DCP/NRC 1916
7/17/2007	ML072040017	Submittal of Response to NRC Request for Additional Information on AP1000 Standard Combined License Technical Report 44, APP-GW-GLR-026, Rev. 0, New Fuel Storage Rack Structural/Seismic Analysis.	Sterdis, A.	Westinghouse	DCP/NRC1963 TR #44
7/18/2007	ML072040018	Response to Requests for Additional Information on Technical Report No. 24, RAI-TR24-EMB2-02 and RAI-TR24-EMB2-04.		Westinghouse	APP-GW-GLR-060, Rev 0 AW-07-2305 DCP/NRC1959

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7/23/2007	ML072130072	AP1000 COL Standard Technical Report Submittal of APP-GW-GLN-105 (TR 105), Revision 0 (Redacted Version).	Sterdis, A.	Westinghouse	AP1000 DCP/NRC1967 TR 105
7/26/2007	ML072130207	Presentation Materials for Upcoming NRC Visit to China.	Sterdis, A.	Westinghouse	DCP/NRC1971
7/27/2007	ML072130228	AP1000 COL Standard Technical Report Submittal of APP-GW-GLN-108 (TR 108), Revision 1.	Sterdis, A.	Westinghouse	AP1000 DCP/NRC1968 TR #108
7/27/2007	ML072130353	AP1000 COL Standard Technical Report Submittal of APP-GW-GLN-079, (TR 79), Revision 0.	Sterdis, A.	Westinghouse	DCP/NRC1950
7/27/2007	ML072130240	AP1000 COL Standard Technical Report Submittal of APP-GW-GLN-122 (TR 122), Revision 0.	Sterdis, A.	Westinghouse	DCP/NRC1952
7/27/2007	ML072060208	AP1000 COL Standard Technical Report Submittal of APP-GW-GLN-019, Revision 1 (TR 103).	Sterdis, A.	Westinghouse	AP1000 DCP/NRC1965 TR 103
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8/21/2007	ML072500007	Westinghouse AP1000 Design Certification Amendment Piping Design Licensing Proposal.	Cummins, W. E.	Westinghouse	DCP/NRC1979
8/23/2007	ML072530505	AP1000 COL Standard Technical Report Submittal of APP-GW-GLR-040, Revision 1.	Sterdis, A.	Westinghouse	AP1000 APP-GW-GLR-040, Rev 1 DCP/NRC1983
9/5/2007	ML072530508	AP1000 COL Standard Technical Report Submittal of APP-GW-GLR-005, Revision 1 (TR 9).	Sterdis, A.	Westinghouse	DCP/NRC1988
9/6/2007	ML072840093	Completion of Documentation for AP1000 Design Certification Amendment.	Sterdis, A.	Westinghouse	DCP/NRC1993
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9/7/2007	ML072610048	AP1000 COL Standard Technical Report Submittal of APP-GW-GLR-066, Revision 1 (TR94).	Sterdis, A.	Westinghouse	APP-GW-GLR-066, Rev 1 DCP/NRC1994
9/13/2007	ML072620180	AP1000 COL Standard Technical Report Submittal of APP-GW-GLN-131 (TR 131), Revision 1, "Miscellaneous AP1000 Design Changes."	Sterdis, A.	Westinghouse	DCP/NRC1995
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9/26/2007	ML072750137	AP1000 COL Standard Technical Report Submittal of APP-GW-GLN-079, (TR 79), Revision 1.	Sterdis, A.	Westinghouse	AP 1000 APP-GW-GLN-079, Rev 1 DCP/NRC2003 TR 79
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9/28/2007	ML072770252	AP1000 COL Standard Technical Report Submittal of APP-GW-GLN-106, Revision 1 (TR 106).	Sterdis, A.	Westinghouse	DCP/NRC2012 TR 106
9/28/2007	ML072770257	AP1000 COL Standard Technical Report Submittal of APP-GW-GLN-105, Revision 1 (TR 105).	Sterdis, A.	Westinghouse	DCP/NRC2013
9/28/2007	ML072830019	APP-GW-GLN-105, Rev. 1, "Building and Structure Configuration, Layout, and General Arrangement Design Updates."	White, T. J.	Westinghouse	
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10/19/2007	ML072970182	AP1000 COL Standard Technical Report Submittal of APP-GW-GLN-138 (TR 138), Rev. 0.	Sterdis, A.	Westinghouse	AP1000 DCP/NRC2023 TR #138
10/19/2007	ML073030112	AP1000 COL Standard Technical Report Submittal of APP-GW-GLR-115 (TR 115), Rev. 0, "Effect of High Frequency Seismic Content on SSCs."	Sterdis, A.	Westinghouse	DCP/NRC2028
10/19/2007	ML073030118	AP1000 COL Standard Technical Report Submittal of APP-GW-GLN-138 (TR 138), Rev. 0. This submittal contains the strikeouts which the original submittal did not have.	Sterdis, A.	Westinghouse	DCP/NRC2023
10/26/2007	ML073030125	AP1000 COL Standard Technical Report Submittal of APP-GW-GLR-136 (TR 136), Rev. 1.	Sterdis, A.	Westinghouse	AP1000 APP-GW-GLR-136, Rev 1 APP-GW-GLR-136-NP, Rev 1 AW-07-2345 DCP/NRC2027 TR 136

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10/26/2007	ML073030138	APP-GW-GLR-136, Rev. 1, "AP1000 Human Factors Program Implementation for the Emergency Operations Facility and Technical Support Center".	Alvarez, S. A. Drake, A. P. Hunton, P. J. Reed, J. I. Sterdis, A.	Westinghouse	AP1000 DCP/NRC2027
10/26/2007	ML073030150	Submittal of APP-SSAR-GSC-642 Support Document for APP-GW-GLN-122 (TR 122).	Sterdis, A.	Westinghouse	AP1000 APP-GW-GLN-122 APP-SSAR-GSC-642 AW-07-2350 DCP/NRC2030 TR 122
10/26/2007	ML073030175	APP-SSAR-GSC-642-NP, Rev. 0, "Assessment of Basis for Aerosol Plugging in AP1000 Containment Leak Paths for Radiological Design Bases Accidents."	Li, J.	Westinghouse	AP1000 DCP/NRC2030
10/26/2007	ML073120415	APP-SSAR-GSC-642, Rev. 0, "Assessment of Basis for Aerosol Plugging in AP1000 Containment Leak Paths for Radiological Design Bases Accidents."	Li, J.	Westinghouse	AP1000 DCP/NRC2030
10/26/2007	ML073120423	AP1000 COL Standard Technical Report Submittal of APP-GW-GLR-101 (TR 101) Revision 1.	Sterdis, A.	Westinghouse	DCP/NRC2029
10/26/2007	ML073120429	AP1000 COL Standard Technical Report Submittal of APP-GW-GLR-134 (TR 134), Revision 0.	Sterdis, A.	Westinghouse	APP-GW-GLR-134, Rev 0 DCP/NRC2031 TR 134

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11/2/2007	ML073110107	NRC Acceptance Review of AP1000 Design Certification Amendment Application.	Cummins, W. E.	Westinghouse	DCP/NRC2035
11/2/2007	ML073410071	AP1000 COL Standard Technical Report Submittal of APP-GW-GLN-006 (TR 62) Revision 3.	Sterdis, A.	Westinghouse	DCP/NRC2033
11/5/2007	ML073240104	AP1000 COL Standard Technical Report Submittal of APP-GW-GLN-143, Revision 0 (TR 143).	Sterdis, A.	Westinghouse	DCP/NRC2036
11/7/2007	ML073240108	AP1000 Standard Combined License Technical Report, APP-GW-GLN-105, Rev. 2, "Building and Structure Configuration, Layout, and General Arrangement Design Updates."		Westinghouse	
11/16/2007	ML073300299	AP1000 COL Standard Technical Report Submittal of APP-GW-GLR-020 Revision 4, (TR 05).	Sterdis, A.	Westinghouse	AP1000 DCP/NRC2043 TR 05
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11/21/2007	ML073400818	APP-GW-GLR-045-NS, Revision 1, "Nuclear Island: Evaluation of Critical Sections," Technical Report Number 57.		Westinghouse	DCP/NRC2047
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12/4/2007	ML073410069	AP1000 COL Standard Technical Report Submittal of APP-GW-GLN-006 (TR 62) Revision 4.	Sterdis, A.	Westinghouse	DCP/NRC2051
12/4/2007	ML073470914	AP1000 COL Standard Technical Report Submittal of APP-GQ-GLN-105, Revision 2 (TR 105).	Sterdis, A.	Westinghouse	DCP/NRC2048
12/4/2007	ML073470922	AP1000 Licensing Design Change Document, APP-GW-GLN-105, Rev 2, "Building and Structure Configuration, Layout, and General Arrangement Design Updates."		Westinghouse	
12/12/2007	ML073470925	AP1000 Design Specification Amendment Piping Licensing Proposal.	Cummins, W. E.	Westinghouse	DCP/NRC2059
12/12/2007	ML073480033	Transmittal of Proprietary and Non-Proprietary Summary Outlines to Support NRC Acceptance Review of Technical Report 74A.	Sterdis, A.	Westinghouse	DCP/NRC2058



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12/12/2007	ML073510265	AP1000 COL Standard Technical Report Submittal of APP-GW-134 (TR 134), Revision 1.	Sterdis, A.	Westinghouse	AP1000 APP-GW-GLR-134, Rev 1 DCP/NRC2057 TR 134
12/13/2007	ML080100660	AP1000 Human Factors Engineering Program Plan Proposal.	Sterdis, A.	Westinghouse	APP-OCS-GBH-001 DCP/NRC2061
12/13/2007	ML073460098	AP1000 ASME Component Review Schedule.	Sterdis, A.	Westinghouse	DCP/NRC2060
12/20/2007	ML080150506	Westinghouse Presentation: Evaluation for High Frequency Seismic Input.	Lapay, W. S. Parello, J.	Westinghouse	
1/7/2008	ML080150513	Westinghouse AP1000 Combined License (COL) Pre-Application Technical Report 94 Rev. 1 - Request For Additional Information.	Miernicki, M. J.	NRC/NRO/DNRL/ AP1000B2	AP 1000 TAC MD5501
1/11/2008	ML080150526	AP1000 Technical Specifications I&C Bracketed Items Acceptance Issue.	Sterdis, A.	Westinghouse	AP1000 APP-GW-GLR-064, Rev 1 APP-GW-GSC-020 DCP/NRC2068 NUREG-1431, Rev 2 DCP/NRC2067
1/11/2008	ML080150529	AP1000 Piping DAC/Component COL Information Item 3.9-2 Acceptance Issue.	Sterdis, A.	Westinghouse	
1/11/2008	ML080630100	Transmittal of Proprietary Information, AP1000 Containment Recirculation and IRWST Screen Design.	Sterdis, A.	Westinghouse	APP-GW-GLN-147, Rev 0 DCP/NRC2066
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1/11/2008	ML080220387	APP-GW-GLN-147, Rev. 0, "AP1000 Recirculation and IRWST Screen Design."	McGinnis, C.	Westinghouse	
1/14/2008	ML080220389	AP1000 COL Information Items 3.6-1 and 3.9-2 Acceptance Issue Corrections.	Sterdis, A.	Westinghouse	DCP/NRC2070
1/14/2008	ML080220392	AP1000 COL Standard Technical Reports Submittal of APP-GW-GLR-134, Revision 3 (TR 134).	Sterdis, A.	Westinghouse	APP-GW-GLR-134, Rev 3 DCP/NRC2071 TR 134
1/14/2008	ML080430256	AP1000 Standard Combined License Technical Report, APP-GW-GLR-134, Revision 3, "AP1000 DCD Impacts to Support COLA Standardization."		Westinghouse	
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2/5/2008	ML080510189	02/05/08 - Email subject: Schedule for Technical Specification Submittal.	Sterdis, A.	Westinghouse	TR 74
2/15/2008	ML080600452	Letter to Westinghouse: Review Schedule for the AP1000 Design Certification Amendment Application Revision 16.	Gleaves, W. C.	NRC/NRO/DNRL/ AP1000B2	
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2/27/2008	ML080630099	Proposed Combined Operating License Information Item for Cyber Security.	Lindgren, D. A.	Westinghouse	APP-GW-GLR-104 DCP/NRC2086
2/28/2008	ML091470066	Piping Design Acceptance Criteria (DAC).	Matthews, D. B.	NRC/NRO/DNRL	
2/28/2008	ML080650717	Correction to AP1000 Submittal of APP-GW-GLN-147, Revision 0.	Lindgren, D. A.	Westinghouse	DCP/NRC2066
2/28/2008	ML080710111	APP-OCS-GGR-110-P, Rev. 1, "AP1000 Technical Support Center and Emergency Operations Facility Workshop."	Reed, J.	Westinghouse	DCP/NRC2473
3/3/2008	ML080710112	Submittal of Proprietary and Non-Proprietary Versions of WCAP-16914, Evaluation of Debris Loading Head Loss Tests for AP1000 Recirculation Screens and In-Containment Refueling Water Storage Tank Screens.	Lindgren, D. A.	Westinghouse	AW-08-2394 DCP/NRC2094 WCAP-16914
3/5/2008	ML080710113	AP1000 NRC Program Status Presentation - I&C and Human Factors Engineering February 5, 2008 - February 8, 2008 Submittal of Proprietary and Non-Proprietary Presentations.	Lindgren, D. A.	Westinghouse	AW-08-2391 DCP/NRC2090
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3/5/2008	ML080710318	APP-PMS-GLY-003, Revision 0, "NRC Program Status Presentation I&C and Human Factors Engineering."		Westinghouse	DCP/NRC2090
3/6/2008	ML080730026	Submittal of APP-GW-GLR-064, Revision 2, Technical Report 74A.	Lindgren, D. A.	Westinghouse	AP1000 APP-GW-GLR-064, Rev 2 DCP/NRC2098
3/7/2008	ML080800166	Westinghouse Submittal of APP-GW-GLE-001, Revision 0, "Impact of Annex Building Expansion and Condenser Air Removal Stack Location on the Control Room Atmospheric Dispersion Factors".	Lindgren, D. A.	Westinghouse	AP1000 DCP/NRC2099
3/14/2008	ML080800117	Submittal of Certain Supporting Information to the AP1000 Docket.	Gleaves, W. C.	NRC/NRO/DNRL/ AP1000B2	AP1000
3/17/2008	ML080840188	Submittal of Proprietary and Non-Proprietary Versions of APP-OCS-GGR-110-P, Revision 1, "AP1000 Technical Support Center & Emergency Operations Facility Workshop."	Sisk, R. B.	Westinghouse	APP-OCS-GGR-110-P, Rev 1 DCP/NRC2101
3/18/2008	ML080850404	AP1000 DCD Impact Document Submittal of APP-GW-GLE-003, Revision 0, "Addition of Site Specific System Designator YFS and FPS Change for Administration Building."	Sisk, R. B.	Westinghouse	APP-GW-GLE-003, Rev 0 DCP/NRC2105

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3/20/2008	ML080920487	AP1000 Standard COL Technical Report Submittal of APP-GW-GLR-134, Revision 4 (TR 134).	Sisk, R. B.	Westinghouse	APP-GW-GLR-134, Rev 4 DCP/NRC2107 TR 134
3/28/2008	ML080920489	AP1000 COL Standard Technical Report Submittal of APP-GW-GLR-079 (TR26), Revision 3.	Sisk, R. B.	Westinghouse	APP-GW-GLR-079, Rev 3 AW-08-2404 DCP/NRC2108 TR 26
3/28/2008	ML080980257	AP1000 DCD Impact Document Submittal of APP-GW-GLE-002, Revision 0.	Sisk, R. B.	Westinghouse	APP-GW-GLE-002, Rev 0 DCP/NRC2111 GSI-191
3/28/2008	ML080940161	APP-GW-GLE-002, Revision 0, "Impacts to AP1000 DCD to Address Generic Safety Issue (GSI)-191."		Westinghouse	DCP/NRC2111 GSI-191
4/3/2008	ML081020229	AP1000 Standard COL Technical Report Submittal of APP-GW-GLR-126, Revision 0 (TR 126).	Sisk, R. B.	Westinghouse	APP-GW-GLR-126, Rev 0 DCP/NRC2109 TR 126
4/7/2008	ML081000080	Submittal Of Certain Supporting Information On The AP1000 Docket. NRC Requests that Westinghouse Submit APP-OCS-J1R-110 on the Docket.	Jaffe, D. H.	NRC/NRO/DNRL/ AP1000B2	APP-OCS-J1R-110, Rev. 0
4/9/2008	ML081220429	Submittal of Matrix that Provides an Assessment of the AP1000 Design with Respect to Regulatory Guide 1.82, Revision 3.	Cummins, W. E.	Westinghouse	DCP/NRC2116 RG-1.082, Rev 3

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4/28/2008	ML081370147	Submittal of APP-PXS-GLR-001, Revision 0, "Impact on AP1000 Post-LOCA Long Term Cooling of Postulated Containment Sump Debris."	Sisk, R. B.	Westinghouse	AP1000 DCP/NRC2127
5/16/2008	ML081430068	AP1000 DCD Impact Document Submittal of APP-GW-GLE-006, Revision 0, "ASME Code Citation."	Sisk, R. B.	Westinghouse	DCP/NRC2136
5/20/2008	ML081440047	Meeting Handouts - Modular Construction and ITAAC.	Lindgren, D.	Westinghouse	APP-GW-GLY-004
5/20/2008	ML081620100	Review Schedule for the AP1000 Design Certification Amendment Application, Revision 16.	Sisk, R. B.	Westinghouse	DCP/NRC2133
5/20/2008	ML081550223	AP1000 DCD Impact Document Submittal of APP-GW-GLE-009, Revision 0.	Sisk, R. B.	Westinghouse	APP-GW-GLE-009, Rev 0 DCP/NRC2137
5/22/2008	ML081580162	NuStart AP1000 COL Project, AP1000 Design Certificate Amendment, Payment of NRC Invoices.	Cummins, W. E. Kray, M. C.	NuStart Energy Development, LLC Westinghouse	DCP/NRC2155
5/30/2008	ML081700166	AP1000 Submittal of APP-RXS-Z0R-001, Revision 1.	Sisk, R. B.	Westinghouse	APP-RXS-Z0R-001, Revision 1 DCP/NRC2145
6/3/2008	ML082390111	Methodologies Used for the AP1000 Evaluation of Long-Term Core Cooling.	Sisk, R. B.	Westinghouse	AP1000 DCP/NRC2140
6/13/2008	ML081490403	AP1000 DCD Impact Document Submittal of APP-GW-GLE-007, Revision 0.	Sisk, R. B.	Westinghouse	AP1000 APP-GW-GLE-007, Rev 0 DCP/NRC2159

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6/20/2008	ML081830145	Westinghouse Submittal of List of AP1000 Activities for Review During NRC QA Audit in October 2008.	Sisk, R. B.	Westinghouse	AP1000 DCP/NRC2168
6/27/2008	ML081830146	06/27/2008 Review Schedule For AP1000 Revision 16.	Bergman, T. A.	NRC/NRO/DNRL	AP1000
6/27/2008	ML081830156	AP1000 DCD Impact Document Submittal of APP-GW-GLE-012, Revision 0.	Sisk, R. B.	Westinghouse	AP1000 DCP/NRC2184
6/27/2008	ML081850468	AP1000 DCD Impact Document Submittal of APP-GW-GLE-036, Revision 0.	Sisk, R. B.	Westinghouse	AP1000 DCP/NRC2185
6/27/2008	ML081850575	AP1000 DCD Impact Document Submittal of APP-GW-GLE-002, Revision 1.	Sisk, R. B.	Westinghouse	AP1000 APP-GW-GLE-002, Rev 1 DCP/NRC2181
6/27/2008	ML081850576	AP1000 Standard COL Technical Report Submittal of APP-GW-GLR-134, Revision 5 (TR 134).	Sisk, R. B.	Westinghouse	APP-GW-GLR-134, Rev 05 DCP/NRC2183 TR 134
6/27/2008	ML081850577	AP1000 COL Standard Technical Report Submittal of APP-GW-GLR-104, (TR #104).	Sisk, R. B.	Westinghouse	AP1000 APP-GW-GLR-104 DCP/NRC2186 WCAP-16791-NP Rev. 1 WCAP-16791-P Rev. 1
6/27/2008	ML081850550	WCAP-16791-NP, Rev. 1, "AP 1000 Cyber Security Implementation."		Westinghouse	AP1000 DCP/NRC2186
6/27/2008	ML081850551	WCAP-16791-P, Rev. 1, "AP 1000 Cyber Security Implementation."	Gasparovic, M. A.	Westinghouse	AP1000 DCP/NRC2186

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6/30/2008	ML081920164	APP-GW-GLR-134, Revision 05, AP1000 Standard Combined License Technical Report AP1000 DCD Impacts to Support COLA Standardization.		Westinghouse	DCP/NRC2183 TR 134
6/30/2008	ML081920165	APP-GW-GLR-134, Rev 5, "AP1000 Standard Combined License Technical Report AP1000 DCD Impacts to Support COLA Standardization."		Westinghouse	DCP/NRC2183 TR 134
6/30/2008	ML081900574	APP-GW-GLE-016-NS, Revision 0, "AP1000 DCD Impact Document, Impact of In-core Instrumentation Grid, Quicklocs and Changes to Integrated Head Package (IHP)."		Westinghouse	DCP/NRC2190
6/30/2008	ML081900575	APP-GW-GLE-016, Revision 0, "AP1000 DCD Impact Document Impact of In-Core Instrumentation Grid, Quicklocs and Changes to Integrated Head Package (IHP)."		Westinghouse	DCP/NRC2190
7/1/2008	ML081900576	Westinghouse - AP1000 DCD Impact Document Submittal of APP-GW-GLR-045, Revision 2 (TR-57).	Sisk, R. B.	Westinghouse	APP-GW-GLR-045, Rev 2 DCP/NRC2188
7/1/2008	ML081920163	APP-GW-GLR-045 NS, Revision 2, "Nuclear Island: Evaluation of Critical Sections" (Public Version).		Westinghouse	DCP/NRC2188
7/1/2008	ML082000076	APP-GW-GLR-045, Revision 2, "Nuclear Island: Evaluation of Critical Sections" (Sensitive Version).		Westinghouse	DCP/NRC2188



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7/7/2008	ML082210170	AP1000 DCD Impact Document Submittal of APP-GW-GLE-016, Revision 0.	Sisk, R. B.	Westinghouse	APP-GW-GLE-016, Rev 0 DCP/NRC2190
7/15/2008	ML082250353	AP1000 Standard COL Technical Report Submittal of APP-GW-GLR-026, Revision 1 (TR 44).	Sisk, R. B.	Westinghouse	AP1000 DCP/NRC2202 TR 44
8/6/2008	ML082250358	AP1000 DCD Impact Document Submittal of APP-GW-GLE-034, Revision 0.	Sisk, R. B.	Westinghouse	DCP/NRC2222
8/7/2008	ML082250359	Submittal of Proprietary and Non-Proprietary of APP-FA01-T2R-001, Evaluation of Debris Loading Head Loss Tests for AP1000 Simulated Fuel Assembly During Post-Accident Recirculation.	Sisk, R. B.	Westinghouse	APP-FA01-T2R-001 AW-08-2466 DCP/NRC2227
8/7/2008	ML082350194	APP-FA01-T2R-001-NP, Revision 0, "Evaluation of Debris Loading Head Loss Tests for AP1000 Simulated Fuel Assembly During Post-Accident Recirculation."		Westinghouse	DCP/NRC2227
8/7/2008	ML082350196	APP-FA01-T2R-001, Revision 0, "Evaluation of Debris Loading Head Loss Tests for AP1000 Simulated Fuel Assembly During Post-Accident Recirculation."		Westinghouse	DCP/NRC2227
8/7/2008	ML082350197	APP-MY03-GLY-001-NP, Revision 0, "Presentations from the April 16th 2008 Meeting Regarding AP 1000 Sump Screen Design."	Andreychek, T. S. Monahan, J. S.	Westinghouse	DCP/NRC2149

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8/7/2008	ML0823350193	APP-MY03-GLY-001, Revision 0, "Presentations from the April 16th 2008 Meeting Regarding AP 1000 Sump Screen Design," Part 2 of 3.		Westinghouse	DCP/NRC2149
8/7/2008	ML0823350195	APP-MY03-GLY-001, Revision 0, "Presentations from the April 16th 2008 Meeting Regarding AP1000 Sump Screen Design." Part 3 of 3.		Westinghouse	DCP/NRC2149
8/13/2008	ML082330095	Submittal of Proprietary and Non-Proprietary Presentations from the April 16th 2008 Meeting Regarding AP1000 Sump Screen Design.	Sisk, R. B.	Westinghouse	AW-08-2444 DCP/NRC2149
8/13/2008	ML091660340	APP-MY03-GLY-001, Revision 0, "Presentations from the April 16th 2008 Meeting Regarding AP 1000 Sump Screen Design." Part 1 of 3.		Westinghouse	DCP/NRC2149
8/15/2008	ML082380866	Westinghouse Submittal of Proposed Changes to AP1000 Design Control Document to Remove Piping Design Acceptance Criteria and Revise COL Information Item.	Sisk, R. B.	Westinghouse	AP1000 DCP/NRC2228
8/19/2008	ML082660365	Enclosure 5 - Westinghouse Proprietary, Fuel Rack Drawing Package, APP-FS02-V1-001, Revision 1, 8/19/08.		Westinghouse	DCP_NRC_002518

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8/21/2008	ML083220482	Westinghouse Request to Include Control Document Amendment, Revision 17 in the Assessment of the NRC Review Schedule Before Reissuing the Schedule for AP1000 While Westinghouse is Submitting an Update to Rev. 16 in Mid-September.	Sisk, R. B.	Westinghouse	AP1000 DCP/NRC2232
9/17/2008	ML083220503	AP1000 Design Control Document REV17 Submittal Overview.		Westinghouse	AP1000
9/22/2008	ML083220506	Update to Westinghouse's Application to Amend the AP1000 Design Certification Rule.	Sisk, R. B.	Westinghouse	AP1000 APP-GW-GL-700, Rev 17 DCP/NRC2266
9/22/2008	ML083220507	Westinghouse AP1000 Cover Letter Rev. 17 - Oath and Affirmation Letter	Sisk, R. B.	Westinghouse	APP-GW-GL-700.CVR.S APP-GW-GL-700.CVR.S.17 WESTINGHOUSE
9/22/2008	ML083220508	Westinghouse AP1000 Design Control Document Rev. 17 - Design Control Document Introduction	Sisk, R. B.	Westinghouse	APP-GW-GL-700.DCD.S APP-GW-GL-700.DCD.S.17 WESTINGHOUSE
9/22/2008	ML083220509	Westinghouse AP1000 Design Control Document Rev. 17 - Tier 1 - Change Roadmap	Sisk, R. B.	Westinghouse	APP-GW-GL-700.DCD.S APP-GW-GL-700.DCD.S.17 WESTINGHOUSE
9/22/2008	ML083230167	Westinghouse AP1000 Design Control Document Rev. 17 - Tier 1 - List of Effective Pages	Sisk, R. B.	Westinghouse	APP-GW-GL-700.DCD.S APP-GW-GL-700.DCD.S.17 WESTINGHOUSE
9/22/2008	ML083120490	Westinghouse AP1000 Design Control Document Rev. 17 - Tier 1 - Table of Contents	Sisk, R. B.	Westinghouse	APP-GW-GL-700.DCD.S APP-GW-GL-700.DCD.S.17 WESTINGHOUSE
9/22/2008	ML083120491	Westinghouse AP1000 Cover Letter Rev. 17 - Oath and Affirmation Letter	Sisk, R. B.	Westinghouse	APP-GW-GL-700.CVR.P APP-GW-GL-700.CVR.P.17 WESTINGHOUSE
9/29/2008	ML083120287	Westinghouse AP1000 Revision 17, DCD Change Matrix.		Westinghouse	DCP/NRC2267

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9/29/2008	ML082940062	Transmittal of One (1) Copy of the Proprietary Version of the "Reviewer's Aide and Change Matrix for APP-GW-GI-700, AP1000 Design Control Document, Revision 17."	Sisk, R. B.	Westinghouse	APP-GW-GL-700 DCP/NRC2267
10/14/2008	ML083220483	Submittal of Revision 17 Errata Disks.	Sisk, R. B.	Westinghouse	DCP/NRC2275
10/16/2008	ML083090461	Westinghouse, Submittal of Revision 1, APP-GW-GLR-115, "Effect of High Frequency Seismic Content on SSCs," Technical Report 115 (TR-1 15) to Provide an Evaluation of Effects of High Frequency Seismic Input on AP1000 Design.	Sisk, R. B.	Westinghouse	AP1000 DCP/NRC2276
10/24/2008	ML083290463	DCD Revision 17.	Sisk, R. B.	Westinghouse	DCP/NRC2281
11/3/2008	ML083330290	11/03/2008 AP1000 Dose Analysis Meeting Slides.		Westinghouse	
11/20/2008	ML083450729	Westinghouse AP1000 Updated Piping Review Schedule.	Sisk, R. B.	Westinghouse	DCP/NRC2293
11/25/2008	ML083590250	AP1000 COL Standard Technical Report Submittal of APP-GW-GLR-066, Revision 2.	Winters, J.	Westinghouse	APP-GW-GLR-066, Rev 2 DCP/NRC2297
12/15/2008	ML083470258	ACC Slide Presentation		Westinghouse	
12/17/2008	ML083500308	Transmittal of Westinghouse Quality Assurance Documents.	Sisk, R. B.	Westinghouse	DCP/NRC2327
12/30/2008	ML083520635	Safety Evaluation Of The Westinghouse AP1000 Generic Pressure-Temperature Limits Report (PTLR) - APP-RXS-Z0R-001.	McKenna, E. M.	NRC/NRO/DNRL/ NWE2	APP-RXS-Z0R-001, Revision 1

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12/30/2008	ML090220273	Summary of the October 20 - 24, 2008, On-Site Review of AP1000 Piping and Support Design.	Gleaves, W. C.	NRC/NRO/DNRL/NWE2	
12/30/2008	ML090220274	10/13-17/2008 - Summary of On-Site Review of the AP1000 Component Design.	Gleaves, B. C.	NRC/NRO/DNRL/NWE2	AP1000
1/19/2009	ML090300139	Westinghouse Submittal of Proposed Changes to AP1000 Design Control Document to Remove the Piping Design Acceptance Criteria.	Sisk, R. B.	Westinghouse	DCP/NRC2350
1/19/2009	ML090410368	Westinghouse - AP1000 Onsite Chemical RAI Revisions.	Sisk, R. B.	Westinghouse	DCP/NRC2345
1/28/2009	ML090410369	AP1000 ASME Code Citation Change.	Sisk, R. B.	Westinghouse	DCP/NRC2364
1/31/2009	ML090410367	APP-GW-GLE-NP, Rev 1, "Application of ASTRUM Methodology for Best-Estimate Large-Break Loss-of-Coolant Accident Analysis for AP1000."		Westinghouse	DCP/NRC2368
1/31/2009	ML090500732	APP-GW-GLE-026, Rev 1, "Application of ASTRUM Methodology for Best-Estimate Large-Break Loss-of-Coolant Accident Analysis for AP1000."		Westinghouse	DCP/NRC2368
2/3/2009	ML090680308	AP1000 DCD Impact Document Submittal of APP-GW-GLE-026, Revision 1.	Sisk, R. B.	Westinghouse	APP-GW-GLE-026, Rev 1 AW-09-2525 DCP/NRC2368
2/3/2009	ML090480601	Westinghouse Response to NRC Inspection Report No. 05200006/2008-201, Notice of Nonconformance.	Sisk, R. B.	Westinghouse	DCP/NRC2371 IR-08-201 QLA/NRC0001

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2/5/2009	ML090480602	02/05-06/2009 Meeting Presentation on "Westinghouse Fuel Performance Update Meeting".		Westinghouse	AW-09-2526 LTR-NRC-09-7
2/11/2009	ML090480603	Submittal of Proprietary and Non-Proprietary of APP-MY03-T2C-002, Evaluation of Debris Loading Head Loss Tests Across AP1000 Fuel Assemblies During Post-Accident Recirculation.	Sisk, R. B.	Westinghouse	APP-MY03-T2C-002 AW-09-2528 DCP/NRC2376
2/11/2009	ML090490714	WCAP-17028-NP, Revision 0, "Evaluation of Debris Loading Head Loss Experiments Across AP1000 Fuel Assemblies During Post-Accident Recirculation."	McNamee, K. F. Schulz, T. L. Song, Y. J.	Westinghouse	APP-MY03-T2C-002 DCP/NRC2376
2/11/2009	ML090540843	WCAP-17028-P, Revision 0, "Evaluation of Debris Loading Head Loss Experiments Across AP1000 Fuel Assemblies During Post-Accident Recirculation."	McNamee, K. F. Schulz, T. L. Song, Y. J.	Westinghouse	APP-MY03-T2C-002 DCP/NRC2376
2/12/2009	ML090060323	Presentation by Westinghouse, AP1000 Main Control Room In-leakage.		Westinghouse	
2/12/2009	ML090490094	Presentation by Westinghouse, AP1000 Post LOCA Recirculation Screens and Downstream Effects.		Westinghouse	
2/13/2009	ML090290160	Safety Evaluation Report with Open Items for Chapter 14 of NUREG-1793, Supplement 2 - AP1000 Design Certification Amendment.	Matthews, D. B.	NRC/NRO/DNRL	NUREG-1793 S2

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2/13/2009	ML090370941	Westinghouse, Submittal of Annual Report to Document any Emergency Core Cooling System Evaluation Model Changes or Errors for AP1000 Standard Plant Design.	Sisk, R. B.	Westinghouse	DCP/NRC2373
2/17/2009	ML090500209	Letter to Westinghouse NRC Review of Selection 6 of the AP1000 Design Control Document.	Gleaves, W. C.	NRC/NRO/DNRL	
2/20/2009	ML090560606	Request for Additional Information Related to AP1000 Physical Security.	Buckberg, P. H.	NRC/NRO/DNRL	
2/20/2009	ML090790512	Requests for Additional Information Related to AP1000 Standard Combined License Technical Report 94, APP-GW-GLR-066, "AP1000 Safeguards Assessment".	Buckberg, P. H.	NRC/NRO/DNRL/ NWE2	AP1000 APP-GW-GLR-066
2/27/2009	ML091670372	NRC Review of Section 3.2, 3.6.2, And Piping Design Acceptance Criteria of the Design Control Document.	Gleaves, B. C.	NRC/NRO/DNRL	
3/13/2009	ML090840305	Submittal of Proprietary and Non-Proprietary Versions of APP-GW-JJ-002-P, Revision 2, "FMEA of AP1000 Protection & Safety Monitoring System."	Sisk, R. B.	Westinghouse	APP-GW-JJ-002-P, Rev 2 DCP/NRC2395
3/13/2009	ML090650149	Westinghouse AP1000 ASME Code Cases.	Sisk, R. B.	Westinghouse	DCP/NRC2402
3/16/2009	ML091130163	03/16/2009 NRC MCR VES Design Power Point Presentation.		Westinghouse	
3/24/2009	ML083540142	Chapter 7 of AP1000 Design Certification Amendment Review.	McKenna, E. M.	NRC/NRO/DNRL/ NWE2	

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3/27/2009	ML090970336	AP1000 ITAAC Update - Overview of AP1000 Status Update and Work with NRC CIP Taskforce Meeting.	Ray, T.	Westinghouse	
4/1/2009	ML090770458	Letter - Safety Evaluation Report with Open Items for Chapter 17 of NUREG-1793, Supplement 2 - AP1000 Design Certification Amendment.	Matthes, W. D.	NRC/NRO/DNRL	NUREG-1793 S2
4/2/2009	ML090970254	Westinghouse Submittal of APP-RXS-Z0R-001, Revision 2, "AP1000 Generic Pressure Temperature Limits Report," Response to Request for Additional Information in Support of AP1000 Design Certification Amendment Application.	Sisk, R. B.	Westinghouse	DCP/NRC2416
4/3/2009	ML090370180	Revision To Review Schedule For AP1000 Design Certification Amendment.	Matthews, D. B.	NRC/NRO/DNRL	
4/3/2009	ML091040743	Westinghouse Submittal of Shield Building Schedule.	Sisk, R. B.	Westinghouse	DCP/NRC2421
4/7/2009	ML091040771	Propriety Information Review - Safety Evaluation Report With Open Items For Chapter 8, "Electrical Power System," of NUREG-1793, Supplement 2-AP1000 Design Certification Amendment.	Matthews, D. B.	NRC/NRO/DNRL	
4/9/2009	ML090920464	Pipe Break Hazard Evaluation.		Westinghouse	
4/9/2009	ML091340740	NRC Break Hazard Presentation.		Westinghouse	
4/14/2009	ML091340748	03/20/2009 Westinghouse Meeting Presentation on AP1000 Long-Term Cooling Debris Issues Resolution.	Schulz, T. L.	Westinghouse	



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4/17/2009	ML091120718	AP1000 Safety-Related Equipment Seismic Qualification Testing Priority 4 Item 4.	Parello, J.	Westinghouse	
4/17/2009	ML091280024	Damping Value for Seismic Qualification Analysis of AP1000 Electrical Cabinets and Panels Priority 4 Item 4.	Parello, J.	Westinghouse	
4/20/2009	ML091180432	Westinghouse Draft Chapters 8 and 17 SER Review and Determination of no Proprietary Information Included in the SER.	Sisk, R. B.	Westinghouse	DCP/NRC2434
4/21/2009	ML091280023	Response to NRC Letter 03/24/2009 Regarding Chapter 7 of AP1000 Design Certification Amendment Review.	Sisk, R. B.	Westinghouse	DCP/NRC2440
4/23/2009	ML091190299	Schedule for Action Item Follow Up to NRC Review Meeting on Seismic Issues.	Sisk, R. B.	Westinghouse	DCP/NRC2444
4/23/2009	ML091190713	Westinghouse Acknowledgement of Receipt of Revision to Review Schedule for AP1000 Design Certification Amendment.	Sisk, R. B.	Westinghouse	DCP/NRC2439
4/24/2009	ML091200580	Westinghouse Submittal of Responses to Action Item 10 from the March 18 and 19, 2009 Meeting Regarding AP1000 Shield Building Design.	Sisk, R. B.	Westinghouse	DCP/NRC2448
4/27/2009	ML091470061	Westinghouse - AP1000 Writer's Guideline Documents.	Sisk, R. B.	Westinghouse	DCP/NRC2450
4/28/2009	ML091470065	Westinghouse AP1000 ASME Code Case N-782.	Sisk, R. B.	Westinghouse	DCP/NRC2452

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4/30/2009	ML091470067	APP-OCS-GEH-420, Rev. B, "AP1000 Human Factors Engineering Discrepancy Resolution Process."	Van Meter, T. W.	Westinghouse	DCP/NRC2473
4/30/2009	ML091470069	APP-OCS-GBH-001, Rev. 1, "AP1000 Human Factors Engineering Program Plan."	Reed, J. I.	Westinghouse	DCP/NRC2473
4/30/2009	ML091470070	APP-OCS-J1R-210, Rev. 1, "AP1000 Operational Sequence Analysis 2 (OSA-2) Implementation Plan."	Shaffer, M. C.	Westinghouse	DCP/NRC2473
4/30/2009	ML091470071	WNA-DS-01046-GEN, Rev. 2, "RRAS Distributed Control & Information Systems, Standard Computerized Procedures System Functional Requirements."	Dudics, R. A.	Westinghouse	DCP/NRC2473
4/30/2009	ML091470073	APP-OCS-GEH-120, Rev. B, "AP1000 Human Factors Engineering Design Verification Plan."	Van Meter, T. W.	Westinghouse	DCP/NRC2473
4/30/2009	ML091120620	APP-OCS-GEH-220, Rev. B, "AP1000 Human Factors Engineering Task Support Verification Plan."	Van Meter, T. W.	Westinghouse	DCP/NRC2473
4/30/2009	ML091120769	APP-OCS-J1-020, Rev. 1, "Computerized Procedures System Functional Requirements."	Dudics, R. A.	Westinghouse	DCP/NRC2473
5/4/2009	ML091460242	Submission of Proprietary Responses to Action Item 9 from the March 18 and 19, 2009 Meeting Regarding AP1000 Shield Building Design.	Sisk, R. B.	Westinghouse	AW-09-2570 DCP/NRC2456
5/12/2009	ML091410433	Westinghouse Draft Chapter 4 SER Review.	Sisk, R. B.	Westinghouse	DCP/NRC2488

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5/14/2009	ML091420104	Submittal of Proprietary and Non-Proprietary Documents for Docketing (RAI-SRP18-COLP708).	Sisk, R. B.	Westinghouse	AW-09-2577 DCP/NRC2473 RAI-SRP18-COLP-08
5/15/2009	ML091420105	AP1000 DCD Impact Document Submittal of APP-GW-GLE-002, Revision 2.	Sisk, R. B.	Westinghouse	DCP/NRC2480 GSI-191
5/15/2009	ML091420106	Submittal of Proprietary and Non-Proprietary Versions of APP-GW-GLN-147 (TR 147), Revision 2.	Sisk, R. B.	Westinghouse	APP-GW-GLN-147, Rev 2 AW-09-2580 DCP/NRC2482 TR 147
5/15/2009	ML091470691	APP-GW-GLE-147-NP, Rev. 2, "AP 1000 Containment Recirculation and IRWST Screen Design."		Westinghouse	DCP/NRC2482
5/15/2009	ML091470696	APP-GW-GLN-147, Rev. 2, "AP1000 Containment Recirculation and IRWST Screen Design," Technical Report Number 147.		Westinghouse	DCP/NRC2482
5/20/2009	ML091470707	05/20/2009 Meeting Slides, AP1000 Design Certification Pipe Rupture Hazard Evaluation Meeting with NRC."		Westinghouse	
5/20/2009	ML091470074	05/20/2009 Meeting Slides, AP1000 As-Designed Pipe Rupture Hazards Analysis (PRHA).		Westinghouse	
5/20/2009	ML091480387	05/20/2009 Meeting Slides, Pipe Rupture Hazard Evaluation Design Certification Review Licensing Background and Approach.		Westinghouse	

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5/22/2009	ML091480388	Submittal of Responses to Action Item 12 from the March 18 and 19, 2009 Meeting Regarding AP1000 Shield Building Design.	Sisk, R. B.	Westinghouse	AP1000 DCP/NRC2490
5/22/2009	ML091480015	Submittal of Proprietary Responses to Action Items from the March 18 and 19, 2009 Meeting Regarding AP1000 Shield Building Design.	Sisk, R. B.	Westinghouse	AW-09-2587 DCP/NRC2489
5/26/2009	ML091340725	AP1000 Response to Request for Additional Information in Support of the Design Certification Amendment Application.	Sisk, R. B.	Westinghouse	DCP/NRC2497
5/28/2009	ML091340774	Seismic Incoherent SSI Methodology Applied to AP1000 NPP at Bellefonte Site Priority 1 Item 1.	Ghiocel, D. M.	Westinghouse	
5/28/2009	ML091420474	Adjacent Building Seismic Design Priority 4 Item 3.		Westinghouse	
5/28/2009	ML091480740	SCV Equivalent Static Analysis Priority 2 Item 3.	Schoonmaker, B.	Westinghouse	
5/28/2009	ML091520089	Effects of High Frequency on Piping.		Westinghouse	
5/28/2009	ML091530125	Proprietary - Adjacent Building Seismic Design Priority 4 Item 3.		Westinghouse	
5/28/2009	ML091530128	Westinghouse Draft Chapter 19 SER Review.	Sisk, R. B.	Westinghouse	DCP/NRC2498
5/29/2009	ML091620255	AP1000 DCD Impact Document Submittal of APP-PXS-GLR-001, Rev. 1, "Impact on AP1000 Post-LOCA Long Term Cooling of Postulated Containment Sump Debris."	Sisk, R. B.	Westinghouse	APP-PXS-GLR-001, Rev 1 DCP/NRC2494

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Document Date	Accession Number	Title	Author Name	Author Affiliation	Case/Reference Number
5/29/2009	ML091620256	Submittal of Proprietary Document APP-OCS-GEH-320, Revision B "AP1000 Human Factors Engineering Integrated System Validation Plan" for Docketing.	Sisk, R. B.	Westinghouse	APP-OCS-GEH-320, Rev B AW-09-2592 DCP/NRC2509
5/31/2009	ML091520424	APP-GW-GLR-065-NP, Revision 1, "AP1000 I&C Data Communication and Manual Control of Safety Systems and Components."	Crew, A. W.	Westinghouse	DCP/NRC2513
5/31/2009	ML090700697	APP-GW-GLR-065-P, Revision 1, "AP1000 I&C Data Communication and Manual Control of Safety Systems and Components."	Crew, A. W.	Westinghouse	DCP/NRC2513
6/1/2009	ML091470625	Safety Evaluation Report Related to the Review of AP1000 Standard Combined License Technical Report Number 30, Revision 0.	Terao, D. A.	NRC/NRO/DE/CIB1	
6/2/2009	ML091530262	Enclosure - Safety Evaluation Report Chapter 16. Technical Specifications.		NRC/NRO/DNRL	
6/2/2009	ML091660338	05/20/2009 Summary of Public Meeting to Discussed Pipe Break Hazard Planning With Westinghouse on the AP1000 Design Certification Amendment.	Gleaves, B. C.	NRC/NRO/DNRL	
6/2/2009	ML091390631	06/15/09 Notice of Meeting with Westinghouse on AP1000 Design Certification Amendment Structural And Seismic Issues.	Gleaves, B. C.	NRC/NRO/DNRL/ NWE2	

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6/4/2009	ML091600141	ACRS Meeting with the U.S. Nuclear Regulatory Commission, - June 4, 2009, Slides.	Bonaca, M. V.	NRC/ACRS	
6/4/2009	ML093170673	AP1000 COL Standard Technical Report Submittal of APP-GW-GLR-005, Revision 3 (TR-09).	Sisk, R. B.	Westinghouse	APP-GW-GLR-005, Rev 3 DCP/NRC2515
6/4/2009	ML091610613	Westinghouse, LLC - Submittal of Proprietary and Non-Proprietary Versions of APP-GW-GLR-071, Revision 2.	Sisk, R. B.	Westinghouse	
6/8/2009	ML091620251	Summary of Audit of AP1000 Reactor Coolant Pump External Heat Exchanger Design Report.	Donoghue, J. E.	NRC/NRO/DSRA SRSB	
6/8/2009	ML091620252	Supplemental Information Regarding AP1000 ASME Code Case N-782.	Sisk, R. B.	Westinghouse	DCP/NRC2519 RG-1.084, Rev 34
6/8/2009	ML091620253	Submittal of Proprietary Information on Structural Model Node Locations.	Sisk, R. B.	Westinghouse	AP1000 AW-09-2598 DCP/NRC2524
6/8/2009	ML091660336	Submittal of Proprietary and Non-Proprietary Versions of APP-GW-GLR-065, Revision 1.	Sisk, R. B.	Westinghouse	APP-GW-GLR-065, Rev 1 DCP/NRC2513
6/9/2009	ML091660342	06/15/09 - 06/16/09 Notice of Public Meeting with Westinghouse on AP1000 Design Certification Amendment Structural Review Of Shield Building.	Gleaves, B. C.	NRC/NRO/DNRL	
6/9/2009	ML091670169	Enclosure 9 - Westinghouse Proprietary Roadmap of Draft NRC Audit Items and Coverage in Criticality Analysis.		Westinghouse	DCP_NRC_002518

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6/10/2009	ML091670170	Draft Chapter 16 SER Review.	Sisk, R. B.	Westinghouse	DCP_NRC002525
6/12/2009	ML091800405	Westinghouse - Proprietary Review of Draft Chapter 18 SER Review - DCD Revision 16.	Sisk, R. B.	Westinghouse	DCP_NRC_002529
6/15/2009	ML090860852	Meeting Handout: AP1000 Shield Building Steel Plate Modular Design Regulatory Issues by D. Lindgren, Westinghouse.	Lindgren, D. A.	Westinghouse	
6/16/2009	ML091190346	Draft Safety Evaluation for AP1000 Design Certification Document Chapter 15, Revision 17.	Donoghue, J. E.	NRC/NRO/DSRA/SRSB	
6/17/2009	ML091700120	Enclosure - Safety Evaluation Report Reactor Coolant System and Connected Systems Chapter 5.		NRC/NRO/DNRL/NWE2	NUREG-1793
6/17/2009	ML091410535	BLN QA Program Design, Chapter 17 from ISL Chapter Day Comments 5/29/09.		- No Known Affiliation	
6/17/2009	ML091520136	Westinghouse Submittal of Matrix for Assessment of AP1000 Design With Respect to Regulatory Guide 1.82, Revision 3, "Water Sources for Long-Term Recirculation Cooling Following a Loss-of-Coolant Accident."	Sisk, R. B.	Westinghouse	DCP/NRC-002535 RG-1.082, Rev. 3
6/18/2009	ML091540494	Letter - Safety Evaluation Report with Open Items for Chapter 11, "Radioactive Waste Management," of NUREG-1793, Supplement 2 - AP1000 Design Certification Amendment.	McKenna, E. M.	NRC/NRO/DNRL/NWE2	NUREG-1793 S2

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Document Date	Accession Number	Title	Author Name	Author Affiliation	Case/Reference Number
6/18/2009	ML091560352	AP1000 Request For Withholding Information From Public Disclosure (DCP/NRC2463).	Clark, P. M.	NRC/NRO/DNRL/ NWE2	DCP/NRC2463
6/18/2009	ML091680608	Safety Evaluation Report With Open Items For Chapter 11, "Radio Active Waste Management," of NUREG-1793, Supplement 2 - AP1000 Design Certification Amendment.	McKenna, E. M.	NRC/NRO/DNRL/ NWE2	NUREG-1793 S2
6/18/2009	ML091050516	Audit Report for the Review of Phase I and II Proprietary Documents related to the Software Lifecycle for the Protection and Safety Monitoring System for the AP1000.	McKenna, E. M.	NRC/NRO/DNRL/ NWE2	
6/18/2009	ML091050554	Final Safety Evaluation Report for Section 3.6.3 Regarding the Westinghouse AP1000 Revision 17 Design Center Amendment.	Terao, D.	NRC/NRO/DE/CIB1	
6/19/2009	ML091740119	Letter - Safety Evaluation Report with Open Items for Chapter 12, "Radiation Protection," of NUREG-1793, Supplement 2 - AP1000 Design Certification Amendment.	McKenna, E. M.	NRC/NRO/DNRL	NUREG-1793 S2
6/19/2009	ML091380100	Enclosure - Safety Evaluation Report with Open Items for Chapter 12 of NUREG-1793, Supplement 2 - AP1000 Design Certification Amendment.	McKenna, E. M.	NRC/NRO/DNRL/ NWE2	NUREG-1793 S2



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6/22/2009	ML091541130	Enclosure - Proprietary Safety Evaluation Report With Open Items For Chapter 10, "Steam And Power Conversion System," Of NUREG-1793, Supplement 2 - AP1000 Design Certification Amendment.		NRC/NRO/DNRL/ NWE2	NUREG-1793 S2
6/22/2009	ML091550705	Safety Evaluation Report With Open Items For Chapter 10, "Steam And Power Conversion System," Of NUREG-1793, Supplement 2 - AP1000 Design Certification Amendment.	McKenna, E. M.	NRC/NRO/DNRL/ NWE2	NUREG-1793 S2
6/22/2009	ML091600421	Advisory Committee on Reactor Safeguards AP1000 Subcommittee Review of Selected Chapters of the Safety Evaluation Report with Open Items - AP1000 Design Certification Amendment.	Matthews, D. B.	NRC/NRO/DNRL	
6/23/2009	ML091751196	Letter - Safety Evaluation Report With Open Items for Chapter 1, "Introduction and General Discussion," of NUREG-1793, Supplement 2 - AP1000 Design Certification Amendment	McKenna, E. M.	NRC/NRO/DNRL/ NWE2	NUREG-1793 S2
6/23/2009	ML091751197	Enclosure - Safety Evaluation Report With Open Items for Chapter 1, "Introduction and General Discussion," of NUREG-1793, Supplement 2 - AP1000 Design Certification Amendment.		NRC/NRO/DNRL	NUREG-1793 S2

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6/23/2009	ML091751007	Appendix B. Pre-Application Chronology of Principal Actions, December 2004 - May 2007.	McKenna, E. M.	NRC/NRO/DNRL/ NWE2	
6/23/2009	ML091760085	Appendix A. AP1000 Historical Perspective.	McKenna, E. M.	NRC/NRO/DNRL/ NWE2	AP1000
6/24/2009	ML091761017	Audit Plan to Review AP1000 DCD Revision 17 and for Chapter 9.	Segala, J. P.	NRC/NRO/DSRA/ SBPA	
6/24/2009	ML091520184	Audit Plan to Review AP1000 DCD Revision 16 and 17 and RTNSS/Cold Shutdown Issues for Chapter 9.	Segala, J. P.	NRC/NRO/DSRA/ SBPA	
6/24/2009	ML092120305	04/28/2009 Meeting Minutes, Attendance List and Slides, QA/ITAAC Workshop Conducted at the Westinghouse Energy Center in Monroeville, Pennsylvania.	Sisk, R. B.	Westinghouse	DCP_NRC_002512
6/25/2009	ML091800463	AP1000 Request For Withholding Information From Public Disclosure (CAR 080084, CAR 080093, PV-CEDM-CGI-001, NQCP-1501, NQCP-1602, NCR-080026, NCR-080448, NCR-080530, QCP-1801, RCA-080084 R1, RCA-080084 R3 and VER-0605-06).	Clark, P. M.	NRC/NRO/DNRL/ NWE2	CAR 080084 CAR 080093 NCR-080026 NCR-080448 NCR-080530 NQCP-1501 NQCP-1602 PV-CEDM-CGI-001 QCP-1801 RCA-080084 R1 RCA-080084 R3 VER-0605-06
6/26/2009	ML091801089	Westinghouse Letter Regarding Draft Chapter 1 SER Review and no Proprietary Information Included in the SER.	Sisk, R. B.	Westinghouse	DCP_NRC_002580

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6/30/2009	ML091900166	07/14/2009 Public Meeting With Westinghouse On AP1000 Design Certification Amendment Structural Review Of Shield Building.	Gleaves, B. C.	NRC/NRO/DNRL/ NWE2	
7/1/2009	ML091900167	07/16/2009 Notice of Meeting with Westinghouse to Discuss AP1000 Design Control Document (DCD) Chapter 7, "Instrumentation And Control Systems", Open Issues and The Audit Report.	Mitra, S. K.	NRC/NRO/DNRL/ NWE2	
7/2/2009	ML092030488	Submittal of Proprietary Presentation Materials from the June 15 and 16, 2009 Meeting Regarding AP1000 Shield Building Design.	Sisk, R. B.	Westinghouse	AP1000 AW-09-2610 DCP_NRC_002547
7/8/2009	ML091190773	2009/07/08 AP-1000 DCD Review - AP1000 DCD Capture - 7/8/09		NRC/NRO	
7/9/2009	ML091280332	Letter, Safety Evaluation Report With Open Items for Chapter 2, "Site Characteristics," of NUREG-1793, Supplement 2 - AP1000 Design Certification Amendment.	McKenna, E. M.	NRC/NRO/DNRL	NUREG-1793, Suppl 2
7/9/2009	ML091280332	Letter, Safety Evaluation Report With Open Items for Chapter 2, "Site Characteristics," of NUREG-1793, Supplement 2 - AP1000 Design Certification Amendment.	McKenna, E. M.	NRC/NRO/DNRL	NUREG-1793, Suppl 2

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7/9/2009	ML093170672	Enclosure - Proprietary Information Report Final Safety Evaluation Report with Open Items for Chapter 2, "Site Characteristics," of NUREG-1793, Supplement 2 - AP1000 Design Certification Amendment.	McKenna, E. M.	NRC/NRO/DNRL	
7/9/2009	ML091980043	Enclosure - Proprietary Information Report Final Safety Evaluation Report with Open Items for Chapter 2, "Site Characteristics," of NUREG-1793, Supplement 2 - AP1000 Design Certification Amendment.	McKenna, E. M.	NRC/NRO/DNRL	
7/10/2009	ML092230121	Transmittal of Proprietary and Non-Proprietary Reports Related to Turbine Reliability.	Sisk, R. B.	Westinghouse	AW-09-2611 DCP_NRC_002549 WCAP-16651-NP, Rev 1 WCAP-16651-P, Rev 1 DCP_NRC_002559
7/13/2009	ML092230123	Draft Chapter 10 SER and Draft Chapter 11 SER Review.	Sisk, R. B.	Westinghouse	
7/16/2009	ML091960276	AP1000RCP-06-009-NP, Revision 2, "Structural Analysis Summary for the API 000 Reactor Coolant Pump High Inertia Flywheel."		Curtiss-Wright Flow Control Corp	
7/16/2009	ML091980326	AP1000RCP-06-009-P, Revision 2, "Structural Analysis Summary for the AP1000 Reactor Coolant Pump High Inertia Flywheel."		Curtiss-Wright Flow Control Corp	
7/17/2009	ML092050141	AP1000 Request For Withholding Information From Public Disclosure (DCP/NRC2463).	Clark, P. M.	NRC/NRO/DNRL/ NWE2	

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7/17/2009	ML092050142	2009/07/17 AP-1000 DCD Review - AP1000 DCD Capture - 7/17/09		NRC/NRO	
7/21/2009	ML092050158	Confirmatory Items AP1000 Design Certification Amendment Safety Evaluation Report Chapter 5.	Sisk, R. B.	Westinghouse	DCP_NRC_002561
7/21/2009	ML092030540	Open Items AP1000 Design Certification Amendment Safety Evaluation Report Chapter 5.	Sisk, R. B.	Westinghouse	DCP_NRC_002563
7/21/2009	ML092050652	Chapter 2 Safety Evaluation Report with Open Items Proprietary Review.	Sisk, R. B.	Westinghouse	DCP_NRC_002568
7/22/2009	ML091770646	2009/07/22 AP-1000 DCD Review - AP1000 DCD Capture - 7/22/09		NRC/NRO	
7/24/2009	ML092110534	Audit Report From June 25, 2009 to Review AP1000 Revision 16 and 17 and SFPCS Issues for Chapter 9.	Segala, J. P.	NRC/NRO/DSRA	
7/28/2009	ML092090295	NRC Response to AP1000 Request For Withholding Information From Public Disclosure (DCP/NRC2508).	Clark, P. M.	NRC/NRO/DNRL/ NWE2	
7/28/2009	ML092120340	Westinghouse Draft Chapter 12 SER Review.	Sisk, R. B.	Westinghouse	DCP_NRC_002566
7/30/2009	ML092190900	Safety Evaluation Report for AP1000 Design Certification Revision 17.	Thomas, B. E.	NRC/NRO/DE/SEB1	
7/31/2009	ML092190901	2009/07/31 AP-1000 DCD Review - AP1000 DCD Capture - 7/31/2009		NRC/NRO	

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7/31/2009	ML092190902	WCAP-17028-P, Rev. 1, "Evaluation of Debris-Loading Head-Loss Tests for AP1000 Fuel Assemblies During Loss of Coolant Accidents." Appendix C.9, Page C-141 to End.	Andreychek, T. S. Byers, W. A. McKinley, J. K. McNamee, K. F. Schulz, T. L. Song, Y. J.	Westinghouse	APP-MY03-T2C-002 DCP_NRC_002582
7/31/2009	ML092190903	Westinghouse, LLC - Transmittal of IRWST and CR Screen Related Documents.	Sisk, R. B.	Westinghouse	DCP_NRC_002582
7/31/2009	ML092190904	APP-GW-GLE-002, Rev. 3, "Impacts to the AP1000 to Address Generic Safety Issues (GSI)-191."		Westinghouse	DCP_NRC_002582
7/31/2009	ML092190905	APP-GW-GLR-079, Rev. 4, "AP1000 Verification of Water Sources for Long-Term Recirculation Cooling Following a LOCA."		Westinghouse	DCP_NRC_002582
7/31/2009	ML092190906	WCAP-17028-NP, Rev. 1, "Evaluation of Debris-Loading Head-Loss Tests for AP1000 Fuel Assemblies During Loss of Coolant Accidents."	Andreychek, T. S. Byers, W. A. McKinley, J. K. McNamee, K. F. Schulz, T. L. Song, Y. J.	Westinghouse	APP-MY03-T2C-002 DCP_NRC_002582
7/31/2009	ML092190921	APP-GW-GLR-079, Rev. 4, "AP1000 Verification of Water Sources for Long-Term Recirculation Cooling Following a LOCA."		Westinghouse	DCP_NRC_00258
7/31/2009	ML092150664	WCAP-17028-P, Rev. 1, "Evaluation of Debris-Loading Head-Loss Tests for AP1000 Fuel Assemblies During Loss of Coolant Accidents." Cover Page Through Chapter 10.	Andreychek, T. S. Byers, W. A. McKinley, J. K. McNamee, K. F. Schulz, T. L. Song, Y. J.	Westinghouse	APP-MY03-T2C-002 DCP_NRC_002582

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7/31/2009	ML092190396	WCAP-17028-P, Rev. 1, "Evaluation of Debris-Loading Head-Loss Tests for AP1000 Fuel Assemblies During Loss of Coolant Accidents." Appendix A through C, Page C-140.	Andreychek, T. S. Byers, W. A. McKinley, J. K. McNamee, K. F. Schulz, T. L. Song, Y. J.	Westinghouse	DCP_NRC_002582
8/3/2009	ML092220043	Regulatory Audit Report - AP1000 Design Certification Amendment Section 3.9.3 on 10/13/08 - 10/17/08.	Le, T. D.	NRC/NRO/DE/EMB1	
8/4/2009	ML092180850	Westinghouse Response to Request for Additional Information on SRP 15 in Support of AP1000 Design Certification Amendment Application.	Sisk, R. B.	Westinghouse	DCP_NRC-002579
8/4/2009	ML092230120	Comment (8) of Robert Sisk, on Behalf of Westinghouse, on Draft Regulatory Guide DG-1191.	Sisk, R. B.	Westinghouse	74FR26440 00008 DCP_NRC_002585 DG-1191
8/6/2009	ML092230122	Audit Report from June 25, 2009 to Review AP1000 Revisions 16 and 17 and RTNSS/Cold Shutdown Issues for Chapter 9.	Segala, J. P.	NRC/NRO/DSRA/ SBPA	
8/7/2009	ML091800255	06/15/09 - 06/16/09 Summary of Public Meeting to Discuss Shield Building Design in the AP1000 Design Certification Amendment with Westinghouse.	Gleaves, B. C.	NRC/NRO/DNRL/ NWE2	
8/11/2009	ML092670395	Westinghouse - Open Item AP1000 Design Certification Amendment Safety Evaluation Report Chapter 11.	Sisk, R. B.	Westinghouse	DCP_NRC_002591

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8/12/2009	ML092100670	AP1000 Request for Withholding Information from Public Disclosure (DCP-NRC-002536).	Clark, P. M.	NRC/NRO/DNRL/ NWE2	DCP-NRC-002536
8/13/2009	ML092380361	08/25/2009 - GSI-191/Sump Meeting With Westinghouse On The AP1000 Design Certification Amendment.	Donnelly, P. M.	NRC/NRO/DNRL/ NWE2	
8/18/2009	ML092380362	Results of Qualification Panel Examination for Wesley Held as a New Reactor Project Manager.	McKenna, E. M.	NRC/NRO/DNRL/ NWE2	
8/18/2009	ML092360182	Westinghouse Submittal of APP-OCS-J1-002, Revision 1 "AP1000 Human System Interface Design Guidelines," Responses Related to RAI-SRRP18-COLP-08	Sisk, R. B.	Westinghouse	DCP_NRC_002594
8/18/2009	ML092220136	APP-OCS-J1-002, Rev 1, "AP1000 Human System Interface Design Guidelines."		Westinghouse	DCP_NRC 2594
8/19/2009	ML092320092	AP1000 COL Standard Technical Report Submittal of APP-GW-GLR-137, Revision 0.	Sisk, R. B.	Westinghouse	APP-GW-GLR-137, Rev 0 DCP_NRC_002597
8/20/2009	ML092380077	Safety Evaluation Regarding AP1000 DCD Revision 17 Changes To Section 8.0, "Electric Power Systems".	Jenkins, R. V.	NRC/NRO/DE/EEB	
8/20/2009	ML092180345	09/02/2009-Notice of GSI-191/Sump Meeting With Westinghouse on the AP1000 Design Certification Amendment.	Donnelly, P. M.	NRC/NRO/DNRL/ NWE2	GSI-191



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8/27/2009	ML092450703	Letter to R. Sisk, Westinghouse on NRC's Chapter 6 Review Progress and Schedule Impact for AP1000 Design Certification Amendment.	Matthews, D. B.	NRC/NRO/DNRL	
8/31/2009	ML092450723	Audit Plan To Review AP1000 Design Control Document Revision 16 And 17 and Fuel Rack Seismic Issues for Chapter 9.	Buckberg, P. H.	NRC/NRO/DNRL/ NWE2	
8/31/2009	ML092450724	Westinghouse Response to Request for Additional Information on SRP Section 18 in Support of AP1000 Design Certification Amendment Application.	Sisk, R. B.	Westinghouse	DCP_NRC_002610
8/31/2009	ML092510094	Westinghouse Submittal of Revision 0 of APP-GW-E1-006 "AP1000 Cyber Security Design Criteria."	Sisk, R. B.	Westinghouse	DCP_NRC_002608
8/31/2009	ML092510095	Technical Document APP-GW-E1 -006, Revision 0, "AP 1000 Cyber Security Design Criteria".	Sisk, R. B.	Westinghouse	APP-GW-E1-006, Rev 0 DCP_NRC_2608
8/31/2009	ML092510096	Westinghouse, LLC - Submittal of "Design Methodology for AP1000 Enhanced Shield Building" - dated August 31, 2009 (APP-1200-S3R-003, Rev 0).	Sisk, R. B.	Westinghouse	AP1000 APP-1200-S3R-003, Rev 0 DCP_NRC_002606
9/2/2009	ML093270025	09/02/09 GSI-191/Sump Meeting Between NRC And Westinghouse on the AP1000 Design Certification Amendment.		Westinghouse	

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9/3/2009	ML0923360296	AP1000 Request for Withholding Information from Public Disclosure for AP100RCP-06-009 Revision 2 (DCP-NRC-002579).	Clark, P. M.	NRC/NRO/DNRL/ NWE2	AP1000RCP-06-009 Rev 2 DCP-NRC-002579
9/3/2009	ML0923360781	09/03/09, Slides, Meeting Summary, DCWG Re: Implementation of DC/COL-ISG-08 "Necessary Content of Plant-Specific Technical Specifications."		NRC/NRO/DNRL/ NWE1	
9/4/2009	ML091980272	Propriety Information Review - Updated Safety Evaluation Report With Open Items For Chapter 8, "Electrical Power System," Of NUREG-1793, Supplement 2 - AP1000 Design Certification Amendment.	McKenna, E. M.	NRC/NRO/DNRL/ NWE2	
9/4/2009	ML092180710	Updated Safety Evaluation Report With Open Items For Chapter 8, "Electrical Power System," of NUREG-1793, Supplement 2 - AP1000 Design Certification Amendment.		NRC/NRO/DNRL/ NWE2	
9/8/2009	ML092180956	AP1000 Request For Withholding Information From Public Disclosure (APP-GW-GLR-065, Rev. 1).	Clark, P. M.	NRC/NRO/DNRL/ NWE2	APP-GW-GLR-065, Rev 1
9/8/2009	ML092470207	Summary of a Category 1 Public Meeting Held with Westinghouse Regarding Proposed AP1000 Shield Building Design Methodology, Held In Rockville, Maryland on July 14, 2009.	Gleaves, B. C. Gleaves, W. C.	NRC/NRO/DNRL/ NWE2	

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9/9/2009	ML092510259	Letter, Safety Evaluation Report With Open Items For Chapter 18, "Human Factors Engineering," of NUREG-1793, Supplement 2 - AP1000 Design Certification Amendment.	McKenna, E. M.	NRC/NRO/DNRL/ NWE2	NUREG-1793, Suppl 2
9/9/2009	ML092530359	Safety Evaluation Report With Open Items for Chapter 18, "Human Factors Engineering," of NUREG-1793, Supplement 2 - AP1000 Design Certification Amendment.		NRC/NRO/DNRL/ NWE2	NUREG-1793, Suppl 2
9/9/2009	ML092940454	Federal Register Notice. Regarding the ACRS Subcommittee Meeting on AP 1000, October 6, 2009..		NRC/ACRS	
9/9/2009	ML092590314	On-Site Audit Review Plan for the AP1000 Sump Screen Downstream Effects/Long-Term Cooling Analyses.	Donoghue, J. E.	NRC/NRO/DSRA/ SRSE	AP1000
9/9/2009	ML092260313	APP-GW-J0H-001, Rev. 1, "AP1000 I&C Systems Cyber Security Plan," October 2009.	Batson, S. J.	Westinghouse	DCP_NRC_0026663
9/14/2009	ML092300329	Notification of Proprietary Status, Submittal of "Design Methodology for AP1000 Enhanced Shield Building" - dated August 31, 2009 (APP-1200-S3R-003 Rev 0).	Sisk, R. B.	Westinghouse	APP-1200-S3R-003, Rev 0 DCP_NRC_002618

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9/15/2009	ML092540088	Letter - Safety Evaluation Report with Open Items for Chapter 3, Not Including Sections 3.7 Or 3.8, Titled "Design of Structures, Components, Equipment, and Systems," Of NUREG-1793, Supplement 2 - AP1000 Design Certification Amendment.	McKenna, E. M.	NRC/NRO/DNRL/ NWE2	
9/15/2009	ML092540264	Enclosure- Safety Evaluation Report With Open Items for Chapter 3, Not Including Sections 3.7 or 3.8, Titled "Design Of Structures, Components, Equipment, and Systems," Of NUREG-1793, Supplement 2 - AP1000 Design Certification Amendment.	McKenna, E. M.	NRC/NRO/DNRL/ NWE2	
9/15/2009	ML092580148	Letter, Safety Evaluation Report With Open Items For Chapter 13, Not Including Section 3.6, Titled "Conduct of Operations," of NUREG-1793, Supplement 2 - AP1000 Design Certification Amendment.	McKenna, E. M.	NRC/NRO/DNRL/ NWE2	NUREG-1793 S02
9/15/2009	ML092470531	Safety Evaluation Report With Open Items for Chapter 13, Not Including Section 3.6, Titled "Conduct of Operations," of NUREG-1793, Supplement 2 - AP1000 Design Certification Amendment.	McKenna, E. M.	NRC/NRO/DNRL/ NWE2	

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9/15/2009	ML092510227	10/05/09 Notice of Meeting with Westinghouse On AP1000 Design Certification Amendment - Shield Building Structural Review.	Gleaves, W. C.	NRC/NRO/DNRL/ NWE2	
9/17/2009	ML092510227	Phase 2b Safety Evaluation Report with Open Item for AP1000 Design Certification Document, Revision 17, and Section 15.3.	Lauron, C. L.	NRC/NRO/DSER/ RSAC	TAC RB5786
9/17/2009	ML092640647	Phase 2B SER Input with Open Item AP1000 Design Certification Amendment DCD Revision 17.		NRC/NRO/DSER/ RSAC	
9/17/2009	ML092650345	Phase 2B SER Input with Open Item AP1000 Design Certification Amendment DCD Revision 17.		NRC/NRO/DSER/ RSAC	
9/17/2009	ML092470453	Westinghouse Responses to Requests for Additional Information on Technical Report No. 54 in Support of AP1000 Design Certification Amendment Application.	Sisk, R. B.	Westinghouse	DCP_NRC_002624
9/17/2009	ML092540421	Westinghouse - AP1000 Response to Request for Additional Information Nos. RAI-SRP3.2.1-EMB2-06 & RAI-SRP3.8.2-CIB1-01 R2, in Support of AP1000 Design Certification Amendment Application.	Sisk, R. B.	Westinghouse	AP1000 DCP_NRC_002624 SRP 3

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Document Date	Accession Number	Title	Author Name	Author Affiliation	Case/Reference Number
9/18/2009	ML092610380	07/16/2009 Meeting Summary, Category 1 Public Meeting (Part of the Meeting Was) with Westinghouse Regarding AP1000 Design Control Document Chapter 7, "Instrumentation and Control System", Open Issues and the Audit Report.	Mitra, S. K.	NRC/NRO/DNRL/ NWE2	
9/21/2009	ML092640230	Advisory Committee On Reactor Safeguards AP1000 Subcommittee Review of Selected Chapters of the Safety Evaluation Report with Open Items - AP1000 Design Certification Amendment.	Matthews, D. B.	NRC/NRO/DNRL	
9/21/2009	ML092640230	10/08/2009 Notice of Meeting with Industry's AP1000 Working Group to Discuss the Implementation of DC/COL-ISG-O8, "Necessary Content of Plant-Specific Technical Specification," Option 3.	Mitra, S. K.	NRC/NRO/DNRL/ NWE2	
9/21/2009	ML092720624	10/05/09 Canceled Notice of Public Meeting with Westinghouse to Discuss the Westinghouse AP1000 Design Certification Amendment Building Structural .Review.	Gleaves, B. C.	NRC/NRO/DNRL/ NWE2	
9/21/2009	ML092610551	10/05/09 Canceled Notice of Public Meeting with Westinghouse to Discuss the Westinghouse AP1000 Design Certification Amendment Building Structural .Review.	Gleaves, B. C.	NRC/NRO/DNRL/ NWE2	

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9/24/2009	ML093130436	AP1000 Design Certification Amendment: Safety Evaluation Report Chapter 10 - Status of Open Items.	Sisk, R. B.	Westinghouse	DCP_NRC_002636
9/25/2009	ML093170675	Summary of a Public Meeting with Westinghouse Regarding Generic Safety Issue 191 Held in Rockville, Maryland on March 16, 2009.	Donnelly, P. B.	NRC/NRO/DNRL/ NWE2	
9/29/2009	ML093170676	"Westinghouse Diverse Actuation System (DAS) Automatic Signal Setpoint Methodology."	Anderson, R. G. Ewald, J. G. Kindred, T. A. Monahan, J. S. Schulz, T. L. Stiffler, C. D. Tuley, C. R. Williams, M. G.	Westinghouse	
9/29/2009	ML093170677	Submittal of Proprietary and Non-Proprietary Reports Related to Spent Fuel Storage Racks Criticality Analysis APP-GW-GLR-029 R2.	Sisk, R. B.	Westinghouse	APP-GW-GLR-029, Rev 2 AW-09-2673 DCP_NRC_002623
9/30/2009	ML092950497	U.S. Nuclear Regulatory Commission AP1000 Spent Fuel Pool On-Site Audit May 5-7, 2009.	Donoghue, J. E.	NRC/NRO/DSRA/ SRSB	
9/30/2009	ML092950498	Letter Documenting Results of 03/11/2009 Telecom Relative to Chapter 14 Open Items from SER.	Sisk, R. B.	Westinghouse	DCP_NRC_002534
9/30/2009	ML092730229	U.S. Nuclear Regulatory Commission AP1000 Spent Fuel Pool On-Site Audit May 5 - 7, 2009.	Donoghue, J. E.	NRC/NRO/DSRA/ SRSB	
10/1/2009	ML092920045	Audit Report for AP1000 DCD Revision 17 Fuel Rack Seismic Issues for Chapter 9 - August 6 and 7, 2009.	Buckberg, P. H.	NRC/NRO/DNRL/ NWE2	AP1000

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10/1/2009	ML092800157	AP1000 Request for Withholding Information from Public Disclosure (Table of Contents (TOC), Design Report for AP1000 Enhanced Shield Building (SB) APP-1200-S3R-003, Revision D and Shield Building Experimental Program, Keith Coogler, July 14, 2009).	Clark, P. M.	NRC/NRO/DNRL/ NWE2	APP-1200-S3R-003, Rev D FOIA/PA-2010-0034
10/2/2009	ML092800158	Part 810 Westinghouse Suppliers (India) Incoming Letter to Interagency.	Goorevich, R. S.	US Dept of Energy, National Nuclear Security Admin	
10/5/2009	ML092670180	Westinghouse has Determined that Draft Chapter 8 SER Is Non-Proprietary in Nature and a Revision is Not Needed.	Sisk, R. B.	Westinghouse	DCP_NRC_002646
10/5/2009	ML092650266	Westinghouse Review of Chapter 3 Safety Evaluation Report with Open Items Proprietary Review.	Sisk, R. B.	Westinghouse	DCP_NRC_002645
10/7/2009	ML092670393	AP1000 Request for Withholding Information From Public Disclosure (APP-GEW-GLR-079, Rev. 4, WCAP-17028, Rev. 1).	Clark, P. M.	NRC/NRO/DNRL/ NWE2	APP-GW-GLR-079, Rev 4 WCAP-17028, Rev 1
10/8/2009	ML092670397	Summary of Regulatory Audit Held with Westinghouse Regarding the Proposed AP1000 Design Certification Amendment, Cranberry Township, Pennsylvania, August 10-14, 2009.	Gleaves, W. C.	NRC/NRO/DNRL/ NWE2	
10/12/2009	ML092860106	Enclosure 3 - Westinghouse Markup of NRC Chapter 18 SER Indicating Proprietary Sections.		Westinghouse	DCP_NRC_002649



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10/12/2009	ML092320205	Letter re: Chapter 18 SER Review.	Sisk, R. B.	Westinghouse	DCP_NRC_002649
10/13/2009	ML092880347	10/28/2009 Public Meeting With Westinghouse On AP1000 Design Certification Amendment - Shield Building Structural Review.	Gleaves, B. C.	NRC/NRO/DNRL/NWE2	
10/15/2009	ML092880421	10/15/2009 Letter to Westinghouse From Dave Matthews to Rob Sisk regarding AP1000 Shield Building Design."	Matthews, D. B.	NRC/NRO/DNRL	
10/15/2009	ML092940445	Westinghouse Letter Enclosure - Details of Key Technical Issues Resulting from NRC Staff Review of AP1000 Shield Building Design Report APP-1200-SR3-003, Rev. 0, (Proprietary).	Matthews, D. B.	NRC/NRO/DNRL	
10/15/2009	ML092940453	Press Release-09-173: NRC Informs Westinghouse of Safety Issues with AP1000 Shield Building.		NRC/OPA	
10/15/2009	ML092800350	Westinghouse's Review of Chapter 13 Safety Evaluation Report.	Sisk, R. B.	Westinghouse	DCP_NRC_002662
10/16/2009	ML093090338	Submittal of "AP1000 I&C Systems Cyber Security Plan" - October 2009 (APP-GW-J0H-001 Rev 1).	Sisk, R. B.	Westinghouse	APP-GW-J0H-001, Rev 1 AW-09-2690 DCP_NRC_002663

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Document Date	Accession Number	Title	Author Name	Author Affiliation	Case/Reference Number
10/19/2009	ML093090339	Safety Evaluation Report With Open Items For Chapter 9, Not Including Sections 9.1.1.2.1 And 9.1.2.2.1 Fuel Rack Design Change Seismic Evaluations, Titled "Auxiliary Systems," of NUREG-1793, Supplement 2 - AP1000 Design Certification Amendment.	McKenna, E. M.	NRC/NRO/DNRL/NWE2	10/19/2009
10/19/2009	ML093010261	Shaw Module Fabrication Schedule Presented to NRC at the Meeting in Westinghouse Cranberry PA Office on 09/10/2009.	Cronan, C.	Shaw Group, Inc.	
10/19/2009	ML092940320	Shaw Module Fabrication Schedule Presented to NRC at the Meeting in Westinghouse Cranberry PA Office on 09/10/2009 (Proprietary).		Shaw Group, Inc.	
10/20/2009	ML092990264	AP1000 Fuel Assembly Debris Testing - Remaining Tests, Revision A.	Schulz, T. L.	Westinghouse	AW-09-2692 DCP_NRC_002670
10/21/2009	ML093010260	2009/10/21 BEL COL - summary of 10/20/09 internal meeting to discuss language that was removed from Bellefonte SER regarding criteria to be used in future COL amendment reviews		NRC/NRO	
10/21/2009	ML093280183	Westinghouse Submittal of Non-Proprietary Version of the AP1000 Shield Building Design Report, APP-1200-SR3-003, Revision 0.	Sisk, R. B.	Westinghouse	DCP_NRC_002671

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Document Date	Accession Number	Title	Author Name	Author Affiliation	Case/Reference Number
10/21/2009	ML092800251	Transmittal of Proprietary Information relating to AP1000 Fuel Assembly Debris Testing for the Containment Debris Issue (GSI-191).	Sisk, R. B.	Westinghouse	AW-09-2692 DCP_NRC_002670
10/21/2009	ML092800266	AP1000 Design Certification Amendment Application - Response to Proposed Open Item (Chapter 3).	Sisk, R. B.	Westinghouse	AP1000 DCP_NRC_002695
10/23/2009	ML092960236	Letter - Safety Evaluation Report With Open Items For Chapter 7, "Instrumentation And Control," of NUREG-1793, Supplement 2 - AP1000 Design Certification Amendment.	McKenna, E. M.	NRC/NRO/DNRL/ NWE2	NUREG-1793, Suppl 2
10/23/2009	ML093000519	Enclosure - Safety Evaluation Report With Open Items For Chapter 7, "Instrumentation And Control," of NUREG-1793, Supplement 2 - AP1000 Design Certification Amendment.	McKenna, E. M.	NRC/NRO/DNRL/ NWE2	NUREG-1793
10/23/2009	ML093010365	10/28/2009 Notice of CANCELED Meeting with Westinghouse on AP1000 Design Certification Amendment - Shield Building Structural Review.	Gleaves, B. C.	NRC/NRO/DNRL/ NWE2	
10/23/2009	ML092920430	Westinghouse AP1000, Administrative Changes to Tier 1 of AP1000 Design Control Document.	Sisk, R. B.	Westinghouse	DCP_NRC_002672
10/23/2009	ML093060431	Westinghouse, ITAACs in Modules Presentation on September 10, 2009.	Sisk, R. B.	Westinghouse	DCP_NRC_002635

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10/26/2009	ML092990381	Advisory Committee On Reactor Safeguards AP1000 Subcommittee Review of Selected Chapters of the Safety Evaluation Report With Open Items - AP1000 Design Certification Amendment.	Matthews, D. B.	NRC/NRO/DNRL	
10/27/2009	ML093010461	Transmittal Schedule of GSI-191 Related Documents.	Sisk, R. B.	Westinghouse	DCP_NRC_002674 GSI-191
10/28/2009	ML093080103	11/18/09-Notice of Closed Meeting with Westinghouse to Discuss the AP1000 Integrated System Validation Plan.	Donnelly, P. B.	NRC/NRO/DNRL/ NWE2	
10/29/2009	ML093080337	11/18/09 Notice of Public Meeting with Westinghouse on AP1000 Design Certification Amendment - Shield Building Structural Review.	Gleaves, B. C.	NRC/NRO/DNRL/ NWE2	
10/29/2009	ML093080102	Transmittal of Proprietary Information Relating to AP1000 DAS Setpoint Methodology.	Sisk, R. B.	Westinghouse	dcp_NRC_002675
10/29/2009	ML093080338	Transmittal of AP1000 Shield Building Briefing for NNSA Presentation on 10/30/09.	Sisk, R. B.	Westinghouse	AW-09-2698 DCP_NRC_002679
10/30/2009	ML093080339	Westinghouse, Withdrawal of AP1000 Technical Report APP-GW-GLR-126, Revision 0 (TR 126).	Sisk, R. B.	Westinghouse	APP-GW-GLR-126, Rev 0 DCP_NRC_002680
10/30/2009	ML093080157	AP1000 Instrumentation and Control Defense-in-Depth and Diversity Report.	Sisk, R. B.	Westinghouse	APP-GW-J1R-004 DCP_NRC_002683

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11/4/2009	ML093130384	11/04/09 Summary of Meeting with Industry's AP1000 Working Group to Discuss the Implementation of DC/COL-ISG-08, "Necessary Content of Plant-Specific Technical Specification," Option 3.	Mitra, S. K.	NRC/NRO/DNRL/ NWE2	
11/4/2009	ML093130385	DRAFT Summary of Category 2 Public Meeting with Industry's AP1000 Working Group to Discuss the Implementation of DC/COL-ISG-08, "Necessary Content of Plant-Specific Technical Specification," Option 3.	Mitra, S. K.	NRC/NRO/DNRL/ NWE2	
11/4/2009	ML093130386	AP1000 Shield Building Briefing Presentations for the NRC Meeting on 11/18/2009.	Sisk, R. B.	Westinghouse	AW-09-2696 DCP_NRC_002687
11/5/2009	ML093090193	Safety Evaluation Report Input for Tier 1 "Inspections, Tests, Analysis, and Acceptance Criteria (ITAAC)" for Westinghouse Amendment, Docket No. 52-006.	Kowal, M. G.	NRC/NRO/DCIP/CTSB	
11/5/2009	ML093160601	Status Report for Revision 17 to AP1000 Design Control Document: Selected Chapters on November 5-7, 2009.	Lee, M. P.	NRC/ACRS	
11/5/2009	ML092730466	2009/11/05 AP-1000 DCD Review - AP1000 DCD Capture 11/5/09		NRC/NRO	
11/6/2009	ML093070733	LTR-09-0550 - Ltr. Edward Markey, re: AP1000 Nuclear Reactor Design...Safety Requirements Impact on Loan Guarantee Applications.	Markey, E. J.	US HR, Comm on Energy & Commerce	LTR-09-0550

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11/10/2009	ML093090260	Memo: Transmittal of TRACE AP1000 LBLOCA, SBLOCA, Transient, and Applicability Reports.	Uhle, J. L.	NRC/RES/DSA	
11/12/2009	ML093160715	Summary of the Audit Conducted at Westinghouse Regarding AP1000 Computer Based Procedures Held in Monroeville, PA On September 15-17, 2009.	Pieringer, P. A.	NRC/NRO/DCIP	
11/12/2009	ML093210485	10/21/09 Summary of Category 2 Public Meeting with the Nuclear Energy Institute to Discuss Health Physics Issues for New Reactors.	Kellner, R.	NRC/NRO/DCIP/CHPB	
11/12/2009	ML093210509	SER - Safety Evaluation Report With Open Items for Chapter 18, "Human Factors Engineering," of NUREG-1793, Supplement 2 - AP1000 Design Certification Amendment.	Donnelly, P. M.	NRC/NRO/DNRL/NWE2	NUREG-1793, Suppl 2
11/13/2009	ML093340031	G20090651/LTR-09-0564/EDA TS: SECY-2009-0512 - Ltr Mario V. Bonaca re: Westinghouse AP1000 Design Certification Amendment: Status of ACRS Review.	Bonaca, M. V.	NRC/ACRS	G20090651 LTR-09-0564 SECY-2009-0512
11/16/2009	ML093340032	Process For Closure Of Open Items And Confirmatory Items In Safety Evaluation Reports.	Akstulewicz, F. M.	NRC/NRO/DNRL	
11/17/2009	ML093340033	AP1000 Shield Building Presentations for the NRC Meeting on 11-18-09.	Sisk, R. B.	Westinghouse	AW-09-2703 DCP_NRC_002692

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11/18/2009	ML093280184	AP1000 Standard COL Technical Report Submittal of APP-GW-GLR-026, Rev. 2 (TR 44).	Sisk, R. B.	Westinghouse	APP-GW-GLR-026, Rev 2 DCP_NRC_002693 TR 44
11/18/2009	ML093280185	AP1000 Design Certification Amendment Application - Response to Request for Additional Information (SRP 6).	Sisk, R. B.	Westinghouse	AP1000 DCP_NRC_002696 SRP 6
11/18/2009	ML093160785	AP1000 Design Certification Amendment Application - Response to Request for Additional Information (SRP 9).	Sisk, R. B.	Westinghouse	AP1000 DCP_NRC_002694 SRP 9
11/18/2009	ML093170178	APP-GW-GLR-026, Rev. 2, "New Fuel Storage Rack Structural/Seismic Analysis, Technical Report Number 44."		Westinghouse	DCP_NRC_002693
11/19/2009	ML093280186	AP1000 Request for Withholding Information from Public Disclosure for Chapter 18 SER (DCP-NRC-002649).	Clark, P. M.	NRC/NRO/DNRL/ NWE2	DCP-NRC-002649
11/20/2009	ML093280187	AP1000 Request for Withholding Information From Public Disclosure For AP1000 I & C Systems Cyber Security Plan (APP-GW-J0H-001, Rev. 1).	Clark, P. M.	NRC/NRO/DNRL/ NWE2	APP-GW-J0H-001, Rev 1
11/20/2009	ML093440190	AP1000 Standard COL Technical Report Submittal of APP-GW-GLR-033, Revision 3 (TR 54).	Sisk, R. B.	Westinghouse	DCP_NRC_002697
11/20/2009	ML093270166	APP-GW-GLR-033, Revision 3, "Spent Fuel Storage Rack Structure/Seismic Analysis, Technical Report Number 54."		Westinghouse	DCP_NRC_002697

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11/22/2009	ML093270296	NRC Audit of the AP1000 Probabilistic Risk Assessment in Support of Design Certification Amendment Review.	Mrowca, L. A.	NRC/NRO/DSRA/ SPLA	
11/23/2009	ML093370157	Canceled 11/18/2009 - Closed Meeting On The AP1000 Integrated System Validation Plan With Westinghouse.	Donnelly, P. M.	NRC/NRO/DNRL/ NWE2	
11/24/2009	ML093370162	12/09/09 Notice of Meeting to Review AP1000 Human Factors Engineering Integrated System Validation Plan (APP-OCS-GEH-320) With Westinghouse Design Certification.	Donnelly, P. B.	NRC/NRO/DNRL/ NWE2	
11/25/2009	ML093380097	Transmittal of APP-GW-GLR-079 Revision 6, (Proprietary) "AP 1000 Verification of Water Sources for Long-Term Recirculation Cooling Following a LOCA."	Sisk, R. B.	Westinghouse	APP-GW-GLR-079, Rev 6 AW-09-2706 DCP_NRC_002699
11/25/2009	ML093380098	Westinghouse - Transmittal of IRWST and CR Screen Related Documents (Letter 1).	Sisk, R. B.	Westinghouse	AP1000 AW-09-2705 DCP_NRC_002700
12/1/2009	ML093380307	12/15/09-Notice of Meeting to Discuss NRC's Review of the Engineered Safety Features Chapter of the AP1000 Design Certification Amendment With Westinghouse.	Donnelly, P. M.	NRC/NRO/DNRL/ NWE2	



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12/1/2009	ML093280435	Transmittal of APP-GW-GLR-086 Revision 1 (Non-Proprietary) "AP1000 Verification of Water Sources for Long-Term Recirculation Cooling Following a LOCA" (Alternate Document No. APP-GW-GLR-079-NP, Revision 6).	Sisk, R. B.	Westinghouse	AP1000 APP-GW-GLR-086, Rev 1 DCP_NRC_002701
12/1/2009	ML093430095	Westinghouse - Revision to AP1000 COL Standard Technical Report Submittal of APP-GW-GLR-102.	Sisk, R. B.	Westinghouse	AP1000 DCP_NRC_002703 OI-SRP19.0-SPLA-07 OI-SRP19.0-SPLA-13
12/2/2009	ML100200634	Request For Withholding Information From Public Disclosure, Shaw Module Fabrication Schedule.	Clark, P. M.	NRC/NRO/DNRL/ NWE2	
12/2/2009	ML093410571	Transmittal of WCAP-16914 Revision 3 and WCAP-17028 Revision 3 Proprietary and Non-Proprietary Reports Related to Recirculation Screen Testing.	Sisk, R. B.	Westinghouse	AW-09-2710 DCP_NRC_002702 WCAP-16914, Rev 3 WCAP-17028, Rev 3
12/3/2009	ML093290121	Westinghouse LLC Columbia Site.		- No Known Affiliation	
12/4/2009	ML093130501	Westinghouse Response to Open Item on Chapter 16 in Support of AP1000 Design Certification Amendment Application	Sisk, R. B.	Westinghouse	DCP_NRC_002709
12/7/2009	ML093160184	AP1000 Request for Withholding Information from Public Disclosure, AP1000 Shield Building Briefing for National Nuclear Safety Administration (NNSA) Presentation on October 30, 2009.	Clark, P. M.	NRC/NRO/DNRL/ NWE2	

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12/9/2009	ML093240354	Safety Evaluation Report With Open Items for Chapter 15, Titled "Transient and Accident Analyzes," of NUREG-1793, Supplement 2 - AP1000 Design Certification Amendment.	McKenna, E. M.	NRC/NRO/DNRL/ NWE2	NUREG-1793, Suppl 2
12/9/2009	ML093510060	Transmittal of Safety Evaluation Report with Open Items For Chapter 15, Titled "Transient and Accident Analyzes," of NUREG 1793, Supplement 2 - AP1000 Design Certification Amendment.	McKenna, E. M.	NRC/NRO/DNRL/ NWE2	NUREG-1793, Suppl 2
12/10/2009	ML093420437	Letter - Response to Requests for Withholding of Proprietary Information In Accordance with 10 CFR Part 2, Section 2.390.	McKenna, E. M.	NRC/NRO/DNRL/ NWE2	
12/13/2009	ML093450780	Enclosure 1 to DCP_NRC_002718, OI-SRP12.3-CHPB-03, Relative to the Physical Protection of an AP1000 Nuclear Power Plant.		Westinghouse	DCP_NRC_002718
12/14/2009	ML093560882	12/21-22/2009 Notice of Closed Meeting with Westinghouse on AP1000 Design Certification Amendment - Shield Building Testing, December 21-22, 2009 (with non-proprietary Enclosure 1 only).	Gleaves, B. C.	NRC/NRO/DNRL/ NWE2	

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12/14/2009	ML0933560890	Proprietary Enclosure 2 to December 21-22, 2009, Notice of Closed Meeting with WEC on AP1000 DCA Shield Building Testing & Benchmarks.		NRC/NRO	
12/14/2009	ML093520054	Westinghouse. - Response to Request for Additional Information on SRP Section 6 in Support of AP1000 Design Certification Amendment Application.	Sisk, R. B.	Westinghouse	AP1000 DCP_NRC_002716 SRP 6
12/17/2009	ML093640995	Submission of Proprietary and Non-Proprietary Versions of WCAP-16592 (APP-PMS-GER-001), Revision 1.	Sisk, R. B.	Westinghouse	AW-09-2708 DCP_NRC_002720
12/18/2009	ML093640996	NEI ITAAC Threshold Examples from 12/17/09 Public Meeting.		NRC/NRO/DCIP/CTSB	
12/21/2009	ML093640997	AP1000 Shield Building - Benchmarking, Analysis, Testing and Design Overview.	Winters, J. W.	Westinghouse	AW-09-2711 DCP_NRC_002721
12/22/2009	ML093420963	AP1000 Request For Withholding Information From Public Disclosure, AP1000 Verification Of Water Sources For Long-Term Recirculation Cooling Following A Loss-Of-Coolant Accident (APP-GW-GLR-079, Revision 6).	Clark, P. M.	NRC/NRO/DNRL/ NWE2	APP-GW-GLR-079, Rev 6
12/22/2009	ML100050186	09/25/2009-Summary Of The Audit Conducted At Westinghouse Regarding AP1000 Passive Containment Cooling Water Held In Rockville, MD.	Hayes, M.	NRC/NRO/DSRA/ SPCV	

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12/24/2009	ML100050187	Advisory Committee on Reactor Safeguards AP1000 Subcommittee Review of Selected Chapters of the Safety Evaluation Report with Open Items - AP1000 Design Certification Amendment.	Matthews, D. B.	NRC/NRO/DNRL	
12/30/2009	ML100050188	Submittal of Proprietary and Non-Proprietary Versions of WCAP-17179, Revision 0.	Sisk, R. B.	Westinghouse	AW-09-2717 DCP_NRC_002725 WCAP-17179, Rev 0
12/30/2009	ML100050189	WCAP-17179 -NP, Revision 0, "AP1000TM Component Interface Module Technical Report." (Non-Proprietary).	Tweedle, T. W.	Westinghouse	APP-GW-GLR-144 AW-09-2717 DCP_NRC_002725
12/30/2009	ML100050190	WCAP-17179-P, Revision 0, "AP1000TM Component Interface Module Technical Report." (Proprietary).	Tweedle, T. W.	Westinghouse	APP-GW-GLR-143 AW-09-2717 DCP_NRC_002725
12/30/2009	ML100050277	AP1000 Shield Building - In-Plane Behavior of Concrete Filled Steel Elements.	Sisk, R. B.	Westinghouse	DCP_NRC_002728
12/30/2009	ML100050280	Submittal of Proprietary and Non-Proprietary Versions of WCAP- 17184, Revision 0.	Sisk, R. B.	Westinghouse	AW-09-2719 DCP_NRC_002727
12/30/2009	ML100050341	Enclosure 4 - WCAP-17184 -NP, Revision 0, "AP1000TM Diverse Actuation System Planning and Functional Design Summary Technical Report." (Non-Proprietary).	Stiffler, C. D.	Westinghouse	APP-GW-GLR-146 AW-09-2719 DCP_NRC_002727
12/30/2009	ML100050343	Submittal of Proprietary and Non-Proprietary Versions of WCAP-16674, Revision 2 and WCAP-16675, Revision 3.	Sisk, R. B.	Westinghouse	AP1000 AW-09-2718 DCP_NRC_002726

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1/5/2010	ML100080058	Westinghouse, AP1000 Shield Building - Benchmarking, Analysis, Testing and Design Overview (Results), in Support of the AP-1000 Design Certification Amendment Application.	Sisk, R. B.	Westinghouse	DCP_NRC_002730
1/5/2010	ML100082096	Westinghouse, Re-submittal of Spent Fuel Storage Racks Criticality Analysis, APP-GW-GLR-029, Revision 2.	Sisk, R. B.	Westinghouse	APP-GW-GLR-029, Rev 2 DCP_NRC_002732
1/5/2010	ML093480081	APP-GW-GLR-029NP, Rev 2 (Reformatted), "AP1000 Spent Fuel Storage Racks Criticality Analysis."		Westinghouse	DCP_NRC_002732 HI-2094327, Rev 1
1/5/2010	ML100070056	APP-GW-GLR-029, Rev 2 (Reformatted), "AP1000 Spent Fuel Storage Racks Criticality Analysis."		Westinghouse	DCP_NRC_002732 HI-2094327, Rev 1
1/7/2010	ML093560519	AP1000 Request for Withholding Information from Public Disclosure for AP1000 Fuel Assembly [Debris] Tests Summary Results.	Clark, P. M.	NRC/NRO/DNRL/ NWE2	
1/7/2010	ML100190224	Federal Register Notice Regarding the ACRS Subcommittee Meeting on AP1000, February 2-3, 2010.		NRC/ACRS	
1/8/2010	ML100190225	AP1000 Request For Withholding Information From Public Disclosure For AP1000 Response to Request for Additional Information on SRP Section 9 (SRP9.1.2) (DCP_NRC_002691).	Clark, P. M.	NRC/NRO/DNRL/ NWE2	DCP_NRC_002691

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1/8/2010	ML100120686	AP1000 Spent Fuel Pool NRC Audit Report Dated 9/30/09 - Proprietary Exclusions.	Sisk, R. B.	Westinghouse	AW-10-2721 DCP_NRC_002731
1/11/2010	ML101100021	Westinghouse Response to NRC Open Item on Chapter 18 in Support of AP1000 Design Certification Amendment Application.	Sisk, R. B.	Westinghouse	DCP_NRC_002729
1/12/2010	ML093480328	AP1000 Request for Withholding Information from Public Disclosure for AP1000 Response to Request for Additional Information (SRP7.1) (DCP-NRC-002705).	Clark, P. M.	NRC/NRO/DNRL/ NWE2	DCP_NRC_002705
1/12/2010	ML100070187	2010/01/12 AP-1000 DCD Review - RE: AP1000 - New Draft RAI - RAI-SRP6.4-SPC-V-11 R1		- No Known Affiliation	
1/13/2010	ML100130818	AP1000 Request for Withholding Information from Public Disclosure for AP1000 Response to Request For Additional Information (SRP7.1) (DCP-NRC-002676).	Clark, P. M.	NRC/NRO/DNRL/ NWE2	DCP_NRC_002676
1/13/2010	ML100190217	12/09/2009-Summary of Public Meeting with Westinghouse Regarding AP1000 Human Factors Engineering Integrated System Validation Plan (APP-OCS-GEH-320) In Rockville, Maryland.	Donnelly, P. M.	NRC/NRO/DNRL/ NWE2	
1/13/2010	ML100190218	Rev. Federal Register Notice Regarding the ACRS Subcommittee Meeting on AP1000, February 2-3, 2010.	Wen, P. C.	NRC/ACRS	

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1/13/2010	ML093631156	Westinghouse - Chapter 9 Safety Evaluation Report with Open Items Proprietary Review.	Sisk, R. B.	Westinghouse	AW-10-2721 DCP_NRC_002734 NUREG-1793
1/13/2010	ML100250873	Westinghouse AP1000 - Chapter 9 SER Proprietary Markup. (Proprietary)		Westinghouse	AP1000 AW-10-2723 DCP_NRC_002734 NUREG-1793
1/15/2010	ML100250874	01/28/10 - 01/29/10-Notice of Public Meeting with Westinghouse on AP1000 Design Certification Amendment - Shield Building Structural Review.	Gleaves, B. C.	NRC/NRO/DNRL/ NWE2	
1/20/2010	ML100040552	Re-submittal of Proposed Changes for AP1000 Design Control Document Rev. 18.	Sisk, R. B.	Westinghouse	AW-10-2728 DCP_NRC_002733 DCP_NRC_002744
1/21/2010	ML100270766	Request for Withholding Information from Public Disclosure, WCAP-16914, Revision 3 (App-My03-T2c-001) "Evaluation of Debris Loading Head Loss for AP1000 Recirculation Screens and In-Containment Refueling Water Storage Tank Screens".	Clark, P. M.	NRC/NRO/DNRL/ NWE2	
1/21/2010	ML100270767	Request For Withholding Information From Public Disclosure, WCAP-17028, Revision 3 (APP-MY03-T2C-002) "Evaluation of Debris-Loading Head-Loss Tests for AP1000 Fuel Assemblies During Loss of Coolant Accidents."	Clark, P. M.	NRC/NRO/DNRL/ NWE2	

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1/21/2010	ML100270768	Westinghouse. - Response to Open Item on Chapter 12 in Support of AP1000 Design Certification Amendment Application.	Sisk, R. B.	Westinghouse	AP1000 DCP_NRC_002746
1/22/2010	ML100271131	AP1000 Response to Proposed Open Item (Chapter 16).	Sisk, R. B.	Westinghouse	AP1000 DCP_NRC_002747
1/22/2010	ML100271132	Westinghouse - AP1000 Shield Building Structural Review Information for the NRC Meeting on 1/28/10 - 1/29/10.	Sisk, R. B.	Westinghouse	AP1000 AW-10-2729 DCP_NRC_002745
1/22/2010	ML093570243	AP1000 Shield Building Structural Review Information for the NRC Meeting on 1/28/10 - 1/29/10, Benchmarking For Out-of-Plane Test (LSDYNA).	Mei, S. Sisk, R. B.	Westinghouse	AP1000 DCP_NRC_002745
1/22/2010	ML100050730	AP1000 Shield Building Structural Review Information for the NRC Meeting on 1/28/10 - 1/29/10, Westwall Axial Tension About 10,000 kips.	Sisk, R. B.	Westinghouse	AP1000 DCP_NRC_002745
1/25/2010	ML100140460	November 18, 2009, Summary of Public Meeting Held with Westinghouse Regarding Proposed AP1000 Shield Building Design Methodology.	Gleaves, W. C.	NRC/NRO/DNRL/ NWE2	
1/26/2010	ML100270140	Request For Withholding Information From Public Disclosure, WCAP-16943 "Enhanced GRCA (Gray Rod Cluster Assembly) Rodlet Design" Topical Report.	Clark, P. M.	NRC/NRO/DNRL/ NWE2	WCAP-16943



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1/26/2010	ML100320294	01/26/10 Summary of The Audit Conducted At Westinghouse Regarding AP1000 Documents APP-GW-GLR-138 and APP-GW-GLR-139 Held In Rockville, MD on November 13, 2009.	Hayes, M. W.	NRC/NRO/DSRA/SPCV	APP-GW-GLR-138 APP-GW-GLR-139
1/27/2010	ML102460491	2010/01/27 AP-1000 DCD Review - FW: Red-Line Strikeout Revision to AP1000 SER Chapter 11		NRC/NRO	
1/27/2010	ML100350166	AP1000 Shield Building Structural Review - Final Public Information for 1/28/10 Meeting.	Sisk, R. B.	Westinghouse	DCP_NRC_002751
1/29/2010	ML101550648	01/29/2010 Meeting - Enclosure 3: Proprietary Meeting Slides.	Gleaves, B. C.	NRC/NRO/DNRL/NWE2	
2/2/2010	ML100261632	Westinghouse, Review of Chapter 15 SER.	Sisk, R. B.	Westinghouse	DCP_NRC_002763
2/2/2010	ML100280262	Transcript of ACRS Subcommittee on AP1000 - Open Session, February 2, 2010, Pages 1-297.		NRC/ACRS	NRC-044
2/3/2010	ML101550682	AP1000 Request For Withholding Information From Public Disclosure, AP1000 Containment Recirculation And IRWST Screen Design, Technical Report 147 (APP-GW-GLN-147, Revision 3)(DCP_NRC_002700).	Clark, P. M.	NRC/NRO/DNRL/NWE2	

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2/3/2010	ML100430341	02/08/2010 Closed Meeting Notice With Westinghouse on AP1000 Design Certification Amendment - Shield Building Construction And Inspection Plans.	Gleaves, B. C.	NRC/NRO/DNRL/ NWE2	
2/3/2010	ML100430709	Transcript of ACRS Subcommittee on AP1000 - Open Session, February 3, 2010, Page 1-190.		NRC/ACRS	NRC-044
2/12/2010	ML100540179	02/23/10, Closed Meeting with Westinghouse on AP1000 Design Certification Amendment - Shield Building Construction Inspection Plans.	Gleaves, B. C.	NRC/NRO/DNRL/ NWE2	
2/12/2010	ML100540393	02/08/10 Canceled - Closed Meeting with Westinghouse on AP1000 Design Certification Amendment - Shield Building Construction and Inspection Plans.	Gleaves, B. C.	NRC/NRO/DNRL/ NWE2	
2/12/2010	ML100540393	AP1000 Shield Building Construction and Inspection Update Information for the NRC Meeting on 2/23/10.	Sisk, R. B.	Westinghouse	AP1000 AW-10-2738 DCP_NRC_002767
2/16/2010	ML100500672	December 15 Meeting Presentation Material on AP1000 GSI-191 Issue Resolution.	Sisk, R. B.	Westinghouse	AP1000 AW-10-2721 DCP_NRC_002778 GSI-191
2/16/2010	ML100570361	2010/02/16 AP-1000 DCD Review - OI-SRP		NRC/NRO	
2/17/2010	ML100570366	5.4.1-CIB1-01 follow up questions (AP1000 RCP flywheel analysis) AP1000 Response to Request for Additional Information (SRP 3).	Sisk, R. B.	Westinghouse	DCP_NRC_002779

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2/17/2010	ML100570376	AP1000 Shield Building Structural Review Information for the NRC Meeting on 1/28/10 - 1/29/10 (Final).	Sisk, R. B.	Westinghouse	AW-10-2740 DCP_NRC_002768
2/17/2010	ML100890666	G20100106/EDATS: OEDO-2010-0153 - Edwin M. Hackett Memo re: ACRS Review of Amendments to Previously Certified Reactor Designs	Hackett, E. M.	NRC/ACRS	EDATS: OEDO-2010-0153 G20100106 OEDO-2010-0153
2/17/2010	ML100980141	2010/02/17 AP-1000 DCD Review - Acknowledgement of RAI-SRP6.1.2-CIB1-01		- No Known Affiliation	
2/17/2010	ML100280667	2010/02/17 AP-1000 DCD Review - Acknowledgement of RAI's - RAI-SRP6.2.2-SPCV-31 & RAI-SRP6.2.2-SPCV-26 R1		- No Known Affiliation	
2/18/2010	ML100491399	2010/02/18 AP-1000 DCD Review - RE: OI-SRP 9.1.5-SBPB-01 Response of 11/11/09		NRC/NRO	
2/22/2010	ML100500713	Summary of Audit Conducted at Westinghouse Regarding AP1000 Documents Addressing Generic Safety Issue GSI-191 Held in Rockville, Maryland on November 18, 2009.	Hayes, M.	NRC/NRO/DSRA/ SPCV	
2/22/2010	ML100541723	03/05/2010-Notice of Closed Meeting With Westinghouse On The AP1000 Sump Design And Associated Test Program That Address Generic Safety Issue (GSI) - 191.	Donnelly, P. B.	NRC/NRO/DNRL/ NWE2	GSI-191

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2/22/2010	ML100541965	Summary of Audit Conducted at Westinghouse Regarding AP1000 Documents Addressing Generic Safety Issue (GSI)-191 Held In Rockville, Maryland on November 18, 2009.		NRC/NRO/DSRA/SBCV	
2/23/2010	ML101100067	2010/02/23 AP-1000 DCD Review - FW: Acknowledgement of RAI-SRP11.3-CHPB-05 and RAI-SRP11.5-CHPB-05		NRC/NRO	
2/23/2010	ML101100070	2010/02/23 AP-1000 DCD Review - FW: Acknowledgement of RAI-SRP6.2.2-SRSB-25 R1		NRC/NRO	
2/23/2010	ML100560171	2010/02/23 AP-1000 DCD Review - Acknowledgement of RAI-SRP6.2.2-SRSB-25 R1		- No Known Affiliation	
2/23/2010	ML100600408	2010/02/23 AP-1000 DCD Review - Acknowledgement of RAI-SRP11.3-CHPB-05 and RAI-SRP11.5-CHPB-05		- No Known Affiliation	
2/25/2010	ML100600409	2010/02/25 AP-1000 DCD Review - FW: OI-SRP19.0-SPLA-07, -13, & -14		NRC/NRO	
2/25/2010	ML100610309	December 15, 2009 Public Meeting Presentation on Passive Filtration & Main Control Room Habitability.	Sisk, R. B.	Westinghouse	AP1000 DCP_NRC_002795
2/25/2010	ML100640574	Westinghouse, Responses to Open Item on Chapter 3 in Support of AP1000 Design Certification Amendment Application.	Sisk, R. B.	Westinghouse	DCP_NRC_002797

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2/26/2010	ML100640575	12/21-22/2009 Summary of Category 1 Public Meeting Held With Westinghouse Regarding the Proposed AP1000 Shield Building Design Methodology.	Gleaves, B. C.	NRC/NRO/DNRL/ NWE2	
2/26/2010	ML100640576	Transmittal of IRWST and CR Screen Related Documents.	Sisk, R. B.	Westinghouse	DCP_NRC_002796
2/28/2010	ML100700452	WCAP-17028-P, Revision 4, "Evaluation of Debris-Loading Head-Loss Tests for AP1000 Fuel Assemblies During Loss of Coolant Accidents." Cover through Page 8-93.	Baier, S. L. Byers, W. A. Pezze, J. P. Ruth, K. L. Scaddozzo, G. Schulz, T. L. Song, Y. J.	Westinghouse	APP-MY03-T2C-002 DCP_NRC_002798
2/28/2010	ML100820177	WCAP-17028-P, Revision 4, "Evaluation of Debris-Loading Head-Loss Tests for AP1000 Fuel Assemblies During Loss of Coolant Accidents." Page 8-94 through Page C-330.		Westinghouse	APP-MY03-T2C-002 DCP_NRC_002798
2/28/2010	ML100820178	WCAP-17028-P, Revision 4, "Evaluation of Debris-Loading Head-Loss Tests for AP1000 Fuel Assemblies During Loss of Coolant Accidents." Page C-331 through Page E-7 (end).		Westinghouse	APP-MY03-T2C-002 DCP_NRC_002798
2/28/2010	ML100550420	WCAP-17201-NP, Rev. 0, "AC 160 High Speed Link Communication Compliance to DI&C-1SG-04 Staff Positions 9, 12, 13 and 15 Technical Report."	McLaughlin, T. J. Odess-Gillett, W. R.	Westinghouse	DCP_NRC_002826

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2/28/2010	ML100700451	WCAP-17201-P, Rev. 0, "AC160 Hugh Speed Link Communication Compliance to DI&C-ISG-04 Staff Positions 9, 12, 13 and 15 Technical Report."	McLaughlin, T. J. Odess-Gillett, W. R.	Westinghouse	APP-GW-GLR-148 DCP_NRC_002826
3/1/2010	ML100630209	01/28/10 - 01/29/10 Summary of Meeting with Westinghouse Regarding the Proposed AP1000 Shield Building Design Methodology, Held In Rockville, Maryland.	Proctor, C. M.	NRC/NRO/DNRL/ NWE2	
3/1/2010	ML100630210	Transmittal of WCAP-17028-P, R4, "Evaluation of Debris-Loading Head-Loss Tests for AP1000 Fuel Assemblies During Loss of Coolant Accidents."	Sisk, R. B.	Westinghouse	AW-10-2760 DCP_NRC_002798 WCAP-17028-P, Rev 4
3/2/2010	ML100630211	Westinghouse Response to Open Item on Chapter 7 in Support of AP1000 Design Certification Amendment Application.	Sisk, R. B.	Westinghouse	DCP_NRC_002800
3/2/2010	ML100640414	Westinghouse Response to Open Item on Chapter 8 in Support of AP1000 Design Certification Amendment Application.	Sisk, R. B.	Westinghouse	DCP_NRC_002801
3/2/2010	ML100640415	Westinghouse Response to Request for Additional Information on Technical Report No. 03 in Support of AP1000 Design Certification Amendment Application.	Sisk, R. B.	Westinghouse	DCP_NRC_002802
3/2/2010	ML101100063	AP1000 Shield Building Construction and Inspection Information for the NRC Meeting on 2/23/10 (FINAL).	Sisk, R. B.	Westinghouse	AP1000 DCP_NRC_002803

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3/2/2010	ML100640704	2010/03/02 AP-1000 DCD Review - Acknowledgement of RAI-SRP 3.9.4-EMB1-01		- No Known Affiliation	
3/3/2010	ML100601038	2010/03/03 AP-1000 DCD Review - FW: Acknowledgement of RAI-SRP 3.9.4-EMB1-01		NRC/NRO	
3/3/2010	ML100640740	Westinghouse Response to Open Item on Chapter 3 in Support of AP1000 Design Certification Amendment Application.	Sisk, R. B.	Westinghouse	DCP_NRC_002804
3/5/2010	ML100670562	03/17/10 - 03/18/10 Notice of Meeting with Westinghouse to Discuss AP1000 Design Certification Amendment - Design Changes to be Incorporated in Revision 18 to the Design Control.	Jaffe, D. H.	NRC/NRO/DNRL/ NWE2	
3/5/2010	ML100700204	2010/03/05 AP-1000 DCD Review - FW: Emailing: OI-SRP4.5.1-CIB1-01 pkg 05-13-09.pdf		NRC/NRO	
3/5/2010	ML100700207	03/17/10 - 03/18/10 Time Change Notice of Meeting with Westinghouse to Discuss AP1000 Design Certification Amendment - Design Changes to be Incorporated In Revision 18 to the Design Control Document.	Jaffe, D. H.	NRC/NRO/DNRL/ NWE2	
3/5/2010	ML100700460	Transmittal of AP1000 Containment Debris Fuel Assembly Testing and RAI Response Summary Presentation.	Sisk, R. B.	Westinghouse	DCP_NRC_002812

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3/5/2010	ML100700460	AP1000 Containment Debris Fuel Assembly Testing and RAI Response Summary.		Westinghouse	DCP_NRC_002812
3/5/2010	ML100740575	03/17-18/2010 Revised Notice of Meeting With Westinghouse On AP1000 Design Certification Amendment - Design Changes To Be Incorporated In Revision 18 To The Design Control Document.	Jaffee, D. H.	NRC/NRO/DNRL/ NWE2	
3/5/2010	ML100610459	03/17-18/2010 Revised Notice of Meeting With Westinghouse On AP1000 Design Certification Amendment - Design Changes To Be Incorporated In Revision 18 To The Design Control Document.	Jaffee, D. H.	NRC/NRO/DNRL/ NWE2	
3/5/2010	ML100740529	03/17/2010 - 03/18/2010 Revised Notice of Meeting With Westinghouse on AP1000 Design Certification Amendment - Design Changes to be Incorporated in Revision 18 to the Design Control Document.	Jaffe, D. H.	NRC/NRO/DNRL/ NWE2	
3/8/2010	ML101100055	02/23/2010 Summary of Closed Meeting With Westinghouse Electric Regarding the Proposed AP1000 Shield Building Construction Inspection Plan Held in Rockville, Maryland.	Proctor, C. M.	NRC/NRO/DNRL/ NWE2	
3/8/2010	ML100710275	2010/03/08 AP-1000 DCD Review - RE: RAI-SRP 5.2.3-CIB1-01 Revision 2		- No Known Affiliation	
3/8/2010	ML100690264	2010/03/08 AP-1000 DCD Review - Acknowledgement of RAI-SRP2.5-RGS1-21		- No Known Affiliation	



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3/9/2010	ML100920517	Transmittal of AP1000 Containment Debris Fuel Assembly Testing and RAI Response Summary Presentation.	Sisk, R. B.	Westinghouse	DCP_NRC_002816
3/10/2010	ML100980070	On-Site Audit Review Plan for the AP1000 Sump Screen Downstream Effects/Long-Term Cooling Analyses.	Donoghue, J. E.	NRC/NRO/DSRA/SRS B	
3/11/2010	ML100750037	2010/03/11 AP-1000 DCD Review - Acknowledgement of RAI-SRP2.2-RSAC-01		- No Known Affiliation	
3/11/2010	ML100750692	2010/03/11 AP-1000 DCD Review - RE: RESEND - OI-SRP 9.1.4-SBPPB-03 Response of 10/15/09		NRC/NRO	
3/12/2010	ML100750693	Technical Report Review, AP1000 Response to Open Item (OI-SRP5.4.1-CIB1-01).		Westinghouse	DCP_NRC_002817 OI-SRP5.4.1-CIB1-01
3/12/2010	ML100750694	Supplementary Information to DCP_NRC_002744 - Re-submittal of Proposed Changes for AP1000 Design Control Document Rev. 18.	Sisk, R. B.	Westinghouse	DCP_NRC_002818
3/12/2010	ML100610207	Supplementary - Proposed Changes for AP1000 DCD Rev. 18.		Westinghouse	DCP_NRC_002818
3/12/2010	ML100610437	Design Control Document Page Mark Ups for Change Numbers 53 and 57.		Westinghouse	DCP_NRC_002818
3/15/2010	ML100610502	12/15/09 Summary of Meeting With Westinghouse Regarding The Review of Chapter 6 of The Design Certification Amendment Held in Rockville, Maryland on December 15, 2009.	Donnelly, P. M.	NRC/NRO/DNRL/ NWE2	

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3/15/2010	ML100740531	Slides - Passive Filtration & Main Control Room Habitability.	Donnelly, P. B.	NRC/NRO/DNRL/NWE2	
3/15/2010	ML100780110	Slides - AP1000 GSI-191 Issue Resolution Recent Informal NRC Questions.	Donnelly, P. M.	NRC/NRO/DNRL/NWE2	GSI-191
3/15/2010	ML100770110	2010/03/15 AP-1000 DCD Review - AP1000 DCD Capture - 3/15/10		NRC/NRO	
3/16/2010	ML100770212	Preliminary Agenda and Representative Draft Slides for Westinghouse Fuel Performance Update Meeting on April 13-14, 2010.		Westinghouse	LTR-NRC-10-16-P
3/17/2010	ML100770213	Audit Report from December 8, 2009 and January 28, 2010, to Review AP1000 Revision 16 and 17 and SFPCS Issues for Chapter 9.	Segala, J. P.	NRC/NRO/DSRA/SBPA	
3/18/2010	ML100770241	2010/03/18 AP-1000 DCD Review - FW: RAI-SRP-5.2.3-CIB1-03 Rev. 1 - Supplemental RAI		- No Known Affiliation	
3/18/2010	ML100820174	2010/03/18 AP-1000 DCD Review - AP1000 DCD Capture - 3/18/2010		NRC/NRO	
3/18/2010	ML100820173	2010/03/18 AP-1000 DCD Review - AP1000 DCD Capture - 3/18/2010		NRC/NRO	
3/18/2010	ML100820176	10 CFR 50.46 Annual Report for the AP1000 Standard Plant Design.	Sisk, R. B.	Westinghouse	DCP_NRC_002824
3/19/2010	ML100820239	Closure Basis for Proprietary Status of AP1000 Shield Building Reports per 10 CFR 2.390.	Sisk, R. B.	Westinghouse	DCP_NRC_002825

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3/19/2010	ML100820240	Submittal of Proprietary and Non-Proprietary Versions of WCAP-17201, Revision 0.	Sisk, R. B.	Westinghouse	AW-10-2778 DCP_NRC_002826 WCAP-17201, Rev 0
3/19/2010	ML100820241	Enclosure 4 to DCP_NRC_002819 - Westinghouse AP1000 - DCD Revision 17 Changes (Post TR-134 Rev. 5) Matrix.		Westinghouse	DCP_NRC_002819
3/19/2010	ML100830504	Revision of Submittal of Change Matrix for APP-GW-GL-700 Revision 17, "AP1000 Design Certification Document."	Sisk, R. B.	Westinghouse	APP-GW-GL-700, Rev 17 AW-10-2778 DCP_NRC_002819
3/19/2010	ML100900294	Enclosure 3 to DCP_NRC_002819 - Westinghouse AP1000 - DCD Revision 17 Changes (Post TR-134 Rev.5) Matrix.		Westinghouse	DCP_NRC_002819
3/19/2010	ML101200064	Westinghouse Response to Open Item on Chapter 19 in Support of AP1000 Design Certification Amendment Application.	Sisk, R. B.	Westinghouse	DCP_NRC_002828
3/19/2010	ML100630779	Transmittal of WCAP-17028, Rev. 5, "Evaluation of Debris-Loading Head-Loss Tests for AP1000 Fuel Assemblies During Loss of Coolant Accidents."	Sisk, R. B.	Westinghouse	DCP_NRC_002827
3/19/2010	ML100820226	AP1000 Safeguards Assessment Submittal (APP-GW-GLR-066, Revision 3).	Winters, J. W.	Westinghouse	APP-GW-GLR-066, Rev 3

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3/22/2010	ML100840079	AP1000 Request For Withholding Information From Public Disclosure, AP1000 Response To Open Item OI-SRP7.2-ICE-01) Proprietary And Non-Proprietary (DCP_NRC_002792).	Clark, P. M.	NRC/NRO/DNRL/NWE2	DCP_NRC_002792
3/22/2010	ML100840080	Urgency Request for RFPA; AP1000 - Review Sections 6.3 and 15.6.5.	Madden, P. M.	NRC/NRO/DNRL	
3/22/2010	ML100840081	Submittal of AP1000 Flow Skirt Testing 1/4 Scale Test Facility Presentation Material dated February 2 and 3, 2010.	Sisk, R. B.	Westinghouse	AW-10-2786 DCP_NRC_002831
3/22/2010	ML100850633	Shearon Harris, Units 2 & 3, Levy, Units 1 & 2 - Submittal of Annual Report for AP1000 Standard Plant Design.	Kitchen, R.	Progress Energy Carolinas, Inc	AP1000 NPD-NRC-2010-024
3/22/2010	ML100850634	APP-1200-S3R-003, Revision 1, "Design Report for the AP1000 Enhanced Shield Building."		Westinghouse	DCP_NRC_002835
3/22/2010	ML100850636	Submittal of "Design Report for the AP1000 Enhanced Shield Building" - dated March 22, 2010 (APP-1200-S3R-003 Rev. 1).	Sisk, R. B.	Westinghouse	AW-10-2781 DCP_NRC_002830
3/22/2010	ML100640499	APP-1200-S3R-003, Rev. 1, "Design Report for AP1000 Enhanced Shield Building," Cover through Page 7-45.		Westinghouse	DCP_NRC_002830
3/22/2010	ML100670312	APP-1200-S3R-003, Rev. 1, "Design Report for AP1000 Enhanced Shield Building," Page 7-46 through End.		Westinghouse	DCP_NRC_002830

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3/23/2010	ML100680151	AP1000 Request For Withholding Information From Public Disclosure, AP1000 Shield Building Construction And Inspection Update Information For The NRC Meeting On February 23, 2010, (DCP_NRC_002767).	Clark, P. M.	NRC/NRO/DNRL/ NWE2	DCP_NRC_002767
3/23/2010	ML100700320	AP1000, Request For Withholding Information From Public Disclosure, AP1000 Shield Building Structural Review Information For The NRC Meeting On January 28, 2010, - January 29, 2010, (Final) (DCP_NRC_002768).	Clark, P. M. Jabbour, K.	NRC/NRO/DNRL/ NWE2	DCP_NRC_002768
3/23/2010	ML100750171	AP1000 Request For Withholding Information From Public Disclosure, AP1000 Shield Building - Benchmarking, Analysis, Testing And Design Overview (Results) (DCP_NRC_002730).	Clark, P. M.	NRC/NRO/DNRL/ NWE2	DCP_NRC_002730
3/23/2010	ML100750190	AP1000 Request For Withholding Information From Public Disclosure, AP1000 Shield Building - Benchmarking, Analysis, Testing and Design Overview (DCP_NRC_002721).	Clark, P. M.	NRC/NRO/DNRL/ NWE2	DCP_NRC_002721
3/24/2010	ML100770461	Summary of the Audit Conducted at Westinghouse Regarding AP1000 Revision 17 Section 3.5.1.4 Automobile Missile Generation Issue Held In Rockville, Maryland on February 24, 2010.	Segala, J. P. Thomas, B. E.	NRC/NRO/DE/SEB1 NRC/NRO/DSRA	

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3/24/2010	ML100850192	04/08/2010 Meeting Notice With Westinghouse to Discuss of Component Interface Module and Diverse Actuation System Technical Reports of the AP1000 Instrumentation and Control System.	Mitra, S. K.	NRC/NRO/DNRL/ NWE2	
3/24/2010	ML100910305	Submittal of "Design Report for the AP1000 Enhanced Shield Building" - dated March 22, 2010 (APP-1200-S3R-003 Rev. 1).	Sisk, R. B.	Westinghouse	APP-1200-S3R-003, Rev 1 DCP_NRC_002835
3/26/2010	ML100680304	2010/03/26 AP-1000 DCD Review - FW: Acknowledgement of RAI SRP6.1.1-CIB1-01 R1		NRC/NRO	
3/29/2010	ML100690367	AP1000, Request for Withholding Information from Public Disclosure, Submittal of Proprietary and Non-Proprietary Technical Document Information, Response to Request for Additional Information on Standard Review Plan Section 6.2.2 (DCP_NRC_002759).	Clark, P. M.	NRC/NRO/DNRL/ NWE2	DCP_NRC_002759
3/29/2010	ML100710226	AP1000 Request for Withholding Information From Public Disclosure, December 15 Meeting Presentation Material On AP1000 GSI-191 Issue Resolution (DCP_NRC_002778).	Clark, P. M.	NRC/NRO/DNRL/ NWE2	

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3/29/2010	ML100890054	AP1000 Request For Withholding Information From Public Disclosure, AP1000 Response To Open Item (OI-SRP7.9-Ice-01) Proprietary And Non-Proprietary (DCP_NRC_002756).	Clark, P. M.	NRC/NRO/DNRL/ NWE2	AP1000 DCP_NRC_002756 OI-SRP7.9-ICE-01
3/29/2010	ML100890069	AP1000, Request for Withholding Information from Public Disclosure, Submittal of Proprietary and Non-Proprietary Technical Document Information, Re-Submittal of Proposed Changes for AP-1000 Design Control Document Revision 18 (DCP_NRC_002744).	Clark, P. M.	NRC/NRO/DNRL/ NWE2	DCP_NRC_002744
3/30/2010	ML100890071	2010/03/30 AP-1000 DCD Review - FW: Acknowledgement of RAI-SRP6.2.2-CIB1-31	Butler, R.	NRC/NRO/DNRL	
3/30/2010	ML100890072	2010/03/30 AP-1000 DCD Review - FW: Acknowledgement of RAI-SRP6.2.2-CIB1-30		NRC/NRO	
3/30/2010	ML100890186	2010/03/30 AP-1000 DCD Review - FW: Emailing: RAI-SRP17.4-SPLA-05 R1 pkg 03-23-10.pdf		NRC/NRO	
3/30/2010	ML100890649	2010/03/30 AP-1000 DCD Review - FW: Emailing: RAI COL03.05.01.04-1 R1 RAI-SRP3.7.1-SEB1-06 R4 OI-SRP3.3.2-SEB1-01 R1 OI-SRP3.7.2-SEB1-02 R1 pkg 03-24-10.pdf		NRC/NRO	

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3/30/2010	ML100890650	Completing Rulemaking on the AP1000 Amendment (Rev. 17).		Westinghouse	
3/30/2010	ML100890651	2010/03/30 AP-1000 DCD Review - FW: Acknowledgement of RAI-SRP2.2-RSAC-01		NRC/NRO	
3/30/2010	ML100890652	2010/03/30 AP-1000 DCD Review - FW: Acknowledgement of RAI-SRP2.5-RGS1-21		NRC/NRO	
3/30/2010	ML100890657	2010/03/30 AP-1000 DCD Review - FW: Acknowledgement of RAI-SRP6.2.2-SRSB-25 R1		NRC/NRO	
3/30/2010	ML100890658	2010/03/30 AP-1000 DCD Review - FW: Acknowledgement of RAI-SRP6.2.2-CIB1-28 R1		NRC/NRO	
3/30/2010	ML100890662	2010/03/30 AP-1000 DCD Review - FW: Acknowledgement of RAI-SRP2.5-RGS1-21		NRC/NRO	
3/30/2010	ML100890665	2010/03/30 AP-1000 DCD Review - FW: Acknowledgement of RAI-SRP2.2-RSAC-01		NRC/NRO	
3/30/2010	ML100890667	2010/03/30 AP-1000 DCD Review - FW: Acknowledgement of new RAI-SRP 5.4.1-CQVB-01 - variable speed drives		NRC/NRO	
3/30/2010	ML100900292	2010/03/30 AP-1000 DCD Review - FW: Acknowledgement of RAI-SRP6.1.2-CIB1-01		NRC/NRO	



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3/30/2010	ML100920282	2010/03/30 AP-1000 DCD Review - FW: Acknowledgement of RAI's - RAI-SRP6.2.2-SPCV-31 & RAI-SRP6.2.2-SPCV-26 R1	NRC/NRO		
3/31/2010	ML100920285	WCAP-17028-NP, Rev. 05, "Evaluation of Debris-Loading Head-Loss Tests for AP1000 Fuel Assemblies During Loss of Coolant Accidents."	Baier, S. L. Byers, W. A. Pezze, J. P. Ruth, K. L. Scaddozzo, G. Schulz, T. L. Song, Y. J.	Westinghouse	APP-MY03-T2C-004
3/31/2010	ML100920287	WCAP-17028-P, Rev. 5, "Evaluation of Debris-Loading Head-Loss Tests for AP1000 Fuel Assemblies During Loss of Coolant Accidents." Section 8.36 to Appendix C-88.	Baier, S. L. Byers, W. A. Pezze, J. P. Ruth, K. L. Scaddozzo, G. Schulz, T. L. Song, Y. J.	Westinghouse	APP-MY03-T2C-002
3/31/2010	ML100920289	WCAP-17028-P, Rev. 5, "Evaluation of Debris-Loading Head-Loss Tests for AP1000 Fuel Assemblies During Loss of Coolant Accidents." Appendix C-89 to C-270.	Baier, S. L. Byers, W. A. Pezze, J. P. Ruth, K. L. Scaddozzo, G. Schulz, T. L. Song, Y. J.	Westinghouse	APP-MY03-T2C-002
3/31/2010	ML100920291	WCAP-17028-P, Rev. 5, "Evaluation of Debris-Loading Head-Loss Tests for AP1000 Fuel Assemblies During Loss of Coolant Accidents." Cover to Section 8-99.	Baier, S. L. Byers, W. A. Pezze, J. P. Ruth, K. L. Scaddozzo, G. Schulz, T. L. Song, Y. J.	Westinghouse	APP-MY03-T2C-002

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3/31/2010	ML100920292	WCAP-17028-P, Rev. 5, "Evaluation of Debris-Loading Head-Loss Tests for AP1000 Fuel Assemblies During Loss of Coolant Accidents." Appendix C-271 to C-428.	Baier, S. L. Byers, W. A. Pezze, J. P. Ruth, K. L. Scaddozzo, G. Schulz, T. L. Song, Y. J.	Westinghouse	APP-MY03-T2C-002
3/31/2010	ML100950116	WCAP-17028-P, Rev. 5, "Evaluation of Debris-Loading Head-Loss Tests for AP1000 Fuel Assemblies During Loss of Coolant Accidents." Appendix C-429 to C-594.	Baier, S. L. Byers, W. A. Pezze, J. P. Ruth, K. L. Scaddozzo, G. Schulz, T. L. Song, Y. J.	Westinghouse	APP-MY03-T2C-002
3/31/2010	ML100970364	WCAP-17028-P, Rev. 5, "Evaluation of Debris-Loading Head-Loss Tests for AP1000 Fuel Assemblies During Loss of Coolant Accidents." Appendix C-595 to End.	Baier, S. L. Byers, W. A. Pezze, J. P. Ruth, K. L. Scaddozzo, G. Schulz, T. L. Song, Y. J.	Westinghouse	APP-MY03-T2C-002
4/1/2010	ML100920509	AP1000 Response to Proposed Open Item (Chapter 3), OI-SRP3.12-EMB-4 R1 and OI-SRP3.6-2-EMB2-01 R1, in Support of the Design Certification Amendment Application.	Sisk, R. B.	Westinghouse	DCP_NRC_002845
4/2/2010	ML100920512	2010/04/02 AP-1000 DCD Review - Emailing: OI-SRP3.6.2-EMB2-01 R1 OI-SRP3.12-EMB-4 R1 pkg 04-01-10.pdf		NRC/NRO	
4/2/2010	ML100920513	2010/04/02 AP-1000 DCD Review - FW: Emailing: OI-SRP3.6.2-EMB2-01 R1 OI-SRP3.12-EMB-4 R1 pkg 04-01-10.pdf		NRC/NRO	

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4/2/2010	ML100920514	2010/04/02 AP-1000 DCD Review - FW: Transmittal of RAI SRP17.4-SPLA-04		NRC/NRO	
4/2/2010	ML100920515	2010/04/02 AP-1000 DCD Review - FW: Transmittal of RAI SRP17.4-SPLA-04		NRC/NRO	
4/2/2010	ML100920518	2010/04/02 AP-1000 DCD Review - FW: Emailing: RAI-SRP17.4-SPLA-05 R1		NRC/NRO	
4/2/2010	ML100950238	2010/04/02 AP-1000 DCD Review - FW: Emailing: RAI-SRP17.4-SPLA-05 R1		NRC/NRO	
4/2/2010	ML100950315	2010/04/02 AP-1000 DCD Review - FW: Acknowledgement of RAI-SRP2.2-RSAC-01		NRC/NRO	
4/5/2010	ML100950469	04/15/2010 Notice of Forthcoming Meeting with Westinghouse to Discuss Request for Additional Information SRP2.2-RSAC-01, Hydrogen Explosion and Other Chemical Hazard of the AP1000 Reactor Site.	Mitra, S. K.	NRC/NRO/DNRL/ NWE2	
4/5/2010	ML101100023	Meeting Minutes of the AP1000 Subcommittee, October 6-7th, 2009 (Open).	Mitchell-Funderbun k, N.	NRC/ACRS	
4/5/2010	ML100570217	Meeting Minutes of the AP1000 July 23-24, 2009 Subcommittee Meeting (Open).	Wang, W.	NRC/ACRS	
4/5/2010	ML100980048	2010/04/05 AP-1000 DCD Review - RE: AP1000 - New draft RAI - RAI-SRP6.2.2-SPCV-32		- No Known Affiliation	
4/7/2010	ML100980072	Memo - Procedure For Chapter Validation And Integration.	McKenna, E. M.	NRC/NRO/DNRL/ NWE2	

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4/8/2010	ML100980143	Federal Register Notice Regarding the ACRS Subcommittee Meeting on AP1000, April 22, 2010.	Dias, A. F.	NRC/ACRS	
4/8/2010	ML101520248	2010/04/08 AP-1000 DCD Review - AP1000 DCD Capture - 4/8/10		NRC/NRO	
4/8/2010	ML101520340	2010/04/08 AP-1000 DCD Review - AP1000 DCD Capture - 4/8/10 2		NRC/NRO	
4/8/2010	ML100900234	AP1000 Diverse Actuation System (DAS) Setpoint Methodology – Westinghouse Responses to NRC Questions.		Westinghouse	
4/8/2010	ML100960417	Slides, 04/08/2010, Discussion on AP1000 Component Interface Module and Defense-in-Depth and Diversity Design.	Jackson, T. W.	NRC/NRO/DE/ICE1	
4/9/2010	ML100990094	04/09/2010 Summary of Category 1 Public Meeting With Westinghouse Regarding the Proposed AP1000 Design Change Packages.	Jaffe, D. H.	NRC/NRO/DNRL/ NWE2	
4/9/2010	ML101040347	New Reactor Information Slides.	Junge, M. A.	NRC/NRO/DCIP/CHPB	
4/9/2010	ML101090173	04/22/2010 Meeting Notice with Westinghouse to Discuss the Effects of High Frequency Seismic Ground Motion on the Seismic Margin of Ap1000 Structures, Systems, and Components.	Sanders, S.	NRC/NRO/DNRL/ NWE2	

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4/9/2010	ML101100022	Westinghouse Submittal of Revision 4 of AP1000 Standard Combined License Technical Report No. 3, "Extension of Nuclear Island Seismic Analysis to Soil Sites."	Sisk, R. B.	Westinghouse	DCP_NRC_002848
4/19/2010	ML101100024	04/26/2010 Revised Meeting Notice with Westinghouse to Discuss the Effects of High Frequency Seismic Ground Motion on the Seismic Margin of AP1000 Structures, Systems, and Components.	Sanders, S.	NRC/NRO/DNRL/ NWE2	
4/20/2010	ML101100026	2010/04/20 AP-1000 DCD Review - FW: AP1000 - New Draft RAI - RAI-SRP6.4-SPCV-11 R1		NRC/NRO	
4/20/2010	ML101100028	2010/04/20 AP-1000 DCD Review - FW: AP1000 - New draft RAI - RAI-SRP6.2.2-SPCV-32		NRC/NRO	
4/20/2010	ML101100054	2010/04/20 AP-1000 DCD Review - FW: AP1000 - New Draft RAI - RAI-SRP6.4-SPCV-09-14		NRC/NRO	
4/20/2010	ML101100059	2010/04/20 AP-1000 DCD Review - FW: AP1000 - New Draft RAI - RAI-SRP6.2.2-CIB1-24		NRC/NRO	
4/20/2010	ML101100066	2010/04/20 AP-1000 DCD Review - FW: Acknowledgement of RAI-SRP2.2-RSAC-01		NRC/NRO	
4/20/2010	ML101100068	2010/04/20 AP-1000 DCD Review - FW: Acknowledgement of RAI-SRP2.5-RGS1-21		NRC/NRO	

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4/20/2010	ML101100071	2010/04/20 AP-1000 DCD Review - FW: Acknowledgement of RAI-SRP 3.9.4-EMB1-01		NRC/NRO	
4/20/2010	ML101121005	2010/04/20 AP-1000 DCD Review - FW: Acknowledgement of RAI-SRP6.2.2-SRSB-25 R1		NRC/NRO	
4/20/2010	ML101121013	2010/04/20 AP-1000 DCD Review - FW: Acknowledgement of RAI-SRP11.3-CHPB-05 and RAI-SRP11.5-CHPB-05		NRC/NRO	
4/20/2010	ML101230513	Westinghouse Response to Request for Additional Information on SRP Section 17 in Support of AP1000 Design Certification Amendment Application.	Sisk, R. B.	Westinghouse	DCP_NRC_002853
4/21/2010	ML101100713	AP1000 Standard COL Technical Report Submittal of APP-GW-S2R-010, Revision 4 (TR3).	Sisk, R. B.	Westinghouse	DCP_NRC_002855

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4/21/2010	ML101160477	Petition to Initiate Special Investigation on Significant AP1000 Design Defect.	Runkle, J. D.	Bellefonte Efficiency & Sustainability Team (BEST) Blue Ridge Environmental Defense League Georgia Women's Action for New Directions Green Party of Florida North Carolina Waste Awareness & Reduction Network (NC WARN) Nuclear Information & Resource Service (NIRS) Nuclear Watch South Sierra Club Southern Alliance for Clean Energy	
4/23/2010	ML101160478	04/26/2010-Notice of Closed Meeting With Westinghouse On The AP1000 One Percent Power Uncertainty Error Issue.	Clark, P. M.	NRC/NRO/DNRL/ NWE2	
4/23/2010	ML101160479	Submittal of AP1000 Calorimetric Power Uncertainty April 26, 2010 Presentation.	Sisk, R. B.	Westinghouse Westinghouse	AW-10-2799 DCP_NRC_002857
4/26/2010	ML101050285	Final Information on Proposed Changes for the AP1000 Design Control Document Rev. 18.	Sisk, R. B.	Westinghouse	DCP_NRC_002850
4/26/2010	ML101180421	Description of Proposed Changes for AP1000 DCD Rev. 18.		Westinghouse	DCP_NRC_002850

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4/27/2010	ML101060298	Audit Plan of AP1000 Design Certification - Regulatory Audit of Open Items: J Groove Welds and Containment Recirculation Screen.	Dixon-Herrity, J. L.	NRC/NRO/DE/EMB2	
4/28/2010	ML101190163	Inspection of Westinghouse Software Verification and Validation of the Macro Code for Design of Reinforced Concrete Structures.	Peralta, J. D.	NRC/NRO/DCIP/CQVP	
4/29/2010	ML101190165	AP1000 Request For Withholding Information From Public Disclosure, Submittal Of Proprietary And Non-Proprietary Versions Of AP1000 Shield Building Construction And Inspection Information For The NRC Meeting 2/23/10 (FINAL) (DCP_NRC_002803).	Clark, P. M.	NRC/NRO/DNRL/ NWE2	
4/29/2010	ML100960243	2010/04/29 AP-1000 DCD Review - RE: OI-SRP 9.1.3-SBPA-13 Rev. 1		- No Known Affiliation	
4/29/2010	ML100970293	2010/04/29 AP-1000 DCD Review - AP1000 DCD Capture - 4/29/2010		NRC/NRO	
4/30/2010	ML102000155	Advanced Final Safety Evaluation Report For Chapter 14 Titled "Verification Programs," of NUREG-1793, Supplement 2 - AP1000 Design Certification Amendment.	McKenna, E. M.	NRC/NRO/DNRL/ NWE2	NUREG-1793
4/30/2010	ML102000156	Enclosure - Chapter 14. Verification Programs.	Jaffe, D. H.	NRC/NRO/DNRL/ NWE2	NUREG-1793



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5/3/2010	ML101200263	04/15/2010 Summary of Category 1 Public Meeting With Westinghouse To Discuss Request For Additional Information SRP2.2-RSAC-01, Hydrogen Explosion and Other Chemical Hazard of The AP1000 Reactor Site.	Mitra, S. K.	NRC/NRO/DNRL/ NWE2	
5/3/2010	ML101050410	Evaluation of Hydrogen Explosion and Other Chemical Hazards to the AP1000 Reactor Plant Westinghouse April 15, 2010.		NRC/NRO/DNRL/ NWE2	
5/3/2010	ML101270258	Inspection Plan for Westinghouse AP1000 Design Certification - Software Verification and Validation Inspection of Macro Structural Design Code.	Kavanagh, K. A.	NRC/NRO/DCIP/CQVP	
5/5/2010	ML101320112	AP1000 Request For Withholding Information From Public Disclosure, Submittal Of Proprietary And Non-Proprietary Versions Of WCAP-17201(APP-GW-GLR-148), Revision 0 (DCP_NRC_002826).	Clark, P. M.	NRC/NRO/DNRL/ NWE2	
5/7/2010	ML101450349	05/20/10-Meeting With Westinghouse on AP1000 Design Certification Amendment - Design Changes To Be Incorporated In Revision 18 To The Design Control Document.	Jaffe, D. H.	NRC/NRO/DNRL/ NWE2	

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5/7/2010	ML101450350	Westinghouse, AP1000 Safeguards Assessment Resubmittal of Figures (APP-GW-GLR-066 Revision 3).	Winters, J.	Westinghouse	NPP_NRC_000002
5/7/2010	ML101450478	Submittal of "Design Report for the AP1000 Enhanced Shield Building" - dated May 7, 2010 (APP-1200-S3R-003 Rev 2).	Sisk, R. B.	Westinghouse	APP-1200-S3R-003, Rev 2 AW-10-2812 DCP_NRC_002865
5/7/2010	ML101450480	APP-1200-S3R-003, Revision 2, "Design Report for the AP1000 Enhanced Shield Building."		Westinghouse	DCP_NRC_002865
5/7/2010	ML101450481	APP-1200-S3R-003, Revision 2, "Design Report for the AP1000 Enhanced Shield Building," Cover Page through Chapter 6, Section 6.3.		Westinghouse	DCP_NRC_002865
5/7/2010	ML101450483	APP-1200-S3R-003, Revision 2, "Design Report for the AP1000 Enhanced Shield Building," Chapter 7, Section 7.1 through Figure 7.11-23.		Westinghouse	DCP_NRC_002865
5/7/2010	ML101450484	APP-1200-S3R-003, Revision 2, Design Report for the AP1000 Enhanced Shield Building," Chapter 7, Figure 7.11-24 through Chapter 8, Section 8.11.		Westinghouse	DCP_NRC_002865
5/7/2010	ML101450485	APP-1200-S3R-003, Revision 2, "Design Report for the AP1000 Enhanced Shield Building," Appendix B, Figure B-78 through Figure B-192.		Westinghouse	DCP_NRC_002865

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5/7/2010	ML101450486	APP-1200-S3R-003, Revision 2, "Design Report for the AP1000 Enhanced Shield Building," Appendix C, Section C.1 through Figure C.4-26.		Westinghouse	DCP_NRC_002865
5/7/2010	ML101450486	APP-1200-S3R-003, Revision 2, Design Report for the AP1000 Enhanced Shield Building," Chapter 9 through Appendix A.		Westinghouse	DCP_NRC_002865
5/7/2010	ML101450487	APP-1200-S3R-003, Revision 2, "Design Report for the AP1000 Enhanced Shield Building," Appendix B, Figure B-1 through Figure B-77.		Westinghouse	DCP_NRC_002865
5/7/2010	ML101180508	APP-1200-S3R-003, Revision 2, "Design Report for the AP1000 Enhanced Shield Building," Appendix B, Figure B-1 through Figure B-77.		Westinghouse	DCP_NRC_002865
5/7/2010	ML101320314	APP-1200-S3R-003, Revision 2, "Design Report for the AP1000 Enhanced Shield Building," Appendix C, Section C.5 through Appendix G.		Westinghouse	DCP_NRC_002865
5/8/2010	ML101320318	06/9-11/2010 Notice of Public Meeting with Westinghouse to Discuss AP1000 Design Certification Amendment - Shield Building Design Methodology.	Gleaves, B. C.	NRC/NRO/DNRL/ NWE2	
5/10/2010	ML101320589	2010/05/10 AP-1000 DCD Review - OI-SRP9.1.3-SBPA-13 SFP AP1000 (1A)] for Review / Comments Due: 5/13/2010		Westinghouse	

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5/10/2010	ML101330044	2010/05/10 AP-1000 DCD Review - OI-SRP9.1.5-SBPB-01 AP1000 (2A)] for Review / Comments Due: 5/13/2010		Westinghouse	
5/10/2010	ML101330203	2010/05/10 AP-1000 DCD Review - Chapter 18 At Risk RAI Responses		- No Known Affiliation	
5/10/2010	ML101380249	2010/05/10 AP-1000 DCD Review - AP1000 P4 SER with No Open Items		NRC/NRO	
5/10/2010	ML101380250	2010/05/10 AP-1000 DCD Review - AP1000 SER - Section 11 Revision based upon staff review of response to RAI-SRP-11.3-CHPB-06		NRC/NRO	
5/10/2010	ML101380254	Description of Proposed Changes for AP-1000 DCD Rev. 18.		Westinghouse	DCP_NRC_002863
5/10/2010	ML101400037	DCD Pages for CN59.		Westinghouse	DCP_NRC_002863
5/10/2010	ML101330142	Westinghouse Submittal of Information on Proposed Changes for AP-1000 Design Certification Amendment Application, Rev. 18.	Sisk, R. B.	Westinghouse	DCP_NRC_002863
5/10/2010	ML101340591	2010/05/10 AP-1000 DCD Review - RE: OI-SRP 9.1.3-SBPA-13 Rev. 1		- No Known Affiliation	
5/11/2010	ML101320319	AP1000 Response to Request for Additional Information (RAI-TR94-NSIR-20, Revision 1).	Sisk, R. B.	Westinghouse	AP1000 DCP_NRC_002871
5/12/2010	ML101320322	2010/05/12 AP-1000 DCD Review - drafts of OI-SRP9.1.3-SBPA-13 R1 and OI-SRP9.1.5-SBPB-01 R2		- No Known Affiliation	

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5/12/2010	ML101320323	2010/05/12 AP-1000 DCD Review - FW: OI-SRP9.1.4-SBPA-03 AP1000 (2A)] for Review / Comments Due: 5/13/2010		- No Known Affiliation	
5/12/2010	ML101320597	2010/05/12 AP-1000 DCD Review - RCP Variable Frequency drives.		- No Known Affiliation	
5/12/2010	ML101380347	2010/05/12 AP-1000 DCD Review - AP1000 Draft OI/RAI Responses - 5/12/10		NRC/NRO	
5/12/2010	ML101330047	2010/05/12 AP-1000 DCD Review - AP1000 Draft OI/RAI Responses - 5/12/10		NRC/NRO	
5/12/2010	ML101330204	Westinghouse Submittal of Revised AP100 Safeguards Assessment APP-GW-GLR-066, Revision 4.	Winters, J.	Westinghouse	NPP_NRC_0000003
5/13/2010	ML101240969	2010/05/13 AP-1000 DCD Review - FW: AP1000 P4 SER with No Open Items		NRC/NRO	
5/13/2010	ML101330376	2010/05/13 AP-1000 DCD Review - FW: AP1000 SER - Section 11 Revision based upon staff review of response to RAI-SRP-11.3-CHPB-06		NRC/NRO	
5/14/2010	ML100910165	05/27/2010, Meeting With Westinghouse On AP1000 Design Certification Amendment - Nuclear Regulatory Commission Management Meeting On Selected Technical or Regulatory Issues.	Jaffe, D. H.	NRC/NRO/DNRL/ NWE2	

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5/14/2010	ML100910522	Transmittal of Safety Evaluation for AP1000 Design Control Document Amendment, Revision 17, Certification Phase 2.	McKirgan, J. B.	NRC/NRO/DSRA/SPCV	
5/17/2010	ML101100194	Advanced Final Safety Evaluation Report For Chapter 10 Titled "Steam And Power Conversion System," Of NUREG-1793, Supplement 2 - AP1000 Design Certification Amendment.	McKenna, E. M.	NRC/NRO/DNRL/NWE2	
5/17/2010	ML101250336	Steam And Power Conversion System.		NRC/NRO/DNRL/NWE2	
5/18/2010	ML101370640	AP1000 Request for Withholding Information from Public Disclosure, Transmittal of Proprietary and Non-Proprietary Versions of AP1000 Containment Debris Fuel Assembly Testing and Request for Additional Information Response Summary Presentation (DCP_NRC...	Clark, P. M.	NRC/NRO/DNRL/NWE2	DCP_NRC_002816 DPC_NRC_002812
5/18/2010	ML101400320	AP1000 Request for Withholding Information from Public Disclosure, Transmittal of Proprietary and Non-Proprietary Versions of Design Report for the AP1000 Enhanced Shield Building (DCP_NRC_002830 and DCP_NRC_002835).	Clark, P. M.	NRC/NRO/DNRL/NWE2	DCP_NRC_002830 DCP_NRC_002835
5/18/2010	ML100120788	Announcement Letter for NRC Design Certification Inspection of Westinghouse at Purdue University.	Peralta, J. D.	NRC/NRO/DCIP/CQVP	

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5/19/2010	ML100120839	2010/05/19 AP-1000 DCD Review - Acknowledgement of receipt of RAIs RAI-SRP3.7.1-SEB1-19, RAI-TR03-001 R1, -005 R2, -007 R2, and -037		- No Known Affiliation	
5/20/2010	ML100640742	Letter - Safety Evaluation Report With Open Items For Chapter 22, "Regulatory Treatment Of Non-Safety Systems," Of NUREG-1793, Supplement 2 - AP1000 Design Certification Amendment.	McKenna, E. M.	NRC/NRO/DNRL/ NWE2	NUREG-1793
5/20/2010	ML101200195	Safety Evaluation Report with Open Items For Chapter 22, "Regulatory Treatment Of Non-Safety Systems," Of NUREG-1793, Supplement 2 - AP1000 Design Certification Amendment.		NRC/NRO	NUREG-1793
5/20/2010	ML101400038	P4 Chapter 4 (Reactor).		NRC/NRO/DNRL/ NWE2	
5/20/2010	ML101400249	Advanced Final Safety Evaluation Report for Chapter 4 Titled "Reactor," of NUREG-1793, Supplement 2 - AP1000 Design Certification Amendment.	McKenna, E. M.	NRC/NRO/DNRL/ NWE2	
5/20/2010	ML101400322	2010/05/20 AP-1000 DCD Review - AP1000 DCD Capture - 5/20/10		NRC/NRO	
5/20/2010	ML101400571	Inspection Plan for Westinghouse AP1000 Design Certification - Dedication of Purdue Testing Services.	Jacobson, J.	NRC/NRO/DCIP/CQVB	

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5/20/2010	ML101400664	2010/05/20 AP-1000 DCD Review - FW: Acknowledgement of receipt of RAIs RAI-SRP3.7.1-SEB1-19, RAI-TR03-001 R1, -005 R2, -007 R2, and -037		NRC/NRO	
5/20/2010	ML101440386	Transmittal of Safety Evaluation for AP1000 Design Control Document Amendment, Revision 17, Certification Phase 2.	McKirgan, J. B. Terao, D. A.	NRC/NRO/DSRA/ SPCV	
5/20/2010	ML101440387	Transmittal of Safety Evaluation for AP1000 Design Control Document Amendment, Revision 17, Certification Phase 2.		NRC/NRO	
5/20/2010	ML101440388	Submittal of "AP1000 DCD Revision 18 Update Summary of New Change Notices - May 20, 2010." Presentation Slides.	Sisk, R. B.	Westinghouse	DCP_NRC_002884
5/20/2010	ML101450198	Submittal of AP-1000 DCD Revision 18 Update Summary of New Change Notices - May 20, 2010 Presentation.		Westinghouse	DCP_NRC_002884
5/20/2010	ML101450300	Submittal of AP1000 DCD Revision 18 Update Summary of New Change Notices - May 20, 2010 Presentation.		Westinghouse	DCP_NRC_002884
5/20/2010	ML101300682	Westinghouse - Response to Proposed Open Item (Chapter 3), OI-SRP3.2.1-EMB2-06 R1, in Support of the AP1000 Design Certification Amendment Application.	Sisk, R. B.	Westinghouse	AP1000 DCP_NRC_002886
5/20/2010	ML101300701	2010/05/20 AP-1000 DCD Review - RE: Draft RAI-TR09-08 Rev 5 to WEC		- No Known Affiliation	



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5/21/2010	ML101450248	Letter re: Advanced Final Safety Evaluation Report for Chapter 12 Titled "Radiation Protection," Of NUREG-1793, Supplement 2 - AP1000 Design Certification Amendment.	McKenna, E. M.	NRC/NRO/DNRL/NWE2	NUREG-1793, Suppl 2
5/21/2010	ML101470257	SER - Advanced Final Safety Evaluation Report for Chapter 12 Titled "Radiation Protection," Of NUREG-1793, Supplement 2 - AP1000 Design Certification Amendment.		NRC/NRO	NUREG-1793, Suppl 2
5/21/2010	ML101470258	Westinghouse, AP 1000 Response to Request for Additional Information (SRP 18), in support of the AP1000 Design Certification Amendment Application.	Sisk, R. B.	Westinghouse	DCP_NRC_002883
5/21/2010	ML101580471	Final Information on Proposed Changes for the AP1000 Design Control Document Rev. 18.	Sisk, R. B.	Westinghouse	AW-10-2817 DCP_NRC_002874
5/21/2010	ML101450280	Enclosures 3, 6, Description of Proposed Changes for AP1000 DCD Rev. 18, Proprietary.		Westinghouse	DCP_NRC_002874
5/21/2010	ML101410193	AP1000 DCD Impact Document Submittal of APP-GW-GLR-115 (TR 115), Revision 2.	DeBlasio, J. Lapay, W. S. Sisk, R. B.	Westinghouse	AP1000 APP-GW-GLR-115, Rev 2 DCP_NRC_002889 TR 115
5/22/2010	ML092650374	2010/05/22 AP-1000 DCD Review - Draft RAI-SRP3.8.3-SEB1-04, Rev. 2		NRC/NRO	

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5/24/2010	ML101340177	Federal Register Notice Regarding the ACRS Subcommittee on AP1000, June 24-25, 2010.	Wang, W.	NRC/ACRS	
5/25/2010	ML101400117	P4 Chapter 11 (Radioactive Waste Management).	Sanders, S.	NRC/NRO/DNRL/NWE2	
5/25/2010	ML101410466	Ltr - Advanced Final Safety Evaluation Report for Chapter 11 Titled "Radioactive Waste Management," of NUREG-1793, Supplement 2 - AP1000 Design Certification Amendment.	McKenna, E. M.	NRC/NRO/DNRL/NWE2	
5/25/2010	ML101450281	G20100259/EDATS: OEDO-2010-0329 - Linda Herr and Carolyn Harves, E-mail re: Briefing Package for Meeting with Westinghouse Electric on June 4, 2010.	Jaffe, D. H.	NRC/NRO/DNRL/NWE2	G20100259/EDATS: OEDO-2010-0329
5/25/2010	ML101450302	Advisory Committee On Reactor Safeguards AP1000 Subcommittee Review of Selected Chapters of the Safety Evaluation Report with Open Items - AP1000 Design Certification Amendment.	Matthews, D. B.	NRC/NRO/DNRL	
5/25/2010	ML101460555	2010/05/25 AP-1000 DCD Review - FW: Draft RAI-SRP3.8.3-SEB1-04, Rev. 2		NRC/NRO	
5/25/2010	ML101470307	2010/05/25 AP-1000 DCD Review - FW: Draft RAI-TR09-08 Rev 5 to WEC		NRC/NRO	
5/25/2010	ML101470308	Regulatory Audit Report for the AP1000 Sump Screen Downstream Effects/Long-Term Cooling Analyses.	Donoghue, J. E.	NRC/NRO/DSRA/SRS B	

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5/25/2010	ML101170634	Information on Proposed Changes for the AP1000 Design Control Document Rev. 18.	Sisk, R. B.	Westinghouse	AP1000 DCP_NRC_002879
5/25/2010	ML101450006	Enclosure 3, Description of Proposed Changes for AP1000 DCD Rev. 18, Proprietary.		Westinghouse	DCP-NRC-002879 DCP_NRC_002818
5/26/2010	ML101450314	Audit Plan For Review of the AP1000 Fuel Rack Seismic Issues - June 2 - 3, 2010.	Buckberg, P. H.	NRC/NRO/DNRL/ NWE2	
5/26/2010	ML101450327	05/07/2010 Summary of the Audit Conducted on AP1000 Document APP-PXS-M3C-052, R1, at Westinghouse, Rockville, Maryland.	Makar, G. L.	NRC/NRO/DE/CIB1	APP-PXS-M3C-052, Rev 1
5/26/2010	ML101450331	04/26/2010-Summary of Category 1 Public Meeting Held with Westinghouse to Discuss AP1000 DC Adequacy of Seismic Margin.	Sanders, S. R.	NRC/NRO/DNRL/ NWE2	
5/26/2010	ML101450341	Westinghouse Draft AP1000 DCD SER Open Item Review Resolution.		Westinghouse	OI-SRP19.0-SPLA-12
5/26/2010	ML101480032	Westinghouse Draft AP1000 DCD SER Open Item Review Resolution.		Westinghouse	OI-SRP19.0-SPLA-12-01
5/26/2010	ML101480034	Interim Staff Guidance on Implementation of a Probabilistic Risk Assessment-Based Seismic Margin Analysis for New Reactors DC/COL-ISG-020.		NRC/NRO/DNRL/ NWE2	DC/COL-ISG-020
5/26/2010	ML101520167	2010/05/26 AP-1000 DCD Review - AP1000 - New Draft RAI - RAI-SRP6.2.2-SPCV-25 R2		NRC/NRO	

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5/26/2010	ML101870162	2010/05/26 AP-1000 DCD Review - FW: AP1000 - New Draft RAI - RAI-SRP6.1.1-CIB1-02		NRC/NRO	
5/26/2010	ML101870164	2010/05/26 AP-1000 DCD Review - RE: AP1000 - New Draft RAI - RAI-SRP6.1.1-CIB1-02		- No Known Affiliation	
5/26/2010	ML101870168	2010/05/26 AP-1000 DCD Review - Acknowledgement of RAI-TR03-32 R5, and RAI-SRP3.7.1-SEB1-04 R4, -06 R5, and -15 R3		- No Known Affiliation	
5/26/2010	ML101470631	2010/05/26 AP-1000 DCD Review - Acknowledgement of Draft RAI-TR85-SEB1-36 R3		- No Known Affiliation	
5/26/2010	ML101470970	2010/05/26 AP-1000 DCD Review - Acknowledgement of OI-SRP7.1-ICE-02 R1, -03 R1; OI-SRP7.2-ICE-01 R1, -02 R1; OI-SRP7.8-DAS-04 R1 & OI-SRP7.9-ICE-04 R1		- No Known Affiliation	
5/27/2010	ML101470989	Advisory Committee on Reactor Safeguards AP1000 Subcommittee Review of Chapter 11, "Radioactive Waste Management," of The Safety Evaluation Report With Open Items - AP1000 Design Certification Amendment.	Matthews, D. B.	NRC/NRO/DNRL	
5/27/2010	ML101520023	Transmittal of Safety Evaluation for AP1000 DCD Amendment; Revision 17, Certification Phase 2 - Long Term Cooling.	Donoghue, J. E.	NRC/NRO/DSRA/SRS B	

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5/27/2010	ML101520025	Structural Engineering Branch 1 Input to Safety Evaluation Report with Open Items Under Standard Review Plan 3.8 for AP1000 Design Control Document, Revision 17.	Thomas, B. E.	NRC/NRO/DE/SEB1	
5/27/2010	ML101520188	2010/05/27 AP-1000 DCD Review - RE: AP1000 SER3.5.1.4 Supplemental		NRC/NRO	
5/27/2010	ML101530049	2010/05/27 AP-1000 DCD Review - RE: AP1000 Amendment 17 SER for 3.2		NRC/NRO	
5/27/2010	ML101530050	AP1000 Response to Request for Additional Information (SRP3), RAI COL03.05.01.04-1 R2, in Support of the Design Certification Amendment Application.	Sisk, R. B.	Westinghouse	DCP_NRC_002894
5/27/2010	ML101440374	AP1000 Response to Request for Open Item (SRP 5), OI-SRP5.4.1-CIB1-01 R1 in Support of the Design Certification Amendment Application.	Sisk, R. B.	Westinghouse	DCP_NRC_002896 WEM_DCP_000472
5/28/2010	ML101480035	AP1000, Request for Withholding Information From Public Disclosure, Transmittal of Proprietary and Non-Proprietary Versions of Design Report for the AP1000 Enhanced Shield Building (DCP_NRC_002830 and DCP_NRC_002835).	Clark, P. M.	NRC/NRO/DNRL/ NWE2	DCP_NRC_002830 DCP_NRC_002835
5/28/2010	ML101530046	2010/05/28 AP-1000 DCD Review - FW: AP1000 - New Draft RAI - RAI-SRP6.2.2-SPCV-25 R2		NRC/NRO	

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5/28/2010	ML101530048	2010/05/28 AP-1000 DCD Review - FW: AP1000 - New Draft RAI - RAI-SRP6.1.1-CIB1-02		NRC/NRO	
5/28/2010	ML101530052	Transmittal of Revision 4 to WCAP-15775, "AP1000 Instrumentation & Control Defense-in-Depth & Diversity Report."	Sisk, R. B.	Westinghouse	APP-GW-J1R-004 DCP_NRC_002901
5/28/2010	ML101530053	AP1000 Response to Request for Additional Information (SRP6.2.2).	Sisk, R. B.	Westinghouse	AP1000 AW-10-2826 DCP_NRC_002899 SRP 6.2.2
5/28/2010	ML101530055	AP1000 Standard COL Technical Report Submittal of APP-GW-GLR-133, Revision 1 (TR 133).	Sisk, R. B.	Westinghouse	DCP_NRC_002898
5/28/2010	ML101530056	AP1000 Response to Request for Additional Information (SRP 2), RAI-SRP2.2-RSAC-01 R1 and RAI-SRP2.5-RGS1-21 R1 in Support of the Design Certification Amendment Application.	Sisk, R. B.	Westinghouse	DCP_NRC_002897
5/28/2010	ML101530183	Submittal of WCAP-17226, Revision 1, "Assessment of Potential Interactions Between the Core Exit Thermocouple Signals and the Self-Powered Detector Signals in the AP1000 In-Core Instrumentation System."	Sisk, R. B.	Westinghouse	DCP_NRC_002903

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5/28/2010	ML101530184	WCAP-17226, Revision 1, "Assessment of Potential Interactions Between the Core Exit Thermocouple Signals and the Self-Powered Detector Signals in the AP-1000 In-Core Instrumentation System."	Ewald, J. G. Heibel, M. D.	Westinghouse	DCP_NRC_002903
5/28/2010	ML101540159	Submittal of WCAP-17179, Revision 1 - Proprietary "Component Interface Module Technical Report."	Sisk, R. B.	Westinghouse	AW-10-2829 DCP_NRC_002904 WCAP-17179, Rev 1
5/28/2010	ML101540160	WCAP-17179-P, Rev 1, "AP1000 Component Interface Module Technical Report."	Tweedle, T. W.	Westinghouse	APP-GW-GLR-143, Rev 1 DCP_NRC_002904
5/28/2010	ML101520021	Submittal of WCAP-17184, Revision 1 - Prop "AP1000TM Diverse Actuation System Planning and Functional Design Summary Technical Report".	Sisk, R. B.	Westinghouse	AP1000 AW-10-2827 DCP_NRC_002902
5/30/2010	ML101650116	2010/05/30 AP-1000 DCD Review - RE: Emailing: RAI-SRP7.0-ICE-01 thru RAI-SRP7.0-ICE-15 pkg 05-28-10.zip		NRC/NRO	
5/31/2010	ML101650117	APP-OCS-GEH-322 Revision D, "Human Factors Engineering Integrated System Validation Plan" (Non-Proprietary).	Reed, J. I.	Westinghouse	DCP_NRC_002912
5/31/2010	ML101650118	APP-OCS-GEH-323 Revision B, "Human Factors Engineering Integrated System Validation Scenario Information" (Non-Proprietary).	Briggs, D. W.	Westinghouse	DCP_NRC_002912

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5/31/2010	ML101520022	APP-OCS-GEH-320 Revision D, "Human Factors Engineering Integrated System Validation Plan" (Proprietary).	Reed, J. I.	Westinghouse	DCP_NRC_002912
5/31/2010	ML101520024	APP-OCS-GEH-321, Revision B, "Human Factors Engineering Integrated System Validation Scenario Information" (Proprietary).	Briggs, D. W.	Westinghouse	DCP_NRC_002912
6/1/2010	ML101520026	2010/06/01 AP-1000 DCD Review - FW: Emailing: RAI-SRP7.0-ICE-01 thru RAI-SRP7.0-ICE-15 pkg 05-28-10.zip		NRC/NRO	
6/1/2010	ML101520168	2010/06/01 AP-1000 DCD Review - FW: AP1000 SER3.5.1.4 Supplemental		NRC/NRO	
6/1/2010	ML101520201	2010/06/01 AP-1000 DCD Review - FW: AP1000 Amendment 17 SER for 3.2		NRC/NRO	
6/1/2010	ML101520202	2010/06/01 AP-1000 DCD Review - FW: AP1000 - New Draft RAI - RAI-SRP6.1.1-CIB1-02		NRC/NRO	
6/1/2010	ML101520442	2010/06/01 AP-1000 DCD Review - RE: AP1000 - New Draft RAI's - RAI-SRP6.2.2-SRSB-43 and -44		- No Known Affiliation	
6/1/2010	ML101520444	2010/06/01 AP-1000 DCD Review - FW: AP1000 - New Draft RAI's - RAI-SRP6.2.2-SRSB-43 and -44		NRC/NRO	
6/1/2010	ML101520445	2010/06/01 AP-1000 DCD Review - Acknowledgement of OI-SRP 9.1.3-SBPA-13 R2		- No Known Affiliation	



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6/1/2010	ML101540246	2010/06/01 AP-1000 DCD Review - AP1000 DCD Capture - 6/1/2010		NRC/NRO	
6/1/2010	ML101550065	2010/06/01 AP-1000 DCD Review - FW: Acknowledgement of OI-SRP 9.1.3-SPPA-13 R2		NRC/NRO	
6/1/2010	ML101530009	2010/06/01 AP-1000 DCD Review - Acknowledgement of RAI-SRP3.12-EMB1-09		- No Known Affiliation	
6/1/2010	ML101530216	AP1000 Response to Request for Additional Information (SRP 6), RAI-SRP6.4-SPCV-16, in Support of the Design Certification Amendment Application.	Sisk, R. B.	Westinghouse	DCP_NRC_002907
6/2/2010	ML101530217	2010/06/02 AP-1000 DCD Review - FW: Acknowledgement of RAI-SRP3.12-EMB1-09		NRC/NRO	
6/2/2010	ML101530514	2010/06/02 AP-1000 DCD Review - Closure/dispositioning of two OIs for EMB (RAIs SRP3.9.1-EMB1-03 and 04		NRC/NRO	
6/2/2010	ML101530529	2010/06/02 AP-1000 DCD Review - FW: Closure/dispositioning of two OIs for EMB (RAIs SRP3.9.1-EMB1-03 and 04		NRC/NRO	
6/2/2010	ML101530531	06/15/10 Notice of Meeting with Westinghouse to Discuss AP1000 Instrumentation and Control System Open Issues to Complete Final Safety Evaluation Report.	Mitra, S. K.	NRC/NRO/DNRL/ NWE2	

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6/2/2010	ML101530582	2010/06/02 AP-1000 DCD Review - AP1000 Section 3.2.1 and 2 SE		NRC/NRO	
6/2/2010	ML101530583	2010/06/02 AP-1000 DCD Review - FW: AP1000 Section 3.2.1 and 2 SE		NRC/NRO	
6/2/2010	ML101540014	2010/06/02 AP-1000 DCD Review - Conversion of OI SRP3.9.3-EMB2-05 to a Confirmatory item		NRC/NRO	
6/2/2010	ML101580469	2010/06/02 AP-1000 DCD Review - FW: Conversion of OI SRP3.9.3-EMB2-05 to a Confirmatory item		NRC/NRO	
6/2/2010	ML101580470	2010/06/02 AP-1000 DCD Review -		NRC/NRO	
6/2/2010	ML101580475	Submittal of Non-Proprietary Document - WCAP-17184-NP, Revision 1, "AP1000 Diverse Actuation System Planning and Functional Design Summary Technical Report".	Darr, D. G. Peasley, S. A. Sisk, R. B.	Westinghouse	AP1000 DCP_NRC_002908 WCAP-17184-NP, Rev 1
6/2/2010	ML101540015	AP1000 Standard COL Technical Report Submittal of APP-GW-GLR-026, Revision 3 (TR44).	Sisk, R. B.	Westinghouse	APP-GW-GLR-026, Rev 3 DCP_NRC_002905 TR 44
6/2/2010	ML101540247	AP1000 Standard COL Technical Report Submittal of APP-GW-GLR-033, Revision 4 (TR54).	Sisk, R. B.	Westinghouse	DCP_NRC_002906
6/3/2010	ML101550678	2010/06/03 AP-1000 DCD Review - FW:		NRC/NRO	
6/3/2010	ML101520626	2010/06/03 AP-1000 DCD Review - FW: Acknowledgement of RAI-SRP3.12-EMB1-09		NRC/NRO	

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6/3/2010	ML101550137	2010/06/03 AP-1000 DCD Review - FW: Revised Responses to RAI SRP5.2.3-CIB1-01 Rev 2 Resulting from W/NRC Phone Call on May 26		- No Known Affiliation	
6/4/2010	ML101550168	AP1000, Request for Withholding Information from Public Disclosure, AP1000 Response to Open Item (OI-SRP8.3.2-Eeb-05) Proprietary and Non-Proprietary (DCP_NRC_002858).	Clark, P. M.	NRC/NRO/DNRL/ NWE2	DCP_NRC_002858
6/4/2010	ML101550677	06/09-11/2010 Public Meeting with Westinghouse on AP1000 Design Certification Amendment - Shield Building Design Methodology.	Gleaves, B. C.	NRC/NRO/DNRL/ NWE2	
6/4/2010	ML101550679	06/10/2010, 06/17/2010, & 06/24/2010 Notice of Meetings With Westinghouse On AP1000 Design Certification Amendment - Nuclear Regulatory Commission Meeting On Selected Technical Or Regulatory Issues.	Jaffe, D. H.	NRC/NRO/DNRL/ NWE2	
6/4/2010	ML101540490	2010/06/04 AP-1000 DCD Review - RE: Draft of OI-SRP9.1.3-SBPA-13 R2.doc		- No Known Affiliation	
6/4/2010	ML101590167	2010/06/04 AP-1000 DCD Review - AP1000 DCD Capture - 6/4/10 Drafts		NRC/NRO	

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6/7/2010	ML101670075	Transmittal of Safety Evaluation for AP1000 Design Control Document Amendment, Revision 17, Certification Phase 2.	McKirgan, J. B.	NRC/NRO/DSRA/SBCV	AP1000
6/7/2010	ML101590083	2010/06/07 AP-1000 DCD Review - SUBMITTAL4BC - Final Supplement Input from SBPB to AP1000 DCD Safety Evaluation Report Section 3.5.1.4		NRC/NRO	
6/7/2010	ML101590164	2010/06/07 AP-1000 DCD Review - RE: Seismic Margin RAI - Chapter 19		- No Known Affiliation	
6/8/2010	ML101590168	2010/06/08 AP-1000 DCD Review - FW: Acknowledgement of RAI-SRP3.12-EMB1-09		NRC/NRO	
6/8/2010	ML101590496	2010/06/08 AP-1000 DCD Review - FW: SEB1 Contribution to AP1000 DCD SER 3.5.1.4		NRC/NRO	
6/8/2010	ML101590497	2010/06/08 AP-1000 DCD Review - FW: SUBMITTAL4BC - Final Supplement Input from SBPB to AP1000 DCD Safety Evaluation Report Section 3.5.1.4		NRC/NRO	
6/8/2010	ML101650114	2010/06/08 AP-1000 DCD Review - FW: SUBMITTAL4BC - Final Supplement Input from SBPB to AP1000 DCD Safety Evaluation Report Section 3.5.1.4		NRC/NRO	

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6/8/2010	ML101520592	2010/06/08 AP-1000 DCD Review - FW: SUBMITTAL4BC - Final Supplement Input from SBPB to AP1000 DCD Safety Evaluation Report Section 3.5.1.4		NRC/NRO	
6/8/2010	ML101540188	Submittal of Proprietary and Non-Proprietary Integrated System Validation (ISV) Documents for Docketing.	Sisk, R. B.	Westinghouse	AW-10-2833 DCP_NRC_002912
6/9/2010	ML101600521	AP1000 Request for Withholding Information from Public Disclosure, Transmittal Of Proprietary and Non-Proprietary Versions Of Design Report for the AP1000 Enhanced Shield Building (DCP_NRC_002830 and DCP_NRC_002835).	Clark, P. M.	NRC/NRO/DNRL/ NWE2	DCP_NRC_002830 DCP_NRC_002835
6/9/2010	ML101600522	05/26/2010-Summary of Category 2 Public Meeting with Nuclear Energy Institute to Discuss Health Physics Issues for New Reactors.	Stutzcage, E. E.	NRC/NRO/DCIP/CHPB	
6/9/2010	ML101600523	2010/06/09 AP-1000 DCD Review - Additional information relative to RAI SRP5.2.3-CIB1-01 Rev 2		- No Known Affiliation	
6/9/2010	ML101650261	2010/06/09 AP-1000 DCD Review - FW: RAI-SRP5.4.1 CQVB-01 Draft R!		- No Known Affiliation	
6/9/2010	ML101650263	2010/06/09 AP-1000 DCD Review - AP1000 DCD Capture - 6/9/10 draft RAIs responses		NRC/NRO	

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6/9/2010	ML101760088	WESTEMS User's Manual Addenda: Guidance Documents for the User.	Sisk, R. B.	Westinghouse	DCP_NRC_002914
6/9/2010	ML101610444	"WESTEMS Version 4.5.2 User's Manual Addendum 3: Peak and Valley Selection and Documentation Guidelines," Revision 0, dated May 28, 2010.		Westinghouse	DCP_NRC_002914 LTR-PAFM-10-100
6/9/2010	ML101610459	Westinghouse AP1000 Shield Building Structural Review Update - Public Session, June 9, 2010 by Bruce Bevilacqua, Vice President, Engineering, Westinghouse Nuclear Power Plants	Bevilacqua, B.	Westinghouse	
6/10/2010	ML101720019	Memo: Safety Evaluation Report (Ser) For The AP1000 DCD FSAR (Proposed To Revision 17) Section 2.2 Nearby Industrial, Transportation, And Military Facilities.	Samaddar, S. K.	NRC/NRO/DSER/RSA C	
6/10/2010	ML101620262	Enclosure: Safety Evaluation Report (SER) For The AP1000 DCD FSAR (Proposed To Revision 17) Section 2.2 Nearby Industrial, Transportation, And Military Facilities. Enclosure: Safety Evaluation Report (SER) for The AP1000 DCD Final Safety Analysis Report.		NRC/NRO/DSER/RSA C	

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6/10/2010	ML101720011	2010/06/10 AP-1000 DCD Review - RE: Revised Responses to RAI SRP5.2.3-CIB1-01 Rev 2 Resulting from W/NRC Phone Call on May 26		- No Known Affiliation	
6/11/2010	ML101650058	AP1000 Revision 15 Certified Design Complete ITAAC List.	Jardaneh, M. M.	NRC/NRO/DCIP/CTSB	
6/13/2010	ML101670133	2010/06/13 AP-1000 DCD Review - smaller file sizes		- No Known Affiliation	
6/14/2010	ML101670135	2010/06/14 AP-1000 DCD Review - FW: Seismic Margin RAI - Chapter 19		NRC/NRO	
6/14/2010	ML101670136	AP1000 Response to Request for Additional Information (SRP6.2.2), RAI-SRP6.2.2-SRSB-44 in Support of the Design Certification Amendment Application.	Sisk, R. B.	Westinghouse	AW-10-2853 DCP_NRC_002917
6/14/2010	ML101720013	Information on Proposed Changes for the AP1000 Design Control Document Rev. 18.	Sisk, R. B.	Westinghouse	AW-10-2830 DCP_NRC_002909
6/14/2010	ML101540211	2010/06/14 AP-1000 DCD Review - Fuel Rack RAI Drafts (per audit discussions) - audit actions 8 and 16		- No Known Affiliation	
6/15/2010	ML101670077	Follow-up Audit of Design and Procurement Specifications for Pumps, Valves, and Dynamic Restraints for AP1000 Reactor.	Scarborough, T. G.	NRC/NRO/DE/CIB2	

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6/16/2010	ML101680654	AP1000 Request For Withholding Information From Public Disclosure, Submittal Of Proprietary And Non-Proprietary Versions Of The AP1000 Calorimetric Power Uncertainty April 26, 2010, Presentation (DCP_NRC_002857).	Clark, P. M.	NRC/NRO/DNRL/NWE2	DCP_NRC_002857
6/16/2010	ML101720014	2010/06/16 AP-1000 DCD Review - AP1000 DCD Capture - 6/16/10		NRC/NRO	
6/16/2010	ML101690454	6/16/2010 Construction Reactor Oversight Process Category 2 Public Meeting Handout: Risk Importance Table.		NRC/NRO/DCIP	
6/16/2010	ML101690455	2010/06/16 AP-1000 DCD Review - Resubmit proper draft RAI-TR44-09 R2A		- No Known Affiliation	
6/17/2010	ML101820084	Chapter 9 Safety Evaluation Report (SER) with Open Items Proprietary Review - Update.	Sisk, R. B.	Westinghouse	DCP_NRC_002919
6/17/2010	ML101720017	Enclosure 2, Westinghouse AP1000 Chapter 9 SER - Update List of Proprietary Information and Text.		Westinghouse	DCP_NRC_002919
6/17/2010	ML101720018	2010/06/17 AP-1000 DCD Review - Response to RAI-SRP6 1 1-CIB1-02 R0-draft.pdf		- No Known Affiliation	
6/18/2010	ML101720020	2010/06/18 AP-1000 DCD Review - Draft version of RAI-TR44-01 R1B		- No Known Affiliation	
6/18/2010	ML101720645	2010/06/18 AP-1000 DCD Review - AP1000 DCD Capture - 6/18/10 drafts		NRC/NRO	



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6/18/2010	ML101720646	2010/06/18 AP-1000 DCD Review - AP1000 DCD Capture - 6/18/10 drafts		NRC/NRO	
6/18/2010	ML101380217	Submittal of Information on Proposed Changes for the AP1000 Design Control Document Rev. 18.	Sisk, R. B.	Westinghouse	DCP_NRC_002918
6/21/2010	ML101680069	Audit Report For Lifecycle Phases One And Two Documentation Validation Related To Protection And Safety Monitoring System And Diverse Actuation System For The AP1000 Design Certification Amendment Application.	McKenna, E. M.	NRC/NRO/DNRL/ NWE2	
6/21/2010	ML101740602	Audit Report For Lifecycle Phases One And Two Documentation Validation Related To Protection And Safety Monitoring System And Diverse Actuation System For The AP1000 Design Certification Amendment Application.	McKenna, E. M.	NRC/NRO/DNRL/ NWE2	
6/21/2010	ML101790090	Ltr to Sadler Rupperecht from David Matthews re: AP1000 Design Certification Amendment Schedule.	Matthews, D. B.	NRC/NRO/DNRL	
6/21/2010	ML101790091	Letter - Audit Report For Lifecycle Phases One And Two Documentation Validation Related To Protection And Safety Monitoring System And Diverse Actuation System For The AP1000 Design Certification Amendment Application.	McKenna, E. M.	NRC/NRO/DNRL/ NWE2	

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6/22/2010	ML101790362	AP1000 Response to Request for Additional Information (SRP6.2.2).	Sisk, R. B.	Westinghouse	AP1000 DCP_NRC_002926 SRP6.2.2
6/22/2010	ML101590617	Westinghouse Submittal of Chapter 7 Documents.	Sisk, R. B.	Westinghouse	AP1000 DCP_NRC_002927
6/23/2010	ML101720170	IR 05200006-10-201, on 05/11 - 13, 2010, Westinghouse Facility in Cranberry Township, PA, Assessment of Quality Activities Implemented to Control Use of a Macro Code Used in the Design of Nuclear Island Structures of AP1000 Design.	Peralta, J. D.	NRC/NRO/DCIP/CQVP	
6/23/2010	ML101720236	05/20/2010 Summary of Category 1 Public Meeting With Westinghouse to Discuss Design Changes to be Incorporated in Revision 18 to the AP1000 Design Control Document.	Proctor, C. M.	NRC/NRO/DNRL/ NWE2	
6/23/2010	ML101790088	Safety Evaluation Report Section 3.9.6 on Revision 17 to Westinghouse AP1000 Design Certification Amendment.	Terao, D.	NRC/NRO/DE/CIB1	
6/23/2010	ML101790089	Mechanical Equipment Environmental Qualification Input for Safety Evaluation Report Section 3.11 on Revision 17 to Westinghouse AP1000 Design Certification Amendment.	Terao, D.	NRC/NRO/DE/CIB1	
6/24/2010	ML101660670	Final Shield Building In-Plane Shear Test Results.	Sisk, R. B.	Westinghouse	DCP_NRC_002928

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6/25/2010	ML101580228	Transmittal of Safety Evaluation for AP1000 Design Certification Document Amendment Revision 17, Certification Phase 2.	McKirgan, J. B.	NRC/NRO/DSRA/SBCV	
6/25/2010	ML101600487	Transmittal of Safety Evaluation for AP1000 Design Control Document Amendment Revision 17, Certification Phase 2.		NRC/NRO/DSRA/SBCV	
6/28/2010	ML101740222	Advanced Final Safety Evaluation Report For Chapter 16 Titled "Technical Specification," Of NUREG-1793, Supplement 2 - AP1000 Design Certification Amendment.	McKenna, E. M.	NRC/NRO/DNRL/NWE2	
6/28/2010	ML101830084	SER - Advanced Final Safety Evaluation Report For Chapter 16 "Technical Specification," Of NUREG-1793, Supplement 2 - AP1000 Design Certification Amendment.		NRC/NRO/DNRL/NWE2	
6/28/2010	ML101410310	05/20/2010 Summary Of A Category 1 Public Meeting Held With Westinghouse In Rockville, Maryland Regarding Open Items In AP1000 Safety Evaluation Report.	Proctor, C. M.	NRC/NRO/DNRL/NWE2	
6/28/2010	ML101410395	2010/06/28 AP-1000 DCD Review - Fuel rack Final Draft RAI: RAI-TR44-017-3C, RAI-TR54-01 R1C		- No Known Affiliation	

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6/29/2010	ML101540139	Audit Report For The Review Of Proprietary Technical, Procedural, And Process Information Related To The Component Interface Module And Diverse Actuation System For The AP1000 Design Certification Amendment Application.	McKenna, E. M.	NRC/NRO/DNRL/ NWE2	
6/29/2010	ML101540170	Audit Report For The Review Of Proprietary Technical, Procedural, And Process Information Related To The Component Interface Module And Diverse Actuation System For The AP1000 Design Certification Amendment Application.	McKenna, E. M.	NRC/NRO/DNRL/ NWE2	
6/29/2010	ML101800374	Letter - Advanced Final Safety Evaluation Report For Chapter 2 Titled "Site Envelop," of NUREG-1793, Supplement 2 - AP1000 Design Certification Amendment.	McKenna, E. M.	NRC/NRO/DNRL/ NWE2	NUREG-1793, Suppl 2
6/29/2010	ML101800387	SER - Advanced Final Safety Evaluation Report For Chapter 2 Titled "Site Envelop."		NRC/NRO/DNRL/ NWE2	NUREG-1793, Suppl 2
6/29/2010	ML101800507	Audit Report For AP1000 Design Certification Probabilistic Risk Assessment - October 13-19, 2009.	Sanders, S.	NRC/NRO/DNRL/ NWE2	
6/29/2010	ML101800508	Audit Report For AP1000 Design Certification PRA.	Sanders, S.	NRC/NRO/DNRL/ NWE2	
6/29/2010	ML101830081	2010/06/29 AP-1000 DCD Review - Revised Draft of the response to RAI-SRP6 1 1-CIB1-02 R0		- No Known Affiliation	

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6/29/2010	ML101830085	2010/06/29 AP-1000 DCD Review - AP1000 DCD Capture - 6/29/10 draft		NRC/NRO	
6/29/2010	ML102030186	2010/06/29 AP-1000 DCD Review - RAI-SRP5.4 1-CQVB-01 Draft R1 6-29-10.doc		- No Known Affiliation	
6/29/2010	ML101730168	2010/06/29 AP-1000 DCD Review - New Fuel Rack RAIs - per Non-credible "drop" position		- No Known Affiliation	
6/29/2010	ML101810131	Transmittal of IRWST and CR Screen Related Documents.	Sisk, R. B.	Westinghouse	DCP_NRC_002931
6/30/2010	ML101820514	Safety Evaluation Report - SRP Section 8 for Revision to Westinghouse AP1000 DCD Design Control Document.	Jenkins, R. V.	NRC/NRO/DE/EEB	AP1000
6/30/2010	ML101830078	Federal Register Notice Regarding the ACRS Subcommittee Meeting on AP1000, July 21-22, 2010.	Wang, W.	NRC/ACRS	
6/30/2010	ML101830079	Summary List of ISG-11 Design Change Proposals for the AP1000 Design Control Document, Rev. 18.	Sisk, R. B.	Westinghouse	DCP_NRC_002934
6/30/2010	ML101830396	2010/06/30 AP-1000 DCD Review - Acknowledgement of : RAI-DCP-CN58-SRSB-01		- No Known Affiliation	
6/30/2010	ML101870158	2010/06/30 AP-1000 DCD Review - Acknowledgement of : AP1000 RAI-DCP-CN8-SRSB-01		- No Known Affiliation	
6/30/2010	ML101940044	10 CFR 50.46 Thirty (30) Day Report for the AP-1000 Standard Plant Design.	Sisk, R. B.	Westinghouse	DCP_NRC_002943
6/30/2010	ML101940046	2010/06/30 AP-1000 DCD Review - Acknowledgement of: RAI-SRP3.10-EMB-11		- No Known Affiliation	

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6/30/2010	ML101940048	Presentations and Actions for WEC Meeting with NRC June 9 through June 11.	Sisk, R. B.	Westinghouse	AW-10-2864 DCP_NRC_002929
6/30/2010	ML101550290	APP-GW-J0R-012, Revision 1, "AP1000 Protection and Safety Monitoring System Computer Security Plan."	Batson, S. J.	Westinghouse	
7/1/2010	ML101750759	04/08/10 Summary of Meeting with Westinghouse to Discuss Component Interface Module (CIM) And Diverse Actuation System (DAS) Technical Reports (TR) of the AP1000 Instrumentation and Control System.	Mitra, S. K.	NRC/NRO/DNRL/ NWE2	
7/1/2010	ML101750762	PROBLEM AP1000 Diverse Actuation System (DAS) Setpoint Methodology – Westinghouse Responses to NRC Questions	Mitra, S. K.	NRC/NRO/DNRL/ NWE2	
7/1/2010	ML101750763	Phase 2 Safety Evaluation Report for Chapter 3 Section 3.7 Titled "Seismic Design" and Chapter 3 Section 3.8 Titled "Design of Category I Structures" of NUREG-1793, Supplement 2 - AP1000 Design Certification Amendment - Without Shield Building (Letter).	McKenna, E. M.	NRC/NRO/DNRL/ NWE2	NUREG-1793, Suppl 2
7/1/2010	ML101790099	Safety Evaluation Report - Chapter 3, Section 3.7, "Seismic Design."		NRC/NRO/DNRL/ NWE1	NUREG-1793, Suppl 2
7/1/2010	ML101820085	Safety Evaluation Report - Chapter 3, Section 3.8 "Design of Category I Structures."		NRC/NRO/DNRL/ NWE2	NUREG-1793, Suppl 2

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7/1/2010	ML101820483	07/01/2010 CIP Category 3 Public Meeting DAC Inspection Summary.	Fredette, T. R.	NRC/NRO/DCIP/CAEB	
7/1/2010	ML101830067	2010/07/01 AP-1000 DCD Review - AP1000 DCD Capture - 6.18.10 RAI response		NRC/NRO	
7/1/2010	ML101830069	07/01/2010 CIP Category 3 Public Meeting Surge in ITAAC Submittals Westinghouse Presentation.	Ray, T.	Westinghouse	
7/1/2010	ML101830070	2010/07/01 AP-1000 DCD Review - Acknowledgement of RAI-DCP-CN08-ICE-02		- No Known Affiliation	
7/1/2010	ML101830071	2010/07/01 AP-1000 DCD Review - Acknowledgement of RAI-DCP-CN65-ICE-01		- No Known Affiliation	
7/1/2010	ML101830072	2010/07/01 AP-1000 DCD Review - Acknowledgement of RAI-DCP-CN64-ICE-01		- No Known Affiliation	
7/1/2010	ML101830073	2010/07/01 AP-1000 DCD Review - Acknowledgement of RAI-DCP-CN63-ICE-01		- No Known Affiliation	
7/1/2010	ML101830074	2010/07/01 AP-1000 DCD Review - Acknowledgement of RAI-DCP-CN60-ICE-02		- No Known Affiliation	
7/1/2010	ML101830075	2010/07/01 AP-1000 DCD Review - Acknowledgement of RAI-DCP-CN66-SRSB-04		- No Known Affiliation	
7/1/2010	ML101830076	2010/07/01 AP-1000 DCD Review - Acknowledgement of RAI-DCP-CN66-SRSB-03		- No Known Affiliation	
7/1/2010	ML101830077	2010/07/01 AP-1000 DCD Review - Acknowledgement of RAI-DCP-CN66-SRSB-02		- No Known Affiliation	
7/1/2010	ML101680449	2010/07/01 AP-1000 DCD Review - Acknowledgement of RAI-DCP-CN66-SRSB-01		- No Known Affiliation	

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7/1/2010	ML101680683	2010/07/01 AP-1000 DCD Review - Acknowledgement of : AP1000 RAI-DCP-CN60-SRSB-01		- No Known Affiliation	
7/2/2010	ML101830066	Letter - Advanced Final Safety Evaluation Report For Chapter 17 Titled "Quality Assurance," of NUREG-1793, Supplement 2 - AP1000 Design Certification Amendment.	McKenna, E. M.	NRC/NRO/DNRL/ NWE2	NUREG-1793, Suppl 2
7/2/2010	ML101830083	Safety Evaluation, Chapter 17 - Quality Assurance.		NRC/NRO/DNRL	NUREG-1793, Suppl 2
7/2/2010	ML101830086	2010/07/02 AP-1000 DCD Review - AP1000 DCD Capture - 7/2/10 drafts		NRC/NRO	
7/2/2010	ML101830136	2010/07/02 AP-1000 DCD Review - AP1000 DCD Capture - 7/2/10 2		NRC/NRO	
7/2/2010	ML101870123	2010/07/02 AP-1000 DCD Review - AP1000 DCD Capture - 7/2/10 3		NRC/NRO	
7/2/2010	ML101880536	Advisory Committee On Reactor Safeguards AP1000 Subcommittee Review Of Selected Chapters Of The Safety Evaluation Report With Open Items - AP1000 Design Certification Amendment.	Matthews, D. B.	NRC/NRO/DNRL	
7/2/2010	ML101890585	2010/07/02 AP-1000 DCD Review - Acknowledgement of RAI-DCP-CN59-EEB-02		- No Known Affiliation	
7/2/2010	ML101870113	2010/07/02 AP-1000 DCD Review - FW: Final Seismic OI draft version		- No Known Affiliation	
7/2/2010	ML101870114	AP1000 Response to Request for Open Item (SRP 3).	Sisk, R. B.	Westinghouse	DCP_NRC_002945



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7/6/2010	ML101870115	2010/07/06 AP-1000 DCD Review - FW: Acknowledgement of RAI-DCP-CN08-ICE-02		NRC/NRO	
7/6/2010	ML101870116	2010/07/06 AP-1000 DCD Review - FW: Acknowledgement of RAI-DCP-CN65-ICE-01		NRC/NRO	
7/6/2010	ML101870117	2010/07/06 AP-1000 DCD Review - FW: Acknowledgement of RAI-DCP-CN64-ICE-01		NRC/NRO	
7/6/2010	ML101870118	2010/07/06 AP-1000 DCD Review - FW: Acknowledgement of RAI-DCP-CN63-ICE-01		NRC/NRO	
7/6/2010	ML101870119	2010/07/06 AP-1000 DCD Review - FW: Acknowledgement of RAI-DCP-CN60-ICE-02		NRC/NRO	
7/6/2010	ML101870120	2010/07/06 AP-1000 DCD Review - FW: Acknowledgement of RAI-DCP-CN66-SRSB-04		NRC/NRO	
7/6/2010	ML101870121	2010/07/06 AP-1000 DCD Review - FW: Acknowledgement of RAI-DCP-CN66-SRSB-03		NRC/NRO	
7/6/2010	ML101870122	2010/07/06 AP-1000 DCD Review - FW: Acknowledgement of RAI-DCP-CN66-SRSB-02		NRC/NRO	
7/6/2010	ML101870124	2010/07/06 AP-1000 DCD Review - FW: Acknowledgement of RAI-DCP-CN66-SRSB-01		NRC/NRO	

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7/6/2010	ML101870154	2010/07/06 AP-1000 DCD Review - FW: Acknowledgement of : AP1000 RAI-DCP-CN8-SRSB-01		NRC/NRO	
7/6/2010	ML101870156	2010/07/06 AP-1000 DCD Review - FW: Acknowledgement of RAI-DCP-CN59-EEB-02		NRC/NRO	
7/6/2010	ML101870159	2010/07/06 AP-1000 DCD Review - FW: Acknowledgement of : AP1000 RAI-DCP-CN60-SRSB-01		NRC/NRO	
7/6/2010	ML101870160	2010/07/06 AP-1000 DCD Review - FW: Acknowledgement of : RAI-DCP-CN58-SRSB-01		NRC/NRO	
7/6/2010	ML101870163	2010/07/06 AP-1000 DCD Review - FW: Acknowledgement of: RAI-SRP3.10-EMB-11		NRC/NRO	
7/6/2010	ML101870166	2010/07/06 AP-1000 DCD Review - FW: Acknowledgement of OI-SRP 9.1.3-SBPA-13 R2		NRC/NRO	
7/6/2010	ML101870169	2010/07/06 AP-1000 DCD Review - FW: Acknowledgement of RAI-TR03-32 R5, and RAI-SRP3.7.1-SEB1-04 R4, -06 R5, and -15 R3		NRC/NRO	
7/6/2010	ML101870170	2010/07/06 AP-1000 DCD Review - FW: Acknowledgement of Draft RAI-TR85-SEB1-36 R3		NRC/NRO	

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7/6/2010	ML101870501	2010/07/06 AP-1000 DCD Review - FW: Acknowledgement of OI-SRP7.1-ICE-02 R1, -03 R1; OI-SRP7.2-ICE-01 R1, -02 R1; OI-SRP7.8-DAS-04 R1 & OI-SRP7.9-ICE-04 R1		NRC/NRO	
7/6/2010	ML101870502	2010/07/06 AP-1000 DCD Review - FW: Acknowledgement of receipt of RAIs RAI-SRP3.7.1-SEB1-19, RAI-TR03-001 R1, -005 R2, -007 R2, and -037		NRC/NRO	
7/6/2010	ML101870615	2010/07/06 AP-1000 DCD Review - Acknowledgement of RAI-DCP-CN66-CTSB-05		- No Known Affiliation	
7/6/2010	ML101870620	2010/07/06 AP-1000 DCD Review - FW: Acknowledgement of RAI-DCP-CN66-CTSB-05		NRC	
7/6/2010	ML101880515	2010/07/06 AP-1000 DCD Review - Acknowledgement of RAI-DCP-CN45-SBP-01		- No Known Affiliation	
7/6/2010	ML101880533	2010/07/06 AP-1000 DCD Review - FW: Acknowledgement of RAI-DCP-CN45-SBP-01		NRC	
7/6/2010	ML101880708	2010/07/06 AP-1000 DCD Review - OI-914-03 R3A		- No Known Affiliation	
7/6/2010	ML101880710	2010/07/06 AP-1000 DCD Review - ISI Potential Words		- No Known Affiliation	
7/6/2010	ML101880531	Information on Proposed Changes for the AP1000 Design Control Document Rev. 18.	Sisk, R. B.	Westinghouse	DCP_NRC_002925

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7/6/2010	ML101880537	Description of Proposed Changes for AP1000 DCD Rev. 18, Proprietary - Change No. 69, Direct Vessel Injection (DVI) Nozzle Design Change and Change No. 70, PCS Design Changes.		Westinghouse	DCP_NRC_002925
7/7/2010	ML101880727	2010/07/07 AP-1000 DCD Review - Fuel Rack RAIs		- No Known Affiliation	
7/7/2010	ML101880759	2010/07/07 AP-1000 DCD Review - AP1000 DCD Capture - 7/7/2010		NRC	
7/7/2010	ML101880762	2010/07/07 AP-1000 DCD Review - AP1000 DCD Capture - 7/7/2010 2		NRC	
7/7/2010	ML101880763	2010/07/07 AP-1000 DCD Review - AP1000 DCD Capture 7/7/2010 4		NRC	
7/7/2010	ML101870359	2010/07/07 AP-1000 DCD Review - FW: smaller files		NRC	
7/7/2010	ML101890439	2010/07/07 AP-1000 DCD Review - AP1000 DCD Capture 7/7/2010 3		NRC	
7/8/2010	ML101890546	06/10/2010 Summary of a Public Meeting to Discuss AP1000 Design Control Document Closure of Chapter 5 Issues.	Buckberg, P. H.	NRC/NRO/DNRL/NWE2	
7/8/2010	ML101930129	2010/07/08 AP-1000 DCD Review - FW: 3.9.3 Audit Follow Up		NRC/NRO	
7/8/2010	ML101930130	Submittal of Certified Copies of Agreements.	Moore, S. W.	NRC/OIP	
7/8/2010	ML102030138	Submittal of Information on Proposed Changes for the AP1000 Design Control Document Rev. 18.	Sisk, R. B.	Westinghouse	DCP_NRC_002932

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7/8/2010	ML101930097	Description of Proposed Changes for AP1000 DCD, Revision 18.		Westinghouse	DCP_NRC_002932
7/8/2010	ML101930098	2010/07/08 AP-1000 DCD Review - RE: OI-914-03 R3A		- No Known Affiliation	
7/12/2010	ML101930144	2010/07/12 AP-1000 DCD Review - Acknowledgement of RAI-SRP19F-AIA-01 through -10 (Aircraft Impact RAIs)		- No Known Affiliation	
7/12/2010	ML101960079	2010/07/12 AP-1000 DCD Review - FW: Acknowledgement of RAI-SRP19F-AIA-01 through -10 (Aircraft Impact RAIs)		NRC/NRO	
7/12/2010	ML101930101	07/29, 08/05, 12 and 19/2010 Revised Notice of Meeting with Westinghouse on AP1000 Design Certification Amendment - Nuclear Regulatory Commission Meeting on Selected Technical or Regulatory Issues.	Jaffe, D. H.	NRC/NRO/DNRL/ NWE2	
7/12/2010	ML101970030	2010/07/12 AP-1000 DCD Review - OI-911-08		- No Known Affiliation	
7/13/2010	ML101940162	AP1000 Request For Withholding Information From Public Disclosure, Submittal Of Proprietary And Non-Proprietary Versions Of Presentations And Actions For Westinghouse Company Meeting With U.S. Nuclear Regulatory Commission From June 9 Through June 11.	Clark, P. M.	NRC/NRO/DNRL/ NWE2	DCP_NRC_002929

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7/13/2010	ML101960078	AP1000 Submittal of APP-GW-GLE-002, Rev. 7, "Impacts to the AP1000 to Address Generic Safety Issue 191".	Sisk, R. B.	Westinghouse	AP1000 DCP_NRC_002962 GSI-191
7/14/2010	ML101960082	07/23/2010 Notice of Meeting with Westinghouse on AP-1000 Containment External Pressure Analysis and Design.	Donnelly, P. M.	NRC/NRO/DNRL/ NWE2	
7/14/2010	ML102000154	2010/07/14 AP-1000 DCD Review - RAI-TR44-01 R1D (parallel with TR44-06 R2B-a)		- No Known Affiliation	
7/14/2010	ML102040724	2010/07/14 AP-1000 DCD Review - Eight Fuel Rack Audit Draft RAls (with detail date info)		- No Known Affiliation	
7/14/2010	ML101960084	Letter re: Resubmittal of Proprietary and Non-Proprietary Versions of WCAP-16914, Rev. 0, "Evaluation of Debris Loading Head Loss Tests for AP 1000 Recirculation Screens and In-Containment Refueling Water Storage Tank Screens".	Sisk, R. B.	Westinghouse	DCP_NRC_002961
7/14/2010	ML102000096	2010/07/14 AP-1000 DCD Review - Gas Accumulation draft DCD Changes		- No Known Affiliation	
7/15/2010	ML102000097	2010/07/15 AP-1000 DCD Review - AP1000 DCD Capture - 7/15/10		NRC/NRO	
7/15/2010	ML102000098	Submittal of "AP-1000 DCD Revision 18 - Closure of Recent Design Changes - July 15, 2010" Presentation Material.	Sisk, R. B.	Westinghouse	DCP_NRC_002947

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7/16/2010	ML102010269	IR 05200006-10-202 on 05/25/10 - 05/28/10 and Notice of Violation for Westinghouse.	Peralta, J. D.	NRC/NRO/DCIP/CQVB	
7/16/2010	ML101730094	2010/07/16 AP-1000 DCD Review - 7/13/2010 - Summary of Phone Call with Westinghouse to Gain Clarification on Draft RAI Response RAI-DCP-CN59-SBP-01		NRC/NRO	
7/16/2010	ML102030123	Westinghouse Submittal of AP1000 Safeguards Assessment APP-GW-GLR-066, Revision 5.	Winters, J.	Westinghouse	DCP_NRC_002969
7/19/2010	ML102030134	06/09-11/2010-Summary of Category 1 Public Meeting Held with Westinghouse Regarding the Proposed AP1000 Shield Building Design Methodology, Held in Rockville, Maryland.	Gleaves, W. C.	NRC/NRO/DNRL/ NWE2	
7/20/2010	ML102170123	2010/07/20 AP-1000 DCD Review - RE: Draft Rev 2 of RAI-SRP5 2 3-CIB1-03 (Quickloc)		NRC	
7/20/2010	ML102170124	2010/07/20 AP-1000 DCD Review - RE: Chapter 19 Open Item on Seismic Margin		NRC	
7/20/2010	ML101820356	Transmittal of Technical Report APP-GW-GLR-079 Revision 8 (TR-026), "AP1000 Verification of Water Sources for Long-Term Recirculation Cooling Following a LOCA."	Sisk, R. B.	Westinghouse	APP-GW-GLR-079, Rev 1 DCP_NRC_002968 TR-026

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7/22/2010	ML102030136	Summary of A Category 1 Public Meeting Held With Westinghouse Regarding The Proposed AP1000 Design Change Packages, Held In Rockville, Maryland On May 20, 2010.	Jaffe, D. H.	NRC/NRO/DNRL/ NWE2	
7/22/2010	ML102030139	AP1000 DCD Revision 18 Update Summary of New Change Notices May 20, 2010.		Westinghouse	
7/22/2010	ML102040722	2010/07/22 AP-1000 DCD Review -		- No Known Affiliation	
7/22/2010	ML102040723	2010/07/22 AP-1000 DCD Review - AP1000 DCD Capture - 7/22/10		NRC	
7/23/2010	ML102040725	2010/07/23 AP-1000 DCD Review - Draft of RAI-SRP18-COLP-46 R2A - Draft.doc		- No Known Affiliation	
7/23/2010	ML102100225	2010/07/23 AP-1000 DCD Review - FW: Draft of RAI-SRP18-COLP-46 R2A - Draft.doc		NRC	
7/23/2010	ML101890155	2010/07/23 AP-1000 DCD Review - FW: Gas Accumulation draft DCD Changes		NRC	
7/23/2010	ML101890223	2010/07/23 AP-1000 DCD Review - RE: AP1000 RAI-DCP-CN58-SRSB-02		- No Known Affiliation	
7/28/2010	ML102010738	Advanced Final Safety Evaluation Report for Chapter 8 Titled "Electric Power Systems," of NUREG-1793, Supplement 2 - AP1000 Design Certification Amendment.	McKenna, E. M.	NRC/NRO/DNRL/ NWE2	



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7/28/2010	ML102080426	Chapter 8, Eclectic Power Systems, Advanced Final Safety Evaluation Report.	McKenna, E. M.	NRC/NRO/DNRL/ NWE2	
7/28/2010	ML102110180	Audit Report for AP1000 DCA Fuel Rack Seismic Issues - June 2 - 4, 2010.	Buckberg, P. H.	NRC/NRO/DNRL/ NWE2	
7/28/2010	ML102100226	08/26/2010 and 09/02, 09, & 16/2010, Revised Notice of Meeting with Westinghouse on AP1000 Design Certification Amendment - on Selected Technical or Regulatory Issues.	Jaffe, D. H.	NRC/NRO/DNRL/ NWE2	
7/28/2010	ML102140333	Information on Proposed Changes for the AP1000 Design Control Document Rev. 18.	Sisk, R. B.	Westinghouse	DCP_NRC_002939
7/29/2010	ML102140334	2010/07/29 AP-1000 DCD Review - AP1000 DCD Capture - 7/29/10		NRC	
7/29/2010	ML102040199	Information on Proposed Changes for the AP1000 Design Control Document Rev. 18.	Sisk, R. B.	Westinghouse	DCP_NRC_002940
7/29/2010	ML102160220	Description of Proposed Changes for AP1000 DCD Rev. 18, Proprietary.		Westinghouse	DCP_NRC_002940
7/30/2010	ML102170267	AP1000 Request for Withholding Information from Public Disclosure, Submittal of Proprietary and Non-Proprietary Versions Final Shield Building In-Plane Shear Test Results (DCP_NRC_002928).	Clark, P. M.	NRC/NRO/DNRL/ NWE2	DCP_NRC_002928

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7/30/2010	ML102160221	Transmittal of Technical Report APP-GW-GLR-096 Revision 0, (Proprietary) & APP-GW-GLR-097 Revision 0 (Non-Proprietary) "Evaluation of the Effect of the AP1000 Enhanced Shield Building Design on the Containment Response and Safety Analyses".	Sisk, R. B.	Westinghouse	APP-GW-GLR-096 APP-GW-GLR-097 DCP_NRC_002986
7/30/2010	ML102160222	APP-GW-GLR-145, WCAP-17184-P, Revision 2, "AP1000 Diverse Actuation System Planning and Functional Design Summary Technical Report."	Peasley, S. A.	Westinghouse	
7/31/2010	ML102170038	APP-GW-GLR-097, Revision 0, "Evaluation of the Effect of the AP1000 Enhanced Shield Building Design on the containment Response & Response and Safety Analyses."		Westinghouse	DCP_NRC_002986
7/31/2010	ML102170039	APP-GW-GLR-096, Revision 0, "Evaluation of the Effect of the AP1000 Enhanced Shield Building Design on the Containment Response and Safety Analyses."		Westinghouse	DCP_NRC_002986
7/31/2010	ML102170259	APP-OCS-GEH-521 Rev. B, "AP1000 Plant Startup Human Factors Engineering Design Verification Plan."	Ma, R.	Westinghouse	DCP_NRC_002990
7/31/2010	ML102170260	APP-OCS-GEH-520, Rev. B, "AP1000 Plant Startup Human Factors Engineering Design Verification Plan."	Ma, R.	Westinghouse	DCP_NRC_002990

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7/31/2010	ML102170263	WCAP-17179-NP, APP-GW-GLR-144, Revision 2, "AP1000 Component Interface Module Technical Report."	Tweedle, T. W.	Westinghouse	APP-GW-GLR-144, Rev 2 DCP_NRC_002991
7/31/2010	ML102170264	WCAP-17226-NP, Revision 1, "Assessment of Potential Interactions Between the Core Exit Thermocouple Signals and the Self-Powered Detector Signals in the AP1000 In-Core Instrumentation System."	Heibel, M. D.	Westinghouse	
7/31/2010	ML102170265	APP-GW-GLR-146, WCAP-17184-NP, Revision 2, "AP1000 Diverse Actuation System Planning and Functional Design Summary Technical Report."	Peasley, S. A.	Westinghouse	APP-GW-GLR-146
7/31/2010	ML102170266	APP-GW-JOR-013, Rev. 1, AP1000 Protection and Safety Monitoring System Computer Security Plan.		Westinghouse	
7/31/2010	ML102040143	WCAP-17179-P, APP-GW-GLR-143, Revision 2, "AP1000 Component Interface Module Technical Report."	Tweedle, T. W.	Westinghouse	
7/31/2010	ML102170037	WCAP-17226-P, Revision 1, "Assessment of Potential Interactions Between the Core Exit Thermocouple Signals and the Self-Powered Detector Signals in the AP1000 In-Core Instrumentations System."	Heibel, M. D.	Westinghouse	

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8/2/2010	ML102170258	AP1000 Request For Withholding Information From Public Disclosure, Submittal Of Proprietary And Non-Proprietary Information On Proposed Changes For The AP1000 Design Control Document Revision 18 (DCP_NRC_002909).	Clark, P. M.	NRC/NRO/DNRL/NWE2	DCP_NRC_002909
8/2/2010	ML102170034	Submittal of the AP1000 Plant Startup Human Factors Engineering Design Verification Plan; Response to RAI-SRP18-COLP-23; and Response to RAI-SRP18-COLP-46.	Sisk, R. B.	Westinghouse	AW-10-2898 DCP_NRC_002990
8/2/2010	ML102420489	Submittal of AP1000 Instrumentation and Control Documents to Support of the AP1000 Design Certification Amendment Application.	Sisk, R. B.	Westinghouse	AW-10-2899 DPC_NRC_002991
8/3/2010	ML102420490	Westinghouse Submittal of APP-GW-GLR-026, Revision 4 of AP1000 Standard Combined License Technical Report No. 44 (TR44), "New Fuel Storage Rack Structural/Seismic Analysis."	Sisk, R. B.	Westinghouse	DCP_NRC_002999
8/3/2010	ML102420503	Presentations & Actions for WEC Meeting With NRC on June 9 through June 11, 2010 re Design Report for AP1000 Enhanced Shield Building.	Sisk, R. B.	Westinghouse	DCP_NRC_002995
8/3/2010	ML102210126	Presentations & Actions for WEC Meeting With NRC on June 9 through June 11, 2010 re Shear Friction Behavior.	Orr, R.	Westinghouse	DCP_NRC_002995

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8/3/2010	ML102150554	Presentations & Actions for WEC Meeting With NRC on June 9 through June 11, 2010 re Response to NRC Action Items.		Westinghouse	DCP_NRC_002995
8/4/2010	ML102210127	Westinghouse - Response to Request for Additional Information (SRP 23), RAI-DCP-CN58-SRSB-01, in support of the AP1000 Design Certification Amendment Application.	Sisk, R. B.	Westinghouse	AP1000 DCP_NRC_003000 SRP 23
8/5/2010	ML102180040	Advance Safety Evaluation Report Input for Chapter 7, Instrumentation and Controls, for Westinghouse AP1000 Design Control Documentation, Revision 17 (TAC#RB7500).	Jackson, T. W.	NRC/NRO/DE/ICE1	TAC RB7500
8/5/2010	ML102220579	Westinghouse - Response to Request for Additional Information (SRP 23), RAI-DCP-CN59-EEB-02, in support of the AP1000 Design Certification Amendment Application.	Sisk, R. B.	Westinghouse	AP1000 DCP_NRC_003002 SRP 23
8/6/2010	ML102220580	Safety Evaluation Report on the Westinghouse AP1000 Design Certification Amendment Related to Design Control Document Section 6.1.2.	McKenna, E. M.	NRC/NRO/DNRL/ NWE2	

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8/6/2010	ML102240271	Transmittal of Technical Report APP-GW-GLR-096 Revision 1, and APP-GW-GLR-097 Revision 1, "Evaluation of the Effect of the AP1000 Enhanced Shield Building Design on the Containment Response and Safety Analyses."	Sisk, R. B.	Westinghouse	AP1000 APP-GW-GLR-097, Rev 1 AW-10-2901 DCP_NRC_002998
8/11/2010	ML102290202	Summary of the April 19 - 21, 2010, Audit of AP1000 Design Certification - Regulatory Audit Of Open Items: J-Groove Welds and Containment Recirculation Screens.	Clark, P. M.	NRC/NRO/DNRL/ NWE2	
8/12/2010	ML102110322	Westinghouse - Information on Proposed Changes for the AP1000 Design Control Document Rev. 18.	Sisk, R. B.	Westinghouse	DCP_NRC_002942
8/13/2010	ML102170183	Audit Plan For Review Of The AP1000 Seismic Margins Issues - August 9 - 10, 2010.	Buckberg, P. H.	NRC/NRO/DNRL/ NWE2	
8/13/2010	ML102280266	Response to Notice of Violation Cited in NRC Inspection Report No. 05200006-2010-202 and (Notice of Violation) Date July 16, 2010.	Sisk, R. B.	Westinghouse	DCP_NRC_003009 IR-10-202
8/16/2010	ML102310235	06/15/2010 - 06/16/2010 Meeting With Westinghouse To Discuss AP1000 Instrumentation And Control System Open Issues To Complete Final Safety Evaluation Report.	Mitra, S. K.	NRC/NRO/DNRL/ NWE2	

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Document Date	Accession Number	Title	Author Name	Author Affiliation	Case/Reference Number
8/16/2010	ML102170455	Input for Safety Evaluation Report Resolving Revision 17 Issues for Section 5.2.3 (Reactor Coolant Pressure Boundary Materials) for AP1000 Design Certification Document.	Terao, D. A.	NRC/NRO/DE/CIB1	
8/16/2010	ML102180160	Westinghouse - Information on Proposed Changes for the AP1000 Design Control Document Rev. 18.	Sisk, R. B.	Westinghouse	DCP_NRC_002941
8/17/2010	ML102180276	AP1000 Request For Withholding Information From Public Disclosure, Submittal Of Proprietary And Non-Proprietary Versions Of The Final Information On Proposed Changes For The AP1000 Design Control Documents Rev.18 (DCP_NRC_002850).	Clark, P. M.	NRC/NRO/DNRL/NWE2	DCP_NRC_002850
8/17/2010	ML102210275	AP1000 Request For Withholding Information From Public Disclosure, Submittal Of Proprietary And Non-Proprietary Versions Of Information On Proposed Changes For The AP1000 Design Control Documents Revision 18.	Clark, P. M.	NRC/NRO/DNRL/NWE2	DCP_NRC_002918

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Document Date	Accession Number	Title	Author Name	Author Affiliation	Case/Reference Number
8/17/2010	ML102320580	AP1000 Request For Withholding Information From Public Disclosure, Submittal Of Proprietary And Non-Proprietary Versions Of Information On Proposed Changes For The AP1000 Design Control Documents Revision 18.	Clark, P. M.	NRC/NRO/DNRL/ NWE2	DCP_NRC_002863
8/17/2010	ML102420175	AP1000 Request For Withholding Information From Public Disclosure, Submittal Of Proprietary And Non-Proprietary Versions Of Information On Proposed Changes For The AP1000 Design Control Documents Revision 18 (DCP_NRC_002925).	Clark, P. M.	NRC/NRO/DNRL/ NWE2	DCP_NRC_002925
8/17/2010	ML102420178	AP1000 Standard COL Technical Report Submittal of APP-GW-GLR-026, Revision 5 (TR44).	Sisk, R. B.	Westinghouse	AP1000 DCP_NRC_003010 TR44
8/17/2010	ML102300228	2010/08/17 AP-1000 DCD Review - RE: Seismic Margins OI		- No Known Affiliation	
8/17/2010	ML102300492	2010/08/17 AP-1000 DCD Review - Emailing: OI-SRP9.1.3-SBPA-13 R3.doc		- No Known Affiliation	
8/18/2010	ML102310077	Federal Register Notice Regarding the ACRS Subcommittee Meeting on AP1000, September 20-21, 2010.	Wang, W.	NRC/ACRS	
8/18/2010	ML102420170	09/08/2010 Notice of Planning Meeting With Westinghouse On AP1000 Core Reference Report.	Clark, P. M.	NRC/NRO/DNRL/ NWE2	



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8/23/2010	ML102250118	Inspection of AP1000 Pressurize Water Reactor Design Aircraft Impact Assessment.	Peralta, J. D.	NRC/NRO/DCIP/CQVP	
8/23/2010	ML102250159	2010/08/23 AP-1000 DCD Review - RE: Fuel rack RAIs Update		- No Known Affiliation	
8/25/2010	ML102250216	Letter - Transmittal of Safety Evaluation for Chapter 5 Titled "Reactor Coolant System and Connected Systems," of NUREG-1793, Supplement 2 - AP1000 Design Certification Amendment.	McKenna, E. M.	NRC/NRO/DNRL/ NWE2	
8/25/2010	ML102250247	SE - Reactor Coolant System and Connected Systems.	McKenna, E. M.	NRC/NRO/DNRL/ NWE2	
8/25/2010	ML102390520	Proprietary Information Review - Advanced Final Safety Evaluation for Chapter 13, Titled "Conduct of Operations," of NUREG-1793, Supplement 2 - AP1000 Design Certification Amendment.	McKenna, E. M.	NRC/NRO/DNRL/ NWE2	
8/25/2010	ML102390521	SE - Conduct of Operations.	McKenna, E. M.	NRC/NRO/DNRL/ NWE2	
8/25/2010	ML102390522	Submittal of AP1000 Instrumentation and Control Documents to Support of the AP1000 Design Certification Amendment Application.	Sisk, R. B.	Westinghouse	DCP_NRC_003021
8/25/2010	ML102210227	APP-IIS-J0R-002-NP Revision 0, WCAP-17226-NP R2, "Assessment of Potential Interactions Between the Core Exit Thermocouple Signals and the Self-Powered Detector Signals in AP1000 In-Core Instrumentation System."		Westinghouse	APP-IIS-J0R-002-NP, Rev 0 DCP_NRC_003021 WCAP-17226-NP, R2

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Document Date	Accession Number	Title	Author Name	Author Affiliation	Case/Reference Number
8/25/2010	ML102210237	APP-IIS-JOR-001-P, Revision 1, WCAP-17226-P, R2, "Assessment of Potential Interactions Between the Core Exit Thermocouple Signals and the Self-Powered Detector Signals in the AP1000 In-Core Instrumentation System."		Westinghouse	APP-IIS-JOR-002-P, Rev 0 DCP_NRC_003021 WCAP-17226-P, R2
8/26/2010	ML102210335	Letter - Transmittal of Advanced Final Safety Evaluation for Chapter 7 Titled "Instrumentation and Controls," of NUREG-1793, Supplement 2 - AP1000 Design Certification Amendment.	McKenna, E. M.	NRC/NRO/DNRL/ NWE2	
8/26/2010	ML102420177	Enclosure 1 - 7.0 Instrumentation and Control Safety Evaluation.		NRC/NRO	
8/26/2010	ML102290132	Enclosure 2 AP1000 Instrumentation and Control System Secure Development and Operational Environment Safety Evaluation Report.		NRC/NRO	
8/26/2010	ML102420179	2010/08/26 AP-1000 DCD Review - Revised drafts for review: RAI-SRP5.2.3-CIB1-01 R4A and RAI-SRP5.4.1-CIB1-01 R3A		- No Known Affiliation	
8/27/2010	ML102530306	AP1000 Subcommittee Review of Selected Chapters of the Advanced Safety Evaluation Report - AP1000 Design Certification Amendment.	Matthews, D. B.	NRC/NRO/DNRL	AP1000
8/30/2010	ML102280208	2010/08/30 AP-1000 DCD Review - AP1000 DCD Capture - 8/30/10		NRC	

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8/30/2010	ML102430008	Representative Draft Slides for September 8, 2010 AP1000 Core Reference Report Planning Meeting with NRC (Proprietary).	Gresham, J. A.	Westinghouse	LTR-NRC-10-58
8/31/2010	ML102430008	Proprietary Information Review - Advanced Final Safety Evaluation For Chapter 18 Titled "Human Factors Engineering," of NUREG-1793, Supplement 2 - AP1000 Design Certification Amendment.	McKenna, E. M.	NRC/NRO/DNRL/NWE2	
8/31/2010	ML102300415	Westinghouse Response to NRC Inspection Report No. 0520006-10-202 and Notice of Violation.	Peralta, J. D.	NRC/NRO/DCIP/CQVP	IR-10-202
8/31/2010	ML102440055	Westinghouse Response to NRC Inspection Report No. 0520006-10-202 and Notice of Violation.	Peralta, J. D.	NRC/NRO/DCIP/CQVP	IR-10-202
9/1/2010	ML102500223	Progress Report on the Review of the AP1000 Design Certification Application.	Matthews, D. B.	NRC/NRO/DNRL	
9/1/2010	ML102500224	Summary of the Audit Conducted on AP1000 Document WCAP-17280-P, at Westinghouse, Rockville, Maryland, on June 28, 2010.	Davis, R. H.	NRC/NRO/DE/CIB2	WCAP-17280-P
9/2/2010	ML102500225	Submittal of AP1000 RCP Casing: Cast Stainless Steel Weld Inspectability 8/26/10 Presentation.	Sisk, R. B.	Westinghouse	AP1000 AW-10-2910 DCP_NRC_003032
9/3/2010	ML102510192	Supplementary Information on Proposed Changes for the AP1000 Design Control Document Rev. 18.	Ziesing, R. F.	Westinghouse	DCP_NRC_003014

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9/3/2010	ML102530307	Letter re: Supplemental Information to Resolve Shield Building Audit Questions.	Ziesing, R. F.	Westinghouse	DCP_NRC_003029
9/3/2010	ML102580174	Shield Building Benchmarking Analysis - (Proprietary).		Westinghouse	DCP_NRC_003029
9/8/2010	ML102310320	AP1000 Core Reference Report Planning Meeting.		Westinghouse	LTR-NRC-10-58
9/10/2010	ML102630020	Westinghouse - Response to Request for Additional Information on SRP Section TR03 in Support of AP1000 Design Certification Amendment Application.	Sisk, R. B.	Westinghouse	AP1000 DCP_NRC_003042 SRP TR03
9/13/2010	ML102570087	Advanced Final Safety Evaluation For Chapter 15 titled: "Transient And Accident Analyses," Of NUREG-1793, Supplement 2 - AP1000 Design Certification Amendment	McKenna, E. M.	NRC/NRO/DNRL/ NWE2	
9/13/2010	ML102630017	Westinghouse, AP1000 Response to Request for Additional Information (TR44).	Ziesing, R. F.	Westinghouse	DCP_NRC_003044 TR44
9/14/2010	ML102630018	Federal Register Notice Regarding the ACRS Subcommittee Meeting on AP1000, October 5, 2010.	Wang, W.	NRC/ACRS	
9/15/2010	ML102670213	AP1000 Response to Request for Additional Information (SRP 19).	Ziesing, R. F.	Westinghouse	AP1000 DCP_NRC_003045 SRP 19
9/15/2010	ML102670214	AP1000 Technical Report Review, Enclosure 1 to DCP_NRC_003045.		Westinghouse	AP1000 DCP_NRC_003045 SRP 19
9/15/2010	ML102410009	Westinghouse Submittal of Slides for the AP100 Core Reference Report Planning Meeting on September 8, 2010.	Gresham, J. A.	Westinghouse	LTR-NRC-10-54

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9/15/2010	ML102410012	Slides for the Open Portion of the AP1000 Core Reference Report Planning Meeting on September 8, 2010.		Westinghouse	LTR-NRC-10-54
9/16/2010	ML102630015	Transmittal of Safety Evaluation Report for Chapter 6, "Engineered Safety Features," of NUREG-1793, Supplement 2 - AP1000 Design Certification Amendment.	McKenna, E. M.	NRC/NRO/DNRL/ NWE2	NUREG-1793, Suppl 2
9/16/2010	ML102670216	SE - 6.0 Engineered Safety Features.	McKenna, E. M.	NRC/NRO/DNRL/ NWE2	NUREG-1793, Suppl 2
9/16/2010	ML102580168	Westinghouse Supplementary Information on Proposed Changes for the AP1000 Design Control Document Rev. 18.	Ziesing, R. F.	Westinghouse	DCP_NRC_0030336
9/16/2010	ML102650098	Slides for the Closed Portion of the AP1000 Core Reference Report Planning Meeting on September 8, 2010.		Westinghouse	LTR-NRC-10-54
9/20/2010	ML102650099	Advisory Committee on Reactor Safeguards AP1000 Subcommittee Review of Selected Chapters of the Safety Evaluation Report with Open Items - AP1000 Design Certification Amendment.	Matthews, D. B.	NRC/NRO/DNRL	
9/20/2010	ML102220446	Transmittal of WEC Shield Building Action Item 21.	Ziesing, R. F.	Westinghouse	AW-10-2909 DCP_NRC_003030
9/22/2010	ML102670162	07/29/10 Summary of Meeting Held With Westinghouse Regarding the Proposed AP1000 Design Certification Amendment, Held in Rockville, Maryland on July 29, 2010.	Gleaves, W. C.	NRC/NRO/DNRL/ NWE2	

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9/22/2010	ML102510260	Slides and Viewgraphs - Summary Of A Category 1 Public Meeting Held With Westinghouse Regarding The Proposed AP1000 Design Certification Amendment, Held In Rockville, Maryland On July 29, 2010		Westinghouse	
9/22/2010	ML102510281	Westinghouse Electric Co., Supplementary Information on Proposed Changes for the AP1000 Design Control Document Rev. 18.	Ziesing, R. F.	Westinghouse	DCP_NRC_003035
9/23/2010	ML102650183	08/16/2010 - Audit Report for Review of the AP1000 Hatch Hoist Mount	Buckberg, P. H.	NRC/NRO/DNRL/ NWE2	
9/23/2010	ML102640391	07/16/2010 - Audit Report for Review of the AP1000 Spent Fuel Pool Heat Load Calculation.	Buckberg, P.	NRC/NRO/DNRL/ NWE2	
9/23/2010	ML102630004	10/7, 10/14, 10/21, and 10/28/2010 Notice of Meeting With Westinghouse on AP1000 Design Certification Amendment - Nuclear Regulatory Commission Meeting on Selected Technical or Regulatory Issues.	Jaffe, D. H.	NRC/NRO/DNRL/ NWE2	

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Document Date	Accession Number	Title	Author Name	Author Affiliation	Case/Reference Number
9/24/2010	ML102700378	AP1000 Request for Withholding Information from Public Disclosure, Submittal of Proprietary and Non-Proprietary Versions of AP1000 Responses to Request for Additional Information (RAI-SRP6.2.2-CIB1-31, Revision 1 and RAI-SRP6.2.2-SPCV-25, Revision 2).	Clark, P.	NRC/NRO/DNRL/ NWE2	
9/28/2010	ML102500412	Structural Engineering Branch 1 Input to Safety Evaluation Report for AP1000 Design Control Document, Revision 17, Tier 2, Section 9.1.1.2.1 and 9.1.2.2.1 Application (Phase 4).	Thomas, B. E.	NRC/NRO/DE/SEB1	
9/28/2010	ML102500415	Safety Evaluation for AP1000 Design Control Document, Revision 17, as Amended by APP-GW-GLR-096, Revision 1, Certification Phase 4.	McKirgan, J. B.	NRC/NRO/DSRA/ SPCV	APP-GW-GLR-096, Rev 1
9/29/2010	ML102640352	08/26/2010 Summary of a Category 1 Public Meeting Held with Westinghouse Regarding the AP1000 Reactor Coolant Pump Casing Weld, Held in Rockville, Maryland.	Jaffe, D. H.	NRC/NRO/DNRL/ NWE2	
9/29/2010	ML102660263	08/26/2010 Westinghouse Nonproprietary Presentation "AP1000 RCP Casing: Cast Stainless Steel Weld Inspectability."		Westinghouse	

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9/29/2010	ML102660378	AP1000 Request for Withholding Information from Public Disclosure, Submittal of Proprietary and Non-Proprietary Versions of WCAP-16914, Revision 5 and WCAP-17028, Revision 6 (DCP_NRC_002931).	Clark, P. M.	NRC/NRO/DNRL/ NWE2	DCP_NRC_002931 WCAP-16914, Rev 5 WCAP-17028, Rev 6
9/29/2010	ML102670260	AP1000, Request for Withholding Information from Public Disclosure, Submittal of Proprietary and Non-Proprietary Versions of Supplemental Information to Resolve Shield Building Audit Questions (DCP_NRC_003029).	Clark, P. M.	NRC/NRO/DNRL/ NWE2	DCP_NRC_003029
9/29/2010	ML102770328	AP1000, Request for Withholding Information from Public Disclosure, Submittal of Proprietary and Non-Proprietary Versions of AP1000 RCP Casing: Cast Stainless Steel Well Inspectability 08/26/2010 Presentation (DCP_NRC_003032).	Clark, P. M.	NRC/NRO/DNRL/ NWE2	DCP_NRC_003032
9/29/2010	ML102770447	AP1000, Request for Withholding Information from Public Disclosure, Submittal of Proprietary and Non-Proprietary Versions of "AP1000 Shield Building - Benchmarking, Analysis, Testing and Design Overview," (DCP_NRC_002995).	Clark, P. M.	NRC/NRO/DNRL/ NWE2	DCP_NRC_002995



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9/29/2010	ML102780269	AP1000 COL Standard Technical Report Submittal of APP-GW-GLR-005, Revision 4 (TR-09).	Ziesing, R. F.	Westinghouse	DCP_NRC_003051 TR-09
9/29/2010	ML102740287	Supplementary Information on Proposed Changes for the AP1000 Design Control Document Rev. 18.	Ziesing, R. F.	Westinghouse	DCP_NRC_003015
9/29/2010	ML102740297	Supplementary Information on Proposed Changes for the AP1000 Design Control Document Rev. 18.	Ziesing, R. F.	Westinghouse	DCP_NRC_003048
9/30/2010	ML102780270	Chapter 9 - Auxiliary Systems.	Buckberg, P. H.	NRC/NRO/DNRL/NWE2	
9/30/2010	ML102790599	Letter - Proprietary Information Review - Advanced Final Safety Evaluation For Chapter 9 Titled "Auxiliary Systems," Of NUREG-1793, Supplement 2 - AP1000 Design Certification Amendment.	Buckberg, P. H. McKenna, E. M.	NRC/NRO/DNRL/NWE2	NUREG-1793, Suppl 2
9/30/2010	ML102790613	Supplementary Information on Proposed Changes for the AP1000 Design Control Document Rev. 18.	Ziesing, R. F.	Westinghouse	DCP_NRC_003034
9/30/2010	ML102800192	Submittal of APP-1200-S3R-003, Rev. 3, "Design Report for the AP1000 Enhanced Shield Building".	Ziesing, R. F.	Westinghouse	APP-1200-S3R-003, Rev 3 AW-10-2958 DCP_NRC_003053
9/30/2010	ML102800199	APP-1200-S3R-003, Rev. 3, "Design Report for the AP1000 Enhanced Shield Building".		Westinghouse	AW-10-2958 DCP_NRC_002053
9/30/2010	ML102800217	APP-1200-S3R-003, Rev. 3, "Design Report for the AP1000 Enhanced Shield Building," Cover to Section 6.		Westinghouse	AW-10-2958 DCP_NRC_003053

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9/30/2010	ML102800222	APP-1200-S3R-003, Rev. 3, "Design Report for the AP1000 Enhanced Shield Building," Section 7: Shield Building Test Program.		Westinghouse	AW-10-2958 DCP_NRC_003053
9/30/2010	ML102800225	APP-1200-S3R-003, Rev. 3, "Design Report for the AP1000 Enhanced Shield Building," Section 7.9: Pushout Test through Section 7.14: References.		Westinghouse	AW-10-2958 DCP_NRC_003053
9/30/2010	ML102800227	APP-1200-S3R-003, Rev. 3, "Design Report for the AP1000 Enhanced Shield Building," Section 8: Benchmarking to Section 9.11: References.		Westinghouse	AW-10-2958 DCP_NRC_003053
9/30/2010	ML102800230	APP-1200-S3R-003, Rev. 3, "Design Report for the AP1000 Enhanced Shield Building," Section 10: Shield Building Design Process to Appendix A.4: References.		Westinghouse	AW-10-2958 DCP_NRC_003053
9/30/2010	ML102800237	APP-1200-S3R-003, Rev. 3, "Design Report for the AP1000 Enhanced Shield Building," Appendix B through Figures.		Westinghouse	AW-10-2958 DCP_NRC_003053
9/30/2010	ML102800240	APP-1200-S3R-003, Rev. 3, "Design Report for the AP1000 Enhanced Shield Building," Appendix C: Level 3 Analyses.		Westinghouse	AW-10-2958 DCP_NRC_003053
9/30/2010	ML102800243	APP-1200-S3R-003, Rev. 3, "Design Report for the AP1000 Enhanced Shield Building," Appendix C.5.5: Roof Rebars.		Westinghouse	AW-10-2958 DCP_NRC_003053
9/30/2010	ML102740252	APP-1200-S3R-003, Rev. 3, "Design Report for the AP1000 Enhanced Shield Building," Appendix D: Design Sketches.		Westinghouse	AW-10-2958 DCP_NRC_003053

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9/30/2010	ML102740296	APP-1200-S3R-003, Rev. 3, "Design Report for the AP1000 Enhanced Shield Building," Appendix H.2 to End.		Westinghouse	AW-10-2958 DCP_NRC_003053
10/1/2010	ML102660392	Transmittal of Safety Evaluation for AP1000 Design Change Package 73.	McKirgan, J. B.	NRC/NRO/DSRA/ SPCV	
10/1/2010	ML102660432	Transmittal of Safety Evaluation for AP1000 Design Change Package 75.	McKirgan, J. B.	NRC/NRO/DSRA	
10/4/2010	ML102740302	AP1000 Request for Withholding Additional Information from Public Disclosure, Submittal of Proprietary and Non-Proprietary Versions of "Final Information on Proposed Changes for the AP1000 Design Control Document Rev. 18" (DCP_NRC_002874).	Clark, P. M.	NRC/NRO/DNRL/ NWE2	DCP_NRC_002874
10/4/2010	ML102770180	AP1000 Request for Withholding Information from Public Disclosure, Submittal of Proprietary and Non-Proprietary Versions of "Final Information on Proposed Changes for the AP1000 DCD Rev. 18 Update Summary of New Change Notices" (DCP_NRC_002884).	Clark, P. M.	NRC/NRO/DNRL/ NWE2	DCP_NRC_002884
10/4/2010	ML102770184	AP1000 Subcommittee Review Of Selected Chapters Of The Advanced Safety Evaluation Report- AP1000 Design Certification Amendment.	Mathews, D. B.	NRC/NRO/DNRL	

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10/4/2010	ML102770643	Memo: Structural Engineering Branch 1 Input to Safety Evaluation Report for AP1000 Design Control Document, Revision 17 (Phase 4).	Thomas, B. E.	NRC/NRO/DE/SEB1	
10/4/2010	ML102810225	Enclosure: AP1000 Design Control Document, Revision 17, Safety Evaluation Report for Standard Review Plan Sections 3.7.1, 3.7.2, and 3.7.3.	Thomas, B. E.	NRC/NRO/DE/SEB1	
10/4/2010	ML102810226	Safety Evaluation Report Input on Proposed Revision 18 Changes to AP1000 Design Control Document Related to American Society of Mechanical Engineers Code Edition and Addenda from Tier 2* to Tier 2.	Terao, D. A.	NRC/NRO/DE/CIB1	
10/5/2010	ML103010111	Notifies That Westinghouse Has Completed Proprietary Review of Advanced Final Safety Evaluation for Chapter 7, "Instrumentation & Controls," in NUREG-1793.	Ziesing, R. F.	Westinghouse	AW-10-2959 DCP_NRC_003054 NUREG-1793
10/5/2010	ML102730729	Westinghouse Markup of NRC Chapter 7 AFSE.		Westinghouse	AW-10-2959 DCP_NRC_003054 NUREG-1793
10/5/2010	ML102800603	Transcript of the Advisory Committee on Reactor Safeguards Subcommittee on AP1000 - October 5, 2010 (Open Session)	Wang, W.	NRC/ACRS	NRC-471
10/6/2010	ML102870236	Meeting Summary for the Planning Meeting with Westinghouse on AP1000 Core Reference Report.	Clark, P. M.	NRC/NRO/DNRL/ NWE2	

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10/13/2010	ML103430502	Chapter 19 - Severe Accidents.	Buckberg, P. H.	NRC/NRO/DNRL/ NWE2	
10/13/2010	ML102310352	Proprietary Information Review - Advanced Final Safety Evaluation For Chapter 19 Titled "Severe Accidents," Of NUREG-1793, Supplement 2 - Ap1000 Design Certification Amendment.	McKenna, E. M.	NRC/NRO/DNRL/ NWE2	
10/13/2010	ML103120263	Chapter 3 - Design of Structures, Components, Equipment, and Systems.	McKenna, E. M.	NRC/NRO/DNRL/ NWE2	
10/14/2010	ML103120264	Chapter 15 - Transient and Accident Analyses.		NRC/NRO/DNRL/ NWE2	NUREG-1793
10/14/2010	ML103120265	Westinghouse - Chapter 15 "Transient and Accident Analyses" SER Review.	Ziesing, R. F.	Westinghouse	DCP_NRC_003061
10/14/2010	ML102870071	Westinghouse, Letter Regarding Chapter 14 SER Review.	Ziesing, R. F.	Westinghouse	DCP_NRC_003058
10/14/2010	ML102920143	Westinghouse - Chapter 13 "Conduct of Operation" SER Review.	Ziesing, R. F.	Westinghouse	DCP_NRC_003060
10/15/2010	ML102920343	AP1000 Subcommittee Review of Selected Chapters of The Advanced Safety Evaluation Report- AP1000 Design Certification Amendment.	Matthews, D. B.	NRC/NRO/DNRL/ NWE2	
10/15/2010	ML102910231	Supplementary Information on Proposed Changes for the AP1000 Design Control Document Rev. 18.	Ziesing, R. F.	Westinghouse	DCP_NRC_003050
10/15/2010	ML102930086	Westinghouse - Chapter 5 "Reactor Coolant System and Connected Systems," SER Review.	Ziesing, R. F.	Westinghouse	DCP_NRC_003059

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10/18/2010	ML102930087	2010/10/18 AP-1000 DCD Review - RE: Error occurred in Process Hearings		NRC/OIS	
10/18/2010	ML102930088	Submittal of Supplementary Information on Proposed Changes for the AP1000 Design Control Document, Rev. 18.	Ziesing, R. F.	Westinghouse	AW-10-2962 DCP_NRC_003066
10/18/2010	ML102940228	G20100648/LTR-10-0465/EDA TS: SECY-2010-0498 - Ltr. Louis Zeller Re: Request to Overturn Withholding of Information from Public Disclosure and a Call for a Special Investigation.	Zeller, L. A.	Blue Ridge Environmental Defense League	G20100648 LTR-10-0465 SECY-2010-0498
10/19/2010	ML102940229	AFSE - 23 - Design Changes Proposed in Accordance with ISG-11.		NRC/NRO	
10/19/2010	ML102930106	Enclosure 3 - Westinghouse Markup of NRC Chapter 6 ASE Review Indicating Proprietary Sections.		Westinghouse	DCP_NRC_003067
10/19/2010	ML102950077	Westinghouse - Chapter 6 ASE Review.	Ziesing, R. F.	Westinghouse	AW-10-2986 DCP_NRC_003067
10/20/2010	ML102920565	Minutes of the Advisory Committee on Reactor Safeguards Subcommittee on the AP1000 Reactor, July 21-22, 2010, Rockville, Maryland.	Wang, W.	NRC/ACRS	
10/20/2010	ML103010046	Westinghouse, Supplementary Information on Proposed Changes for the AP1000 Design Control Document Rev. 18.	Ziesing, R. F.	Westinghouse	DCP_NRC_003068

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10/21/2010	ML103010289	Letter - Proprietary Information Review - Advanced Final Safety Evaluation for Chapter 23, Titled "Design Changes Proposed in Accordance with ISG-11," of NUREG-1793, Supplement 2 - AP1000 Design Certification Amendment.	McKenna, E. M.	NRC/NRO/DNRL/ NWE2	NUREG-1793, Suppl 2
10/22/2010	ML103010295	Westinghouse, Response to Request for Additional Information (TR85) in support of the AP1000 Design Certification Amendment Application.	Ziesing, R. F.	Westinghouse	
10/26/2010	ML103010450	Westinghouse, Regarding Chapter 16 SER Review.	Ziesing, R. F.	Westinghouse	DCP_NRC_003077
10/26/2010	ML103010477	Letter from R. F. Ziesing re: Westinghouse regarding the omission of proprietary data in the Safety Evaluation Report.	Ziesing, R. F.	Westinghouse	DCP_NRC-003073
10/26/2010	ML103010481	Westinghouse, Review of SAMDA Relative to Impact for AP1000 DCD Revision 18.	Ziesing, R. F.	Westinghouse	DCP_NRC_003057
10/26/2010	ML103010484	Westinghouse, Letter Regarding Chapter 4 SER Review and Non Proprietary Determination.	Ziesing, R. F.	Westinghouse	DCP_NRC_003074
10/26/2010	ML102710493	Westinghouse, Chapter 12 SER Review and Non-Proprietary Determination Letter.	Ziesing, R. F.	Westinghouse	DCP_NRC_003076
10/26/2010	ML103000063	Westinghouse, Chapter 11 SER Review and Non-Proprietary Determination Letter.	Ziesing, R. F.	Westinghouse	DCP_NRC_003075

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10/27/2010	ML103000144	Advanced Final Safety Evaluation for Chapter 3, Titled "Design of Structures, Components, Equipment, and Systems," of NUREG-1793, Supplement 2-AP1000 Design Certification Amendment.	Gleaves, B. C.	NRC/NRO/DNRL/ NWE2	
10/27/2010	ML101241063	Federal Register Notice Regarding the ACRS Subcommittee Meeting on AP1000, December 1, 2010.	Wang, W.	NRC/ACRS	
10/27/2010	ML102850096	11/18/2010 Notice of Closed Meeting with Westinghouse to Discuss Their October 7, 2010 Proprietary Response to NRC Regulatory Issue Summary 2007-08 Regarding the AP1000 Updated Supplier Listing.	Kavanagh, K. A.	NRC/NRO/DCIP/CQVP	
10/28/2010	ML102980583	P4 Chapter 3 SE Not Including 3.7 and 3.8.		NRC/NRO/DNRL/ NWE2	
10/28/2010	ML103060042	Memo - AP1000 Design Certification Amendment - Advanced Safety Evaluation, Chapter 3, "Design of Structures, Components, Equipment, and Systems".	Matthews, D. B.	NRC/NRO/DNRL	
10/28/2010	ML103020551	IR 05200006-10-203, and Notice of Violation on 09/27/2010 - 10/01/2010, Westinghouse AP1000 Pressurized Water Reactor Design Aircraft Impact Assessment Inspection.	Rasmussen, R. A.	NRC/NRO/DCIP/CQVP	
10/28/2010	ML103090320	Westinghouse - Chapter 19 SER Review.	Ziesing, R. F.	Westinghouse	DCP_NRC_003080



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10/29/2010	ML102950122	10/29/10 Acknowledgement Ltr to L. Zeller re Request to Release Information Regarding Westinghouse's AP1000 Nuclear Power Reactor.	Vietti-Cook, A. L.	NRC/SECY	
11/1/2010	ML103410114	2010/11/01 AP-1000 DCD Review - FW: NRC Concern with AO/111% Overspeed Trip		- No Known Affiliation	
11/2/2010	ML103120399	Letter - Request for Withholding Information from Public Disclosure, Submittal of Proprietary Version of "AP1000 Plant Startup Human Factors Engineering Design Verification Plan" (DCP_NRC_002990).	Clark, P. M.	NRC/NRO/DNRL/NWE2	DCP_NRC_002990
11/2/2010	ML103120400	Transcript of the Advisory Committee on Reactor Safeguards Westinghouse AP1000 DCD Subcommittee (OPEN Session) on November 2, 2010 in Rockville, MD. Pages 1-73.		NRC/ACRS	NRC-529
11/4/2010	ML103090319	Westinghouse - Chapter 23 AFSE Review.	Ziesing, R. F.	Westinghouse	DCP_NRC_003081
11/4/2010	ML103090321	Westinghouse Markup of NRC Chapter 23 AFSE Replacing Proprietary Information with Non-Proprietary Information, Enclosure 3.		Westinghouse	DCP_NRC_003081
11/5/2010	ML103350684	2010/11/05 AP-1000 DCD Review - RE: NRC Concern with AO/111% Overspeed Trip		- No Known Affiliation	
11/5/2010	ML102870605	2010/11/05 AP-1000 DCD Review - AP1000 DCD Capture - 11/5/10		NRC/NRO	

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11/5/2010	ML103060229	Transcript of ACRS 567th Meeting, November 5, 2009, Pages 1-250.		NRC/ACRS	NRC-3181
11/8/2010	ML103050310	P4 Chapter 3, Sections 3.7 and 3.8 With Shield Building (Section 3.8.4.1.1).		NRC/NRO	
11/8/2010	ML103190365	Proprietary Information Review - Advanced Final Safety Evaluation For Sections 3.7 and 3.8 Titled, "Seismic Design," and "Design Of Category I Structures," Respectively, of NUREG-1793, Supplement 2 - AP1000 Design Certification Amendment.	McKenna, E. M.	NRC/NRO/DNRL/ NWE2	NUREG-1793 S2
11/9/2010	ML103190367	Memo to ACRS Transmitting Sections 3.7 & 3.8, with 3.8.4 of the AP1000 Design Certification Amendment - Advanced Final Safety Evaluation, "Design Of Structures, Components, Equipment, And Systems".	Matthews, D. B.	NRC/NRO/DNRL	NUREG-1793, Suppl 2
11/9/2010	ML103190453	Westinghouse - Chapter 18 of Advanced Final Safety Evaluation (AFSE) Review.	Ziesing, R. F.	Westinghouse	DCP_NRC_003055
11/9/2010	ML103190454	Chapter 18 of Advanced Final Safety Evaluation (AFSE) Review.		Westinghouse	DCP_NRC_003055
11/9/2010	ML103000111	Westinghouse, Determination of Chapter 8 SER Review.	Ziesing, R. F.	Westinghouse	DCP_NRC_003085
11/9/2010	ML103210409	Applicant's Supplemental Environmental Report - Amendment to Standard Design Certification.	Ziesing, R. F.	Westinghouse	DCP_NRC_003086

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11/12/2010	ML103210455	G20100648/LTR-10-0465/EDA TS: SECY-2010-0498 - Louis A. Zeller Ltr. Re: Request to Overturn Withholding of Information from Public Disclosure and a Call for a Special Investigation.	Johnson, M. R.	NRC/NRO	G20100648 LTR-10-0465 SECY-2010-0498
11/12/2010	ML102980545	Reply to Notice of Violation Cited in NRC Inspection Report No. 05200006/2010-203 dated October 28, 2010.	Ziesing, R. F.	Westinghouse	DCP_NRC_003084 IR 10-203
11/12/2010	ML102980562	Westinghouse - Response to Request for Additional Information on SRP Section 10 in Support of AP1000 Design Certification Amendment Application.	Ziesing, R. F.	Westinghouse	DCP_NRC_003088 SRP 10
11/17/2010	ML103000381	Transmittal of Advanced Safety Evaluation for Chapter 2 "Site Envelope" of NUREG-1793, Supplement 2 - AP1000 Design Certification Amendment.	McKenna, E. M.	NRC/NRO/DNRL/ NWE2	NUREG-1793 S2
11/17/2010	ML103230126	Chapter 2 Advanced Safety Evaluation Titled "Site Envelope".	McKenna, E. M.	NRC/NRO/DNRL/ NWE2	NUREG-1793 S2
11/17/2010	ML103230129	Chapter 2 Advanced Safety Evaluation Titled "Site Envelope" Phase 4 SE Concurrence Sheet.		NRC/NRO	
11/17/2010	ML103230439	Westinghouse, Response for Additional Information Related to an AP1000 Design Enhancement that Mitigates the Risk of Spurious Actuation of Automatic Depressurization System.	Ziesing, R. F.	Westinghouse	DCP_NRC_003090

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11/17/2010	ML103230472	Westinghouse - Final Information on Proposed Changes for the AP1000 Design Control Document Rev. 18.	Ziesing, R. F.	Westinghouse	DCP_NRC_003087
11/17/2010	ML103230507	Advanced Final SER Section 307 - Seismic Design.		NRC/ACRS	
11/17/2010	ML103260235	Advanced Final SER Section 3.8 - Design of Category 1 Structures; Westinghouse AP1000 Design Certification Amendment Application Review.		NRC/NRO	
11/17/2010	ML103260236	Advanced Final SE Chapter 3.8.4 Other Category I Structures; Westinghouse AP1000 Design Certification Amendment Application Review.		NRC/NRO	
11/17/2010	ML103470497	Westinghouse - Chapter 23 ASE Review.	Ziesing, R. F.	Westinghouse	DCP_NRC_003089
11/17/2010	ML102650378	Westinghouse Markup of NRC Chapter 23 AFSE Replacing Proprietary Information with Non-Proprietary Information. (Proprietary).		Westinghouse	AW-10-2989 DCP_NRC_003089 NUREG-1793
11/17/2010	ML102650626	Transcript of the Advisory Committee on Reactor Safeguards AP1000 Subcommittee - November 17, 2010 (OPEN). Pages 1-110.	Wang, W.	NRC/ACRS	NRC-558
11/18/2010	ML102650629	07/23/2010 Summary of a Public Meeting with Westinghouse Regarding Change Notice 74 and the AP1000 Containment Vessel External Pressure Design	Donnelly, P. M.	NRC/NRO/DNRL/ NWE2	

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11/18/2010	ML103120238	AP1000 Containment Vessel External Pressure Analysis And Design.		NRC/NRO	
11/18/2010	ML103120290	AP1000 Containment Vessel External Pressure Analysis And Design.		Westinghouse	
11/18/2010	ML103120348	AP1000 Request for Withholding Information from Public Disclosure, Transmittal of Proprietary and Non-Proprietary Versions of Westinghouse Shield Building Action Item 21 (DCP_NRC_003030).	Clark, P. M.	NRC/NRO/DNRL/NWE2	
11/18/2010	ML103200351	Letter - AP1000 Request for Withholding Information from Public Disclosure, Transmittal of Proprietary and Non-Proprietary Versions of Shield Building Benchmarking Analysis (DCP_NRC_003029).	Clark, P. M.	NRC/NRO/DNRL/NWE2	
11/18/2010	ML103230409	Letter - AP1000 Request for Withholding Information from Public Disclosure, Transmittal of Proprietary and Non-Proprietary Versions of Design Report for the AP1000 Enhanced Shield Building (DCP_NRC_003053).	Clark, P. M.	NRC/NRO/DNRL/NWE2	
11/18/2010	ML103230422	Transmittal of Safety Evaluation for AP1000 Design Change Package 64.	McKirgan, J. B.	NRC/NRO/DSRA/SPCV	
11/18/2010	ML103230424	11/18/2010 QA Meeting Agenda.	Kavanagh, K. A.	NRC/NRO/DCIP/CQVP	
11/18/2010	ML103340044	11/18/2010 AP1000 EQ Program	Kavanagh, K. A.	NRC/NRO/DCIP/CQVP	
11/18/2010	ML103340047	11/18/2010 EDV Discussion.		NRC/NRO/DCIP/CQVP Westinghouse	

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11/18/2010	ML103230437	GSI-191 ACRS Slide Presentation - AP1000 Long-Term Cooling Debris Issue Resolution. (Non-Proprietary Version).	Schulz, T. L.	Westinghouse	DCP_NRC_003096 GSI-191
11/18/2010	ML103340045	GSI-191 ACRS Slide Presentation - AP1000 Long-Term Cooling Debris Issue Resolution. (Proprietary Version).	Schulz, T. L.	Westinghouse	DCP_NRC_003096 GSI-191
11/19/2010	ML103340048	Minutes of the ACRS Subcommittee on the AP1000 Reactor. September 20-21, 2010, Rockville, Maryland.	Wang, W.	NRC/ACRS	
11/19/2010	ML103470566	GSI-191 ACRS Slide Presentation - AP1000 Long-Term Cooling Debris Issues Resolution Supplemental Information. (Non-Proprietary Version).	Schulz, T. L.	Westinghouse	DCP_NRC_003096 GSI-191
11/19/2010	ML103470567	GSI-191 ACRS Slide Presentation - AP1000 Long-Term Cooling Debris Issues Resolution Supplemental Information. (Proprietary Version).	Schulz, T. L.	Westinghouse	DCP_NRC_003096 GSI-191
11/19/2010	ML103330200	AP1000 Response to Request for Open Item (SRP 19), RAI-SRP19F-AIA-01 R3 and RAI-SRP19F-AIA-09 R2 In Support of the Design Certification Amendment Application.	Ziesing, R. F.	Westinghouse	DCP_NRC_003093
11/21/2010	ML103200633	Westinghouse - Shield Building Figures and PRA Discussion.	Ziesing, R. F.	Westinghouse	DCP_NRC_003082
11/21/2010	ML103300210	Westinghouse - Shield Building Figures.		Westinghouse	DCP_NRC_003082

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Document Date	Accession Number	Title	Author Name	Author Affiliation	Case/Reference Number
11/22/2010	ML103300211	Transmittal of Safety Evaluation for AP1000 Design Change Package 74.	McKirgan, J. B.	NRC/NRO/DSRA/SPCV	
11/22/2010	ML103330185	AP1000 Response to Request for Additional Information (SRP 19).	Ziesing, R. F.	Westinghouse	DCP_NRC_003094 RAI-SRP19F-AIA-01, Rev 4
11/22/2010	ML103330229	Westinghouse - Re-submittal of Chapter 6 AFSE Review Proprietary Review.	Ziesing, R. F.	Westinghouse	AW-10-3026 DCP_NRC_003095
11/22/2010	ML103340060	Enclosure 3 - Westinghouse Markup of NRC Chapter 6 ASE Review Indicating Proprietary Sections.		Westinghouse	DCP_NRC_003095
11/22/2010	ML103340065	Submittal of Proprietary and Non-Proprietary Version of WCAP-16675, Revision 4, "AP1000 Protection & Safety Monitoring System Architecture Technical Report."	Ziesing, R. F.	Westinghouse	AW-10-2988 DCP_NRC_003091 WCAP-16675, Rev 4
11/22/2010	ML103070212	Westinghouse, Chapter 3 AFSE Proprietary Information Review.	Ziesing, R. F.	Westinghouse	DCP_NRC_003083
11/22/2010	ML103080068	Enclosure 3, Westinghouse Markup of NRC Chapter 3 (Section 3.7 & 3.8) AFSE Indicating Proprietary Sections.		Westinghouse	DCP_NRC_003083
11/23/2010	ML103260447	Transmittal of Safety Evaluation Report for Chapter 1, Titled "Introduction and General Discussion," of NUREG-1793, Supplement 2 - AP1000 Design Certification Amendment.	McKenna, E. M.	NRC/NRO/DNRL/NWE2	NUREG-1793, Suppl 2
11/23/2010	ML103340046	Chapter 1, "Introduction and General Discussion."	McKenna, E. M.	NRC/NRO/DNRL/NWE2	NUREG-1793, Suppl 2

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11/23/2010	ML103340049	Westinghouse Response To U.S. Nuclear Regulatory Commission (NRC) Inspection Report [05200006/2010-203] and Notice of Violation.	Rasmussen, R. A.	NRC/NRO/DCIP/CQVB	
11/23/2010	ML103370228	Submittal of GSI-191 ACRS Slide Presentation - November 18-19, 2010 (Proprietary).	Ziesing, R. F.	Westinghouse	DCP_NRC_003096
11/23/2010	ML103370230	Report of Audits for AP1000 Design Change Package Nos. 72 and 74.	Mrowca, L. A.	NRC/NRO/DSRA/SPLA	
11/29/2010	ML103370231	AP1000 Shield Building - Advisory Committee on Reactor Safeguards -November 17, 2010 - (Non-Proprietary).		Westinghouse	DCP_NRC_003097
11/29/2010	ML103370232	Submittal of ACRS November 17 and 18, 2010 Presentation Materials.	Ziesing, R. F.	Westinghouse	DCP_NRC_003097
11/29/2010	ML103370233	AP1000 Design Control Document Amended Design - Section 3.7 - Seismic Design Presentation (November 17, 2010) - (Non-Proprietary).		Westinghouse	DCP_NRC_003097
11/29/2010	ML103370234	AP1000 Design Control Document Amended Design-Section 3.8 - Design of Category I Structures Presentation (November 17, 2010) - Non-Proprietary).		Westinghouse	DCP_NRC_003097
11/29/2010	ML103370195	AP1000 Shield Building - Advisory Committee on Reactor Safeguards - November 17, 2010 - (Proprietary).		Westinghouse	DCP_NRC_003097
11/29/2010	ML103370196	Shield Building Additional Comments (November 18, 2010) - (Proprietary).		Westinghouse	DCP_NRC_003097



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11/30/2010	ML103370194	WCAP-16675-NP, Rev. 5, App-GW-GLR-147, Rev. 2, "AP1000 Protection and Safety Monitoring System Architecture Technical Report."		Westinghouse	DCP_NRC_003099
11/30/2010	ML103370220	WCAP-16675-P, Rev. 5, App-GW-GLR-071, Rev. 5, "AP1000 Protection and Safety Monitoring System Architecture Technical Report."	Schindhelm, E. P. Single, R. E.	Westinghouse	DCP_NRC_003099
12/1/2010	ML103370587	Submittal of Proprietary and Non-Proprietary Versions of WCAP-16592, Revision 2.	Ziesing, R. F.	Westinghouse	DCP_NRC_003100 WCAP-16592, Rev 2
12/1/2010	ML103480059	Submittal of Proprietary and Non-Proprietary Versions of WCAP-16675, Revision 5.	Ziesing, R. F.	Westinghouse	AW-10-3029 DCP_NRC_003099 WCAP-16675, Rev 5
12/1/2010	ML103480123	Westinghouse Chapter 2 SER Review.	Ziesing, R. F.	Westinghouse	DCP_NRC_003078
12/1/2010	ML103480124	Westinghouse Updated Application to Amend the AP1000 Design Certification Rule.	Rupprecht, S. D.	Westinghouse	DCPNRC_003098
12/1/2010	ML103480125	Westinghouse AP1000 Cover Letter Rev. 18 - Packing Slip	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.CVR.S APP-GW-GL-700.CVR.S.18 APP-GW-GL-700.DCD.S APP-GW-GL-700.DCD.S.18 WESTINGHOUSE WESTINGHOUSE.SUBMISSIO N.8
12/1/2010	ML103480127	Westinghouse AP1000 Cover Letter Rev. 18 - Cover and Copyright	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.CVR.S APP-GW-GL-700.CVR.S.18 WESTINGHOUSE WESTINGHOUSE.SUBMISSIO N.8

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12/1/2010	ML103480128	Westinghouse AP1000 Cover Letter Rev. 18 - Revision 18 Transmittal Letter	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.CVR.S APP-GW-GL-700.CVR.S.18 WESTINGHOUSE WESTINGHOUSE.SUBMISSIO N.8
12/1/2010	ML103480130	Westinghouse AP1000 Design Control Document Rev. 18 - Introduction	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.S APP-GW-GL-700.DCD.S.18 WESTINGHOUSE WESTINGHOUSE.SUBMISSIO N.8
12/1/2010	ML103480149	Westinghouse AP1000 Design Control Document Rev. 18 - Tier 1 - Change Roadmap	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.S APP-GW-GL-700.DCD.S.18 WESTINGHOUSE WESTINGHOUSE.SUBMISSIO N.8
12/1/2010	ML103480150	Westinghouse AP1000 Design Control Document Rev. 18 - Tier 1 - List of Effective Pages	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.S APP-GW-GL-700.DCD.S.18 WESTINGHOUSE WESTINGHOUSE.SUBMISSIO N.8
12/1/2010	ML103480151	Westinghouse AP1000 Design Control Document Rev. 18 - Tier 2 - List of Effective Pages	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.S APP-GW-GL-700.DCD.S.18 WESTINGHOUSE WESTINGHOUSE.SUBMISSIO N.8
12/1/2010	ML103370648	Westinghouse AP1000 Design Control Document Rev. 18 - Tier 2 - Change Pages	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.S APP-GW-GL-700.DCD.S.18 WESTINGHOUSE WESTINGHOUSE.SUBMISSIO N.8
12/1/2010	ML102880708	Westinghouse AP1000 Design Control Document Rev. 18 - Tier 2 - Master Table of Contents	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.S APP-GW-GL-700.DCD.S.18 WESTINGHOUSE WESTINGHOUSE.SUBMISSIO N.8

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12/3/2010	ML103430482	Redacted Version of Dissenting View on AP1000 Shield Building Safety Evaluation Report With Respect to the Acceptance of Brittle Structural Module to be Used for the Cylindrical Shield Building Wall.	Bergman, T. A.	NRC/NRO/DE	
12/9/2010	ML103480064	Summary of AP1000 Design Certification-Regulatory On-Site and Off-Site Reviews of Open Items for the Westems Computer Code.	Clark, P. M.	NRC/NRO/DNRL/ NWE2	
12/9/2010	ML103480067	12/09/2010 CIP Category III Public Workshop - Managing ITAAC Surge (WEC).	Bedford, B.	Westinghouse	
12/9/2010	ML103480078	Westinghouse, ADS Spurious Actuation - Revision to Failure Modes and Effects Analysis.	Ziesing, R. F.	Westinghouse	DCP_NRC_003102
12/9/2010	ML103420306	Westinghouse - Chapter 1 SER Review.	Ziesing, R. F.	Westinghouse	DCP_NRC_003101
12/9/2010	ML103440283	Westinghouse, Submittal of Pages that Contain the Revised Proprietary Markings and a Table Containing NRC Comments and the Associated Westinghouse Responses.	Ziesing, R. F.	Westinghouse	AW-10-3039 DCP_NRC_003103
12/10/2010	ML103440547	Chapter 6 - Engineered Safety Features.	McKenna, E. M.	NRC/NRO/DNRL/ NWE2	
12/10/2010	ML103480065	Chapter 23 - Design Changes Proposed in Accordance with ISG-11.	McKenna, E. M.	NRC/NRO/DNRL/ NWE2	
12/10/2010	ML103480072	Chapter 18 - Human Factors Engineering.	McKenna, E. M.	NRC/NRO/DNRL/ NWE2	

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12/10/2010	ML103480073	Westinghouse request for NRC to retire the AP1000 Final Design Approval (FDA) issued March 10, 2006 upon completion of rulemaking for the amendment to the AP1000 NRC certified design.	Ziesing, R. F.	Westinghouse	DCP_NRC_003079
12/10/2010	ML103350501	Proprietary Review of NRC WESTEMS Computer Code Review Summary.	Ziesing, R. F.	Westinghouse	DCP_NRC_003062
12/10/2010	ML103410351	Proprietary Review of WESTEMS Computer Code Review Summary Report.		Westinghouse	DCP_NRC_003062
12/13/2010		AP1000 Technical Reports (Appendix).		NRC/NRO	
12/13/2010		Report on the Final Safety Evaluation Report Associated with the Amendment to the AP1000 Design Control Document.	Abdel-Khalik, S.	NRC/ACRS	
12/14/10	ML103440465	12/30/2010-Notice of Meeting with Westinghouse Regarding AP1000 Design Certification Amendment Selected Technical or Regulatory Issues.	Jaffe, D. H.	NRC/NRO/DNRL/ NWE2	
12/14/10	ML103440485	01/06/2011-Notice of Forthcoming Public Meeting with Westinghouse Regarding AP1000 Design Certification Amendment Selected Technical or Regulatory Issues.	Jaffe, D. H.	NRC/NRO/DNRL/ NWE2	

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12/14/10	ML103440499	01/13/2011-Notice of Forthcoming Public Meeting with Westinghouse Regarding AP1000 Design Certification Amendment Selected Technical or Regulatory Issues.	Jaffe, D. H.	NRC/NRO/DNRL/NWE2	
12/15/10	ML103550589	Amended Chapter 7 SER Proprietary Review, No Proprietary Information is Included in the ASER.	Ziesing, R. F.	Westinghouse	DCP_NRC_003106
12/16/10	ML103430022	11/17/2010 Summary of Meeting with the Industry Focus Group on New Reactor Operator Licensing.	Pelton, R. M.	NRC/NRO/DCIP/COLP	+reviewedgfw
12/16/10	ML103510336	Non-Concurrence - Advanced Final Safety Evaluation Report for the AP1000 Standard Design Certification Amendment - Chapter 7, "Instrumentation and Control." Non-Concurrence - Advanced Final Safety Evaluation Report for the AP1000 Standard Design Certification	Jackson, T. Roggenbrodt, W. A.	NRC/NRO/DE	
12/16/10	ML103550567	Westinghouse, Change Matrix to review "AP1000 Design Certification Document, Revision 18" (DCD R18).	Ziesing, R. F.	Westinghouse	DCP_NRC_003105
12/17/10	ML103620334	Non-Concurrence - Dissenting View on the AP1000 Instrumentation and controls Designs Certification Amendment Advanced Final Safety Evaluation Report.	Mott, K. D.	NRC/NRO/DE/ICE1	
12/20/10	ML103410348	Long-Term Core Cooling for the Westinghouse AP1000 Pressurized Water Reactor.	Abdel-Khalik, S.	NRC/ACRS	

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12/20/10	ML103570064	Westinghouse, Chapter 7 Non-Concurrence Proprietary Review.	Ziesing, R. F.	Westinghouse	NRC_NRC_003107
12/20/10	ML103570138	G20100750/LTR-10-0537/EDA TS: SECY-2010-0619 - Ltr. Said Abdel-Khalik re: Long-Term Core Cooling for the Westinghouse AP1000 Pressurized Water Reactor	Abdel-Khalik, S.	NRC/ACRS	EDATS: SECY-2010-0619 G20100750 LTR-10-0537 SECY-2010-0619
12/21/10	ML103440347	01/10-14-2011, Public Meeting with Westinghouse on AP1000 Design Certification Amendment - Design Control Document Tier 2* Information.	Gleaves, B.	NRC/NRO/DNRL/ NWE2	01/14/11
12/28/10	ML103510080	Chapter 7 - Instrumentation and Control.	McKenna, E. M.	NRC/NRO/DNRL/ NWE2	
12/28/10	ML103620506	Redacted Version of Non-Concurrence - Insufficient Diversity and Independence in the Implementation Process for AP1000 Instrumentation and Controls Systems and Associated Staff Response.	Jackson, T. Roggenbrodt, W. A.	NRC/NRO/DE	
12/29/10	ML103630486	Redacted Version of the Non-Concurrence Dissenting View on the AP1000 Instrumentation and Controls Design Cert. Amendment Advanced Final Safety Eval. Report with Respect to Eval. and Acceptance Methods Used for Demonstrating Conformance to...	Mott, D. B.	NRC/NRO/DE/ICE1	
01/03/11	ML103000397	SECY-11-0002 - Proposed Rule: AP1000 Design Certification Amendment (RIN 3150-AI81)	Borchardt, R. W.	NRC/EDO	EDATS: NRO-2010-0021 NRO-2010-0021 RIN 3150-AI81

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01/03/11	ML103000412	SECY-11-0002 - Enclosure 1 - Federal Register Notice - Proposed Rule - AP1000 Design Certification Amendment (RIN 3150-AI81)	Vietti-Cook, A. L.	NRC/SECY	EDATS: NRO-2010-0020, RIN 3150-AI81 NRO-2010-0021 SECY-11-0002
01/03/11	ML103000415	SECY-11-0002 - Enclosure 2 - Environmental Assessment - Proposed Rule - AP1000 Design Certification Amendment (RIN 3150-AI81)		NRC/SECY	EDATS: NRO-2010-0021; RIN 3150-AI81 NRO-2010-0021 SECY-11-0002
01/03/11	ML110050388	Markup of Chapter 7 Digital I&C Non-Concurrence.		Westinghouse	
01/03/11	ML110050391	Westinghouse, Chapter 7 Digital I&C Non-Concurrence Proprietary Review.	Ziesing, R. F.	Westinghouse	DCP_NRC_003110
01/05/11	ML110070359	Scaling Calculation for Time to Steady State PCS Film Coverage for the AP1000 Containment Pressure and Temperature Response Analyses.	Ziesing, R. F.	Westinghouse	DCP_NRC_003112
01/19/11	ML110210462	G20110047/LTR-11-0021/EDA TS: SECY-2011-0029 - Ltr. Said Abdel-Khalik re: Report on the Safety Aspects of the Aircraft Impact Assessment for the Westinghouse AP1000 Design Certification Amendment Application.	Abdel-Khalik, S. I.	NRC/ACRS	G20110047 LTR-11-0021 SECY-2011-0029
01/26/11	ML110130158	G20100750/LTR-10-0537/EDA TS: SECY-2010-0619, Letter to Said Abdel-Khalik, Long-Term Cooling for the Westinghouse AP1000 Pressurized Water Reactor.	Borchardt, R. W.	NRC/EDO	G20100750 LTR-10-0537 SECY-2010-0619

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01/28/11	ML110330046	AP1000 Response to Request for Additional Information (CI-SRP9.1.1-SRSB-01 and RAI-SRP4.3-SRSB-03).	Ziesing, R. F.	Westinghouse	AW-11-3067 CI-SRP9.1.1-SRSB-01 DCP_NRC_003114 RAI-SRP4.3-SRSB-03
01/31/11	ML110330069	SECY-11-0002 - Chairman Jaczko vote and comments on SECY-11-0002 - Proposed Rule: AP1000 Design Certification Amendment (RIN 3150-AI81)	Jaczko, G. B.	NRC/Chairman	SECY-11-0002
01/31/11	ML110691052	APP-GW-GLR-115 Revision 3, (TR115) "Effect of High Frequency Seismic Content on SSCs".	Lapay, W. S.	Westinghouse	DCP_NRC_003153
02/02/11	ML110350578	CI-23-22, Section 9.2.2.2 and 9.2.2.4.5.2 Wording on CCS Isolation Valve Closure.	Ziesing, R. F.	Westinghouse	DCP_NRC_003119
02/03/11	ML110130185	Ltr. to J. Gresham - AP1000 Request for Withholding Information from Public Disclosure, Transmittal of Proprietary and Non-Proprietary Versions of ACRS November 17 and 18, 2010, Presentation Materials "AP1000 Shield Building Advisory Committee".	Clark, P. M.	NRC/NRO/DNRL/ NWE2	DCP_NRC_003097
02/03/11	ML110390041	Transmittal of Non-Proprietary Document - WCAP-16779-NP, Revision 0, "Overpressure Protection Report for AP1000 Nuclear Power Plant".	Ziesing, R. F.	Westinghouse	DCP_NRC_003120



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02/05/11	ML103560484	G20100734/LTR-10-0528/EDA TS: SECY-2010-0595 - Ltr. to Said Abdel-Khalik Re: Report on the Final Safety Evaluation Report Associated with the Amendment to the AP1000 Design Control Document.	Borchardt, R. W.	NRC/EDO	G20100734 LTR-10-0528 SECY-2010-0595
02/05/11	ML103560502	Enclosure - Staff Response to Comments in the Advisory Committee on Reactor Safeguards Letter on the AP1000 Design Certification Application.	Abdel-Khalik, S.	NRC/ACRS	G20100734 LTR-10-0528 SECY-2010-0595
02/09/11	ML110400358	SRM-SECY-11-0002 - Proposed Rule: AP1000 Design Certification Amendment (RIN 3150-AI81).	Vietti-Cook, A. L.	NRC/SECY	RIN 3150-AI81 SECY-11-0002
02/09/11	ML110450098	Transmittal of Appendix 19F Security Related Information.	Ziesing, R. F.	Westinghouse	DCP_NRC_003126
02/09/11	ML110450100	Westinghouse - DCD Reference of WCAP-16651-P.	Ziesing, R. F.	Westinghouse	AP1000 DCP_NRC_003123 WCAP-16651-P
02/09/11	ML110450101	AP1000 Response to Request for Additional Information (SRP 3).	Ziesing, R. F.	Westinghouse	AP1000 DCP_NRC_003124 SRP 3
02/09/11	ML110450102	Westinghouse, Response to an NRC Confirmatory item on Chapter 2, CI-SRP2.2-RSAC-01, Section 6.4.4 Wording on Protection of the Operators in the MCR From Offsite Toxic Gas Releases.	Ziesing, R. F.	Westinghouse	DCP_NRC_003118

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02/10/11	ML110190380	Letter - Revision To The Advanced Final Safety Evaluation For Chapter 7 Titled "Instrumentation And Controls," of NUREG-1793, Supplement 2 - AP1000 Design Certification Amendment.	McKenna, E. M.	NRC/NRO/DNRL/ NWE2	NUREG-1793, Suppl 2
02/10/11	ML110190411	Safety Evaluation Report - Section 7.0 Instrumentation And Control.		NRC/NRO/DNRL/ NWE2	
02/10/11	ML110450103	Westinghouse, Tier 2 Section 3.9 Editorial Corrections.	Ziesing, R. F.	Westinghouse	DCP_NRC_003122
02/10/11	ML110450506	Letter from R. F. Ziesing re: Referenced Version of Regulatory Guide 1.82.	Ziesing, R. F.	Westinghouse	DCP_NRC_003125 RG-1.082
02/15/11	ML110280229	G20110047/LTR-11-0021/EDA TS: SECY-2011-0029 - Ltr. to Said Abdel-Khalik re: Report on the Safety Aspects of the Aircraft Impact Assessment for the Westinghouse AP1000 Design Certification Amendment Application.	Borchardt R W	NRC/EDO	EDATS: SECY-2011-0029 G20110047 LTR-11-0021 SECY-2011-0029
02/17/11	ML110490543	Submittal of AP1000 DCD Page Revisions and Associated Confirmatory Item Responses.	Ziesing, R. F.	Westinghouse	DCP_NRC_003132
02/21/11	ML110550390	Westinghouse, Update to Wording in DCD Chapter 15 on Offsite Doses.	Ziesing, R. F.	Westinghouse	DCP_NRC_003137
02/21/11	ML110550391	Westinghouse, Wording Changes on ITAAC Inspectability Concerns and Editorial Corrections.	Ziesing, R. F.	Westinghouse	DCP_NRC_003136

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02/21/11	ML110550455	Westinghouse, Response to Proposed Confirmatory Item in Support of AP1000 Design Certification Amendment Application.	Ziesing, R. F.	Westinghouse	DCP_NRC_003134
02/21/11	ML110550456	Westinghouse, Proprietary Review for Portions of DCD Chapter 3 NRC Comments.	Ziesing, R. F.	Westinghouse	DCP_NRC_003140
02/22/11	ML110550594	Westinghouse, Editorial Correction to Remove Trade Name from DCD Table 6.2.1.1-8 for Rev. 19.	Ziesing, R. F.	Westinghouse	DCP_NRC_003139
02/22/11	ML110550600	Westinghouse, DCD Introduction Wording Update for Registration of AP1000 Trademark.	Ziesing, R. F.	Westinghouse	DCP_NRC_003141
02/23/11	ML110590455	AP1000 Containment Cleanliness - DCD Markup for Rev. 19.	Ziesing, R. F.	Westinghouse	DCP_NRC_003113
02/23/11	ML110590480	Submittal of WCAP-16674, Revision 4, "AP1000 I&C Data Communication and Manual Control of Safety Systems and Components."	Ziesing, R. F.	Westinghouse	DCP_NRC_003115
02/24/11	ML110480631	01/10/11 - 01/14/11 Summary of Meeting with Westinghouse Regarding Tier 2* Items in the AP1000 Design Control Document, held in Cranberry Township, PA.	Gleaves, W. C.	NRC/NRO/DNRL/ NWE2	
02/24/11	ML110620129	Submittal of APP-GW-GLR-137, Revision 1 "Bases of Digital Overpower and Over-Temperature Delta-T Reactor Trips."	Ziesing, R. F.	Westinghouse	DCP_NRC_003117

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02/25/11	ML110601158	WCAP-16361, Revision 1, Westinghouse Setpoint Methodology for Protection Systems - AP1000.	Ziesing, R. F.	Westinghouse	CI-SRP-7.2-ICE-07 DCP_NRC_003129
02/25/11	ML110610685	Westinghouse, AP1000 DCD Tier 2 Chapter 16 Proposed Editorial Changes. Proposed Editorial/Consistency Correction Responses Are Submitted In Support Of The AP1000 Design Certification Amendment Application (Docket No. 52-006).	Ziesing, R. F.	Westinghouse	DCP_NRC_003131
02/25/11	ML110610782	AP1000 RCP Flywheel 18Cr/18Mn Retainer Ring Material SCC Testing Program.	Ziesing, R. F.	Westinghouse	DCP_NRC_003146
02/25/11	ML110620126	Westinghouse, Regarding Responses To NRC Confirmatory Items From Chapter 16 And Chapter 23 In Support Of The AP1000 Design Certification Amendment Application (Docket No. 52-006).	Ziesing, R. F.	Westinghouse	DCP_NRC_003130
02/25/11	ML110670277	CI-SRP-7.A-SRSB-03, Markup of DCD Revision 18, Chapter 15-Section 15.4.2 in Support of the AP1000 Design Certification Amendment Application.	Ziesing, R. F.	Westinghouse	DCP_NRC_003127
02/28/11	ML110630110	Re-submittal of Appendix 19F Security-Related Information.	Ziesing, R. F.	Westinghouse	DCP_NRC_003126 DCP_NRC_003148
02/28/11	ML110670191	WCAP-16438-NP, Revision 3, "FMEA of AP1000 Protection and Safety Monitoring System."	Domitrovich, B.	Westinghouse	AW-11-3069 DCP_NRC_003116

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02/28/11	ML110691050	APP-GW-S2R-010, Revision 5 (TR03) "Extension of Nuclear Island Seismic Analyses to Soil Sites".		Westinghouse	DCP_NRC_003153
02/28/11	ML110691051	APP-GW-GLR-044, Revision 2, (TR85) "Nuclear Island Basemat and Foundation".		Westinghouse	DCP_NRC_003153
03/01/11	ML110630109	Response to Requests for Additional Information on PCS Operation.	Ziesing, R. F.	Westinghouse	DCP_NRC_003147
03/01/11	ML110630111	Westinghouse Preparation for Engineering Design Verification (EDV) Inspection.	Ziesing, R. F.	Westinghouse	DCP_NRC_003150
03/02/11	ML110630108	OI-SRP7.2-ICE-08-WCAP-16361, Revision 1.	Ziesing, R. F.	Westinghouse	DCP_NRC_003149 WCAP-16361, Rev 1
03/02/11	ML110670188	CI-SRP-7.2-ICE-02, CI-SRP7.3-ICE-2, WCAP-16438, Revision 3, "FMEA of AP-1000 Protection and Safety Monitoring System."	Ziesing, R. F.	Westinghouse	AW-11-3069 DCP_NRC_003116 WCAP-16438, Rev 3
03/03/11	ML110670233	CI-SRP16-CTSB-38; Spent Fuel Rack Dimensions; Section 9.1.2.2.1 and Section 16.	Ziesing, R. F.	Westinghouse	AW-11-3095 CI-SRP16-CTSB-38 DCP_NRC_003133
03/03/11	ML110670296	APP-GW-GLR-029NP Rev. 3, "AP1000 Spent Fuel Storage Racks Criticality Analysis," Non-Proprietary, Enclosure 4 to DCP_NRC_003138.	Anton, S.	Holtec International	AW-11-3096 DCP_NRC_003138
03/03/11	ML110670298	Submittal of Spent Fuel Storage Racks Criticality Analysis, APP-GW-GLR-029 (TR65), Rev. 3.	Ziesing, R. F.	Westinghouse	APP-GW-GLR-029, Rev. 3 AW-11-3096 DCP_NRC_003138 TR65

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03/07/11	ML110670311	Advanced submittal of the DCD Revision 19, Redacted Public Version of Appendix 19F.	Ziesing, R. F.	Westinghouse	DCP_NRC_003152
03/08/11	ML110670206	Explanatory Note for Appendix 19F (Aircraft Impact Assessment Information).	McKenna, E. M.	NRC/NRO/DNRL/NWE2	
03/08/11	ML110691049	Transmittal of Technical Reports 03, 85 and 115.	Ziesing, R. F.	Westinghouse	DCP_NRC_003153
03/10/11	ML110700167	03/10/2011 Functional Arrangement Tier 1 Definition.	Cerne, T. Chapman, T. A. Welch, C. R.	NRC/NRO NRC/RGN-I NRC/RGN-II	
03/10/11	ML110760228	Transmittal of Technical Report APP-GW-GLR-096 Revision 2, (Proprietary) and APP-GW-GLR-097 Revision 2 (Non-Proprietary) "Evaluation of the Effect of the AP1000 Enhanced Shield Building Design on the Containment Response and Safety Analyses".	Ziesing, R. F.	Westinghouse	DCP_NRC_003128 FOIA/PA-2011-0176
03/10/11	ML110760230	APP-GW-GLR-097, Revision 2, "Evaluation of the Effect of the AP1000 Enhanced Shield Building Design on the Containment Response and Safety Analyses," Enclosure 4 to DCP_NRC_003128.		Westinghouse	DCP_NRC_003128
03/15/11	ML110770282	10 CFR 50.46 Annual Report for the AP1000 Standard Plant Design.	Ziesing, R. F.	Westinghouse	DCP_NRC_003144
03/21/11	ML110740411	Audit Report for AP1000 Design Certification Amendment Spent Fuel Rack Dimension Changes - January 31, 2011.	Buckberg, P. H.	NRC/NRO/DNRL/NWE2	

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03/23/11	ML110760223	AP1000 Request For Withholding Information From Public Disclosure, Evaluation Of The Effect Of AP1000 Enhanced Shield Building Design On The Containment Response And Safety Analyses (DCP_NRC_003128).	Mitra, S. K.	NRC/NRO/DNRL/NWE2	DCP_NRC_003128 FOIA/PA-2011-0176
03/24/11	ML110840455	2011/03/24 AP-1000 DCD Review - RE: AP1000 Final SE Chapter 23 - Concurrence		NRC/NRO	
03/24/11	ML110890434	HOLD Updates to DCD Introduction to Tier 2 Information.	Ziesing, R. F.	Westinghouse	DCP_NRC_003151
03/28/11	ML110910540	Submittal of APP-GW-GLR-602 (Proprietary) and APP-GW-GLR-603 (Non-Proprietary), "AP1000 Shield Building Design Details for Select Wall and RC/SC Connections".	Ziesing, R. F.	Westinghouse	APP-GW-GLR-602 APP-GW-GLR-603 AW-11-3097 DCP_NRC_003154
03/29/11	ML110900542	Transmittal of Technical Report APP-GW-GLR-044, Revision 3 (TR-85).	Ziesing, R. F.	Westinghouse	DCP_NRC_003159 TR-85
03/30/11	ML110820794	AP1000 Request for Withholding Information From Public Disclosure, CI-SRP-7.2-ICE-07-WCAP-16 361, Revision 1 (DCP_NRC_003129).	Mitra, S. K.	NRC/NRO/DNRL/NWE2	DCP_NRC_003129
03/30/11	ML110900544	Letter Withdrawal of Westinghouse Letter DCP_NRC_003142, Dated 03/24/2011, in Support of the AP1000 Design Certification Amendment Application.	Ziesing, R. F.	Westinghouse	DCP_NRC_003142 DCP_NRC_003160

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03/31/11	ML110910543	Transmittal of APP-GW-GLR-005, Rev. 5 "Containment Vessel Design Adjacent to Large Penetrations." (TR09).	Ziesing, R. F.	Westinghouse	DCP_NRC_003158
04/01/11	ML110250634	06/23/2010 - 09/02/2010 Summary of the AP1000 Design Certification - Regulatory On-Site and Off-Site Reviews of Open Items for the WESTEMS Computer Code (Redacted Version).	Clark, P.	NRC/NRO/DNRL/ NWE2	
04/01/11	ML110910419	2011/04/01 AP-1000 DCD Review - RE: AP1000 Final SE Chapter 9 - Concurrence		NRC/NRO	
04/04/11	ML110871707	AP1000 Request For Withholding Information From Public Disclosure, CI-SRP-7.2-Ice-02, CI-SRP7.3-ICE-02, WCAP-16438, Revision 3, "FMEA Of AP1000 Protection And Safety Monitoring System" (DCP_NRC_003116).	Mitra, S. K.	NRC/NRO/DNRL/ NWE2	DCP_NRC_003116 WCAP-16438, Rev 3
04/04/11	ML110960573	Westinghouse, Response to NRC Comments on Proprietary Review of WESTEMS Audit Report.	Ziesing, R. F.	Westinghouse	DCP_NRC_003157
04/06/11	ML110980610	Wording Change for DCD Chapter 2 Editorial Correction.	Ziesing, R. F.	Westinghouse	DCP_NRC_003163



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04/08/11	ML110871927	AP1000 Request For Withholding Information From Public Disclosure, CI-SRP-7.2-ICE-06, WCAP-16674, Revision 4, "AP1000 I&C Data Communication And Manual Control Of Safety Systems And Components" (DCP_NRC_003115)	Mitra, S. K.	NRC/NRO/DNRL/ NWE2	DCP_NRC_003115 WCAP-16674, Rev 4
04/12/11	ML111030427	2011/04/12 AP-1000 DCD Review - AP1000 Final SE Chapter 3 - Concurrence		NRC/NRO	
04/13/11	ML111020005	04/12/2011 Notice of Closed Meeting with Westinghouse to Discuss the AP1000 Shield Building Design Methodology.	Gleaves, B.	NRC/NRO/DNRL/ NWE2	
04/15/11	ML110950197	AP1000 Request For Withholding Information From Public Disclosure, CI-SRP16-CTSB-38; Spent Fuel Rack Dimensions; Section 9.1.2.2.1 and Section 16 (DCP_NRC_003133).	Mitra, S. K.	NRC/NRO/DNRL/ NWE2	
04/27/11	ML110910315	AP1000 Request for Withholding Information from Public Disclosure, Submittal of Spent Fuel Storage Racks Criticality Analysis, APP-GW-GLR-029 (TR 65) Rev. 3 (DCP_NRC_003138).	Mitra, S. K.	NRC/NRO/DNRL/ NWE2	APP-GW-GLR-029, Rev 3
05/03/11	ML110871066	05/03/11 Memorandum Regarding Advisory Committee On Reactor Safeguards Review of AP1000 Design Certification Amendment.	McKenna, E. M.	NRC/NRO/DNRL/ NWE2	

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05/03/11	ML11129A099	Westinghouse Transmittal of Chapter 3 AFSE Proprietary Information Review.	Ziesing, R. F.	Westinghouse	AW-11-3126 DCP_NRC_003167
05/04/11	ML111230096	05/17/11 Notice of Meeting with Westinghouse to Discuss AP1000 Shield Building Design Methodology.	Gleaves, B.	NRC/NRO/DNRL/ NWE2	
05/09/11	ML111250111	AP1000 Request For Withholding Information From Public Disclosure, Transmittal Of Proprietary And Non-Proprietary Reports Related To Turbine Reliability (DCP/NRC1889).	Mitra, S. K.	NRC/NRO/DNRL/ NWE2	DCP/NRC1889
05/11/11	ML111230115	AP1000 Request For Withholding Information From Public Disclosure, AP1000 Response To Open Item OI-SRP5.4.1-SRSB-01 Proprietary And Non-Proprietary (DCP_NRC_002838)	Mitra, S. K.	NRC/NRO/DNRL/ NWE2	DCP_NRC_002838
05/16/11	ML11144A068	Presentation Slides "AP1000 Shield Building Design," Meeting with NRC Staff, May 17, 2011 (Proprietary and Non-Proprietary).	Ziesing, R. F.	Westinghouse	AW-11-3159 DCP_NRC_003169
05/16/11	ML11168A096	Presentation Slides "AP1000 Shield Building Design," Meeting with NRC Staff, April 12, 2011.	Ziesing, R. F.	Westinghouse	AW-11-3122 DCP_NRC_003155
05/17/11	ML111190157	04/12-13/2011 Summary of a Category 1 Closed Meeting with Westinghouse Regarding AP1000 Shield Building Design Methodology, in Rockville, Maryland.	Gleaves, W. C.	NRC/NRO/DNRL/ NWE2	

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05/18/11	ML111260315	AP1000 Request For Withholding Information From Public Disclosure, Transmittal Of Proprietary And Non-Proprietary Reports Related To Turbine Reliability (DCP_NRC_002549).	Mitra, S. K.	NRC/NRO/DNRL/ NWE2	DCP_NRC_002549
05/18/11	ML111300435	Response to Requests for Withholding of Proprietary Information in Accordance With 10 CFR Part 2, Section 2.390, "Chapter 3 AFSE Proprietary Information Review"(DCP_NRC_003167).	Mitra, S. K.	NRC/NRO/DNRL/ NWE2	DCP_NRC_003167
05/18/11	ML111370357	Follow-Up Inspection of the AP1000 Pressurize Water Reactor Design Aircraft Impact Assessment.	Peralta J D	NRC/NRO/DCIP/CQVB	
05/19/11	ML111370664	06/02/2011 Notice of Meeting with Westinghouse on The AP1000 Containment Vessel Peak Pressure.	Buckberg, P. H.	NRC/NRO/DNRL/ NWE2	
05/19/11	ML11144A188	G20110374/EDATS: OEDO-2011-0366 - Said Abdel-Khalik, Ltr. re: Final Safety Evaluation Report Associated with the Amendment to the AP1000 Design Control Document.	Abdel-Khalik S I	NRC/ACRS	EDATS: OEDO-2011-0366 G20110374 OEDO-2011-0366
05/26/11	ML111430582	Summary of A Category 1 Meeting With Westinghouse Regarding AP1000 Shield Building Design Methodology, In Rockville, Maryland On May 17, 2011.	Gleaves W C	NRC/NRO/DNRL/ NWE2	

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06/01/11	ML111470515	Audit Plan for Review of the AP1000 Containment Vessel Pressure Documents - May 23 - June 24, 2011.	Buckberg, P. H.	NRC/NRO/DNRL/ NWE2	
06/06/11	ML111460089	Response to Requests for Withholding of Proprietary Information in Accordance With 10 CFR Part 2, Section 2.390, Presentation Slides "AP1000 Shield Building Design," Meeting With NRC Staff, April 12, 2011 (DCP_NRC_003155).	Mitra, S. K.	NRC/NRO/DNRL/ NWE2	
06/06/11	ML111460163	Response To Requests For Withholding Of Proprietary Information In Accordance With 10 CFR Part 2, Section 2.390, Presentation Slides "AP1000 Shield Building Design," Meeting With NRC Staff, May 17, 2011 (DCP_NRC_003169).	Mitra, S. K.	NRC/NRO/DNRL/ NWE2	DCP_NRC_003169
06/06/11	ML11159A035	Westinghouse Re-Submittal of Chapter 7 AFSE Review.	Ziesing, R. F.	Westinghouse	AW-11-3168 DCP_NRC_003172
06/06/11	ML11159A233	Updated Response to RAI OI-SRP5.4.1-CIB1-01 R1.	Ziesing, R. F.	Westinghouse	DCP_NRC_003170 WEM_DCP_000593
06/08/11	ML11164A079	Presentation Slides "AP1000 Design Control Document - Containment Pressure Analysis," Meeting with NRC Staff, June 2, 2011.	Ziesing, R. F.	Westinghouse	DCP_NRC_003174
06/12/11	ML11166A214	Wording Change for DCD Introduction, References and Chapter 7 Editorial Correction	Ziesing, R. F.	Westinghouse	DCP_NRC_003165

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06/12/11	ML11166A215	Transmittal of Revision 19 DCD Markups Resulting from the Revision of APP-GW-GLR-096 Proprietary), "Evaluation of the Effect of the AP-1000 Enhanced Shield Building Design on the Containment Response and Safety Analyses" for the Updated Peak.....	Ziesing, R. F.	Westinghouse	DCP_NRC_003171
06/12/11	ML11168A044	DCD Updates to Chapter 3 Information.	Ziesing, R. F.	Westinghouse	DCP_NRC_003161
06/12/11	ML11168A047	Enclosure 6 - Markup of DCD Revision 18, Section 3.7 and Appendix 3H figures that include SUNSI.		Westinghouse	DCP_NRC_003161
06/12/11	ML11180A087	Enclosures 3, 4, 5, 8 and 9 re Markup of DCD, Revision 18.	Ziesing, R. F.	Westinghouse	DCP_NRC_003161
06/13/11	ML11171A301	Westinghouse AP1000 Cover Letter Rev. 19 - Revision 19 Transmittal Letter	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.CVR.P APP-GW-GL-700.CVR.P.19 Submission 11
06/13/11	ML11171A303	Westinghouse AP1000 Design Control Document Rev. 19 - Introduction	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A304	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 1 - Change Roadmap	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A305	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 1 - List of Effective Pages	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A306	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 1 - Table of Contents	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A307	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 1 Chapter 1 - Introduction - Section 1.0 Introduction	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11

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Document Date	Accession Number	Title	Author Name	Author Affiliation	Case/Reference Number
06/13/11	ML11171A308	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 1 Chapter 2 - System Based Design Descriptions and ITAAC - 2.1 Reactor	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A310	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 1 Chapter 2 - System Based Design Descriptions and ITAAC - 2.2 Nuclear Safety Systems	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A311	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 1 Chapter 2 - System Based Design Descriptions and ITAAC - 2.3 Auxiliary Systems	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A312	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 1 Chapter 2 - System Based Design Descriptions and ITAAC - 2.4 Steam and Power Conversion Systems	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A313	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 1 Chapter 2 - System Based Design Descriptions and ITAAC - 2.5 Instrumentation and Control Systems	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A315	Westinghouse Updated Application to Amend AP1000 Nuclear Power Plant Design Certification Rule.	Rupprecht, S. D.	Westinghouse	DCP_NRC_003177

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06/13/11	ML11171A314	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 1 Chapter 2 - System Based Design Descriptions and ITAAC - 2.6 Electrical Power Systems	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A316	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 1 Chapter 2 - System Based Design Descriptions and ITAAC - 2.7 HVAC Systems	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A317	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 1 Chapter 3 - Non-System Based Design Descriptions and ITAAC - 3.1 Emergency Response Facilities	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A318	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 1 Chapter 3 - Non-System Based Design Descriptions and ITAAC - 3.2 Human Factors Engineering	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A319	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 1 Chapter 3 - Non-System Based Design Descriptions and ITAAC - 3.3 Buildings	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A320	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 1 Chapter 3 - Non-System Based Design Descriptions and ITAAC - 3.4 Initial Test Program	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11

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06/13/11	ML11171A321	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 1 Chapter 3 - Non-System Based Design Descriptions and ITAAC - 3.5 Radiation Monitoring	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A322	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 1 Chapter 3 - Non-System Based Design Descriptions and ITAAC - 3.6 Reactor Coolant Pressure Boundary Leak Detection	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A323	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 1 Chapter 3 - Non-System Based Design Descriptions and ITAAC - 3.7 Design Reliability Assurance Program	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A324	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 1 Chapter 4 - Interface Requirements - Section 4.0 Interface Requirements	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A325	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 1 Chapter 5 - Site Parameters - 5.0 Site Parameters	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A326	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 - List of Effective Pages	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A327	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 - Change Pages	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11



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06/13/11	ML11171A328	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 - Master Table of Contents	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A329	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 1 - Introduction and General Description of the Plant - Section 1.1 Introduction	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A330	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 1 - Introduction and General Description of the Plant - Section 1.2 General Plant Description	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A331	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 1 - Introduction and General Description of the Plant - Section 1.3 Comparisons With Similar Facility Designs	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A332	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 1 - Introduction and General Description of the Plant - Section 1.4 Identification of Agents and Contractors	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A333	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 1 - Introduction and General Description of the Plant - Section 1.5 Requirements for Further Technical Information	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11

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06/13/11	ML11171A334	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 1 - Introduction and General Description of the Plant - Section 1.6 Material Referenced	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A335	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 1 - Introduction and General Description of the Plant - Section 1.7 Drawings and Other Detailed Information	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A336	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 1 - Introduction and General Description of the Plant - Section 1.8 Interfaces for Standard Design	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A337	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 1 - Introduction and General Description of the Plant - Section 1.9 Compliance with Regulatory Criteria	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A338	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 1 - Introduction and General Description of the Plant - Table of Contents	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A339	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 1 - Introduction and General Description of the Plant - Appendix 1A Conformance With Regulatory Guides	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11

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06/13/11	ML11171A340	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 1 - Introduction and General Description of the Plant - Appendix 1B Severe Accident Mitigation Design Alternatives	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A341	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 10 – Steam and Power Conversion System – Section 10.1 Summary Description	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A342	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 10 – Steam and Power Conversion System – Section 10.2 Turbine-Generator	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A343	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 10 – Steam and Power Conversion System – Section 10.3 Main Steam Supply System	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A344	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 10 – Steam and Power Conversion System – Section 10.4 Other Features of Steam and Power Conversion System	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A345	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 10 – Steam and Power Conversion System – Table of Contents	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11

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Document Date	Accession Number	Title	Author Name	Author Affiliation	Case/Reference Number
06/13/11	ML11171A346	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 11 – Radioactive Waste Management – Section 11.1 Source Terms	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A347	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 11 – Radioactive Waste Management – Section 11.2 Liquid Waste Management Systems	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A348	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 11 – Radioactive Waste Management – Section 11.3 Gaseous Waste Management System	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A349	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 11 – Radioactive Waste Management – Section 11.4 Solid Waste Management	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A350	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 11 – Radioactive Waste Management – Section 11.5 Radiation Monitoring	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A351	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 11 – Radioactive Waste Management – Table of Contents	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11

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06/13/11	ML11171A352	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 12 – Radiation Protection – Section 12.1 Assuring that Occupational Radiation Exposures Are As-Low-As-Reasonably Achievable (ALARA)	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A353	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 12 – Radiation Protection – Section 12.2 Radiation Sources	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A354	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 12 – Radiation Protection – Section 12.3 Radiation Protection Design Feature	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A355	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 12 – Radiation Protection – Section 12.4 Dose Assessment	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A356	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 12 – Radiation Protection – Section 12.5 Health Physics Facilities Design	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A357	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 12 – Radiation Protection – Table of Contents	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A358	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 13 - Conduct of Operations - Table of Contents	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11

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06/13/11	ML11171A359	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 13 - Conduct of Operations	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A360	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 14 - Initial Test Program - Section 14.1 Specific Information to be Included in Preliminary Final Safety Analysis Reports	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A362	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 14 - Initial Test Program - Section 14.2 Specific Information to be Included in Standard Safety Analysis Reports	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A363	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 14 - Initial Test Program - Section 14.3 Certified Design Material	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A364	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 14 - Initial Test Program - Section 14.4 Combined License Applicant Responsibilities	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A365	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 14 - Initial Test Program - Table of Contents	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A366	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 14 - Appendix 14A DAC ITAAC Closure Process	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11

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06/13/11	ML11171A367	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 15 - Accident Analyses - Section 15.0 Accident Analyses	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A368	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 15 - Accident Analyses - Section 15.1 Increase in Heat Removal From the Primary System	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A369	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 15 - Accident Analyses - Section 15.2 Decrease in Heat Removal by the Secondary System	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A370	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 15 - Accident Analyses - Section 15.3 Decrease in Reactor Coolant System Flow Rate	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A371	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 15 - Accident Analyses - Section 15.4 Reactivity and Power Distribution Anomalies	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A372	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 15 - Accident Analyses - Section 15.5 Increase in Reactor Coolant Inventory	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11

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06/13/11	ML11171A373	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 15 - Accident Analyses - Section 15.6 Decrease in Reactor Coolant Inventory	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A374	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 15 - Accident Analyses - Section 15.7 Radioactive Release from a Subsystem or Component	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A375	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 15 - Accident Analyses - Section 15.8 Anticipated Transients Without Scram	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A377	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 15 - Accident Analyses - Table of Contents	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A378	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 15 - Accident Analyses - Appendix 15A Evaluation Models And Parameters for Analysis of Radiological Consequences of Accidents	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A379	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 15 - Accident Analyses - Appendix 15B Removal of Airborne Activity from the Containment Atmosphere Following a LOCA	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11



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06/13/11	ML11171A380	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 16 - Technical Specifications - 16.1 Bases Part 1	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A381	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 16 - Technical Specifications - 16.1 Bases Part 2	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A382	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 16 - Technical Specifications - 16.1 Technical Specifications	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A383	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 16 - Technical Specifications - 16.2 Design Reliability Assurance Program	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A384	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 16 - Technical Specifications - 16.3 Investment Protection	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A385	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 16 - Technical Specifications - Table of Contents	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A386	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 17 - Quality Assurance - Table of Contents	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A387	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 17 - Quality Assurance	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11

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06/13/11	ML11171A388	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 18 - Human Factors Engineering - Section 18.10 Training Program Development	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A389	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 18 - Human Factors Engineering - Section 18.11 Human Factors Engineering Verification and Validation	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A390	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 18 - Human Factors Engineering - Section 18.12 Inventory	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A391	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 18 - Human Factors Engineering - Section 18.13 Design Implementation	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A392	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 18 - Human Factors Engineering - Section 18.14 Human Performance Monitoring	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A393	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 18 - Human Factors Engineering - Section 18.1 Overview	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11

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06/13/11	ML11171A394	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 18 - Human Factors Engineering - Section 18.2 Human Factors Engineering Program Management	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A395	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 18 - Human Factors Engineering - Section 18.3 Operating Experience Review	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A396	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 18 - Human Factors Engineering - Section 18.4 Functional Requirements Analysis and Allocation	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A397	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 18 - Human Factors Engineering - Section 18.5 AP1000 Task Analysis Implementation Plan	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A398	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 18 - Human Factors Engineering - Section 18.6 Staffing	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A399	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 18 - Human Factors Engineering - Section 18.7 Integration of Human Reliability Analysis with Human Factors Engineering	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11

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06/13/11	ML11171A400	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 18 - Human Factors Engineering - Section 18.8 Human System Interface Design	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A401	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 18 - Human Factors Engineering - Section 18.9 Procedure Development	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A402	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 18 - Human Factors Engineering - Table of Contents	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A403	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 19 - Probabilistic Risk Assessment - Sections 19-1 to 19.14	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A404	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 19 - Probabilistic Risk Assessment - Sections 19.15 to 19.33	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A405	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 19 - Probabilistic Risk Assessment - Sections 19.34 to 19.35	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A406	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 19 - Probabilistic Risk Assessment - Sections 19.36 to 19.38	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11

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06/13/11	ML11171A408	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 19 - Probabilistic Risk Assessment - Sections 19.39 to 19.40	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A409	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 19 - Probabilistic Risk Assessment - Sections 19.41 to 19.54	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A410	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 19 - Probabilistic Risk Assessment - Sections 19.55 to 19.58	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A411	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 19 - Probabilistic Risk Assessment - Sections 19.59 PRA Results and Insights	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A412	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 19 - Table of Contents	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A413	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 19 - Probabilistic Risk Assessment - Appendix 19A Thermal Hydraulic Analysis To Support Success Criteria	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A414	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 19 - Probabilistic Risk Assessment - Appendix 19B Ex-Vessel Severe Accident Phenomena	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11

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06/13/11	ML11171A415	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 19 - Probabilistic Risk Assessment - Appendix 19C Additional Assessment of AP1000 Design Features	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A416	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 19 - Probabilistic Risk Assessment - Appendix 19D Equipment Survivability Assessment	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A417	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 19 - Probabilistic Risk Assessment - Appendix 19E Shutdown Evaluation	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A418	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 19 - Probabilistic Risk Assessment - Appendix 19F Malevolent Aircraft Impact	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 SUBMISSION 11
06/13/11	ML11171A419	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 2 - Table of Contents	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A420	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 2 - Site Characteristics	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 WESTINGHOUSE SUBMISSION 11

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06/13/11	ML11171A422	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 3 - Design of Structures, Components, Equip. and Systems - Section 3.10 Seismic and Dynamic Qualification of Seismic Category I Mechanical	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A423	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 3 - Design of Structures, Components, Equip. and Systems - Section 3.11 Environmental Qualification of Mechanical and Electrical Equipment	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A424	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 3 - Design of Structures, Components, Equip. and Systems - Section 3.1 Conformance with Nuclear Regulatory Commission General Design Criteria	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A425	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 3 - Design of Structures, Components, Equip. and Systems - Section 3.2 Classification of Structures, Components, and Systems	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11

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06/13/11	ML11171A426	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 3 - Design of Structures, Components, Equip. and Systems - Section 3.3 Wind and Tornado Loadings	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A427	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 3 - Design of Structures, Components, Equip. and Systems - Section 3.4 Water Level (Flood) Design	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A428	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 3 - Design of Structures, Components, Equip. and Systems - Section 3.5 Missile Protection	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A429	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 3 - Design of Structures, Components, Equip. and Systems - Section 3.6 Protection Against the Dynamic Effects Associated with the Postulated	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A430	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 3 - Design of Structures, Components, Equip. and Systems - Section 3.7 Seismic Design	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11



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06/13/11	ML11171A431	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 3 - Design of Structures, Components, Equip. and Systems - Section 3.8 Design of Category I Structures	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A432	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 3 - Design of Structures, Components, Equip. and Systems - Section 3.9 Mechanical Systems and Components	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A433	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 3 - Design of Structures, Components, Equip. and Systems – Table of Contents	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A434	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 3 - Design of Structures, Components, Equip. and Systems - Appendix 3A HVAC Ducts And Duct Supports	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
06/13/11	ML11171A435	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 3 - Design of Structures, Components, Equip. and Systems - Appendix 3B Leak-Before-Break Evaluation Of The AP1000 Piping	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11

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Document Date	Accession Number	Title	Author Name	Author Affiliation	Case/Reference Number
06/13/11	ML11171A436	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 3 - Design of Structures, Components, Equip. and Systems - Appendix 3C Reactor Coolant Loop Analysis Methods	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
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06/13/11	ML11171A469	Westinghouse AP1000 Design Control Document Rev. 19 - Tier 2 Chapter 7 - Instrumentation and Controls - Section 7.5 Safety-Related Display Information	Rupprecht, S. D.	Westinghouse	APP-GW-GL-700.DCD.P APP-GW-GL-700.DCD.P.19 Submission 11
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## C. ABBREVIATIONS

$\chi/Q$	atmospheric dispersion
$\mu\text{m}$	micrometer
$\mu\text{m}/\text{m}$	micrometers per meter
$\mu\text{Sv}/\text{h}$	microSieverts per hour
2D	two dimensional
2oo2	two-out-of-two
2oo3	two-out-of-three
2oo4	two-out-of-four
3D	three dimensional
ac	alternating current
ACI	American Concrete Institute
ADAMS	Agencywide Documents Access and Management System
ADS	automatic depressurization system
AEA	Atomic Energy Act
AF	Advant Fieldbus
AFCAP	Advanced First Core Analysis Program
AFSE	Advanced Final Safety Evaluation
Ag-In-Cd	silver-indium-cadmium
AIA	aircraft impact assessment
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
ALARA	as low as is reasonably achievable
ALI	annual limit on intake
AIOOH	aluminum oxyhydroxide
ALWR	advanced light-water reactor
AMS	Asset Management Solutions
AMS	Aerospace Material Specification
AMSAC	anticipated transient without scram (ATWS) mitigation systems actuation circuitry
ANS	American National Standard
ANS	American Nuclear Society
ANSI	American National Standards Institute
AOA	axial offset anomaly
AOI	Advant-Ovation Interface
AOO	anticipated operational occurrence
AOP	abnormal operating procedure
AOV	air operated valve
API	American Petroleum Institute
ARP	Alarm Response Procedures
ART	adjusted reference temperature
ASB	auxiliary and shield building
ASCE	American Society of Civil Engineers
ASD	allowable stress design
ASHRAE	American Society of Heating, Refrigerating and Air-Conditioning Engineers
ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing and Materials

## Abbreviations

ASTRUM	Automated Statistical Treatment of Uncertainty Method
ATWS	anticipated transients without scram
AV	allowable values
AWS	American Welding Society
B&PV	Boiler & Pressure Vessel (ASME B&PV Code)
B&W	Babcock & Wilcox
BAC	bounding analysis curve
BDBA	beyond design basis accident
BELOCA	best estimate large-break loss-of-coolant accident
BPL	bistable processor logic
BTP	Branch Technical Position
Btu	British thermal units
BTU/ft-hr-°F	British thermal unit per foot hour degree Fahrenheit
BWR	boiling-water reactor
C	Celsius
Ca(PO <sub>4</sub> ) <sub>2</sub>	calcium phosphate
CAFTA	Computer-Aided Fault-Tree Analysis System
Cal-Sil	calcium silicate
CAS	central alarm station
CASS	cast austenitic stainless steel
CBP	computer-based procedure
CCF	common-cause failure
CCS	component cooling water system
CCW	component cooling water
CCWS	component cooling water system
CDF	core damage frequency
CDF	cumulative distribution function
CDFM	conservative deterministic failure margin
CDI	conceptual design information
CE	Combustion Engineering
CEI/IEC	Commission Electrotechnique Internationale/International Electrotechnical Commission
CET	core exit thermocouple
CEUS	Central and Eastern United States
CFD	computational fluid dynamics
cfm	cubic feet per minute
CFR	<i>Code of Federal Regulations</i>
CFS	condensate and feedwater system
CHF	critical heat flux
CIM	component interface module
CIPS	crud-induced power shift
CIS	containment internal structure
CIS	containment isolation system
CL	cold leg
CLP	cask loading pit
cm	centimeter
cm <sup>2</sup>	square centimeter
CMT	core makeup tank
COF	coefficient of friction

## Abbreviations

COL	combined license
COLA	combined license application
COLR	core operating limits report
CP	cathodic protection
CP	construction permit
CPS	Computerized Procedure System
CPU	central processing unit
CQD	Code Qualification Document
CR	control room
CRC	cyclic redundancy check
CRD	control rod drive
CRDM	control rod drive mechanism
CRDS	control rod drive system
CRE	control room envelope
Cr-Mo	chromium-molybdenum
CSA	control support area
CSDRS	certified seismic design response spectra
CTS	custom technical specification
Cu	copper
CV	containment vessel
CV	control valve
CVS	chemical and volume control system
CWO	core-wide oxidation
CWS	circulating water system
DAC	derived air concentration
DAC	design acceptance criteria
DAS	diverse actuation system
DBA	design-basis accident
DBE	design-basis event
DBT	design-basis threat
DC	design certification
dc	direct current
DCD	design control document
DCP	design change proposal
DCP	design change package
DCR	design certification rule
DDS	data display and processing system
DECL	double-ended cold-leg
DECLG	double-ended cold-leg guillotine
DEDVI	double-ended direct vessel injection
D-EHC	digital electrohydraulic control
DEHL	double-ended hot-leg
DFC	diagnostic flow chart
DG	diesel generator
DG	draft guide
DI&C	digital instrumentation and controls
DID	defense-in-depth
DMIMS	digital metal impact monitoring system
DNB	departure from nucleate boiling
DNBR	departure from nuclear boiling ratio

## Abbreviations

DOF	degree-of-freedom
dP	differential pressure
dpa	displacements per atom
D-RAP	Design Reliability Assurance Program
DVI	direct vessel injection
DWTP	double wide transition panel
EAB	exclusion area boundary
EALF	energy of the average lethargy causing fission
EC	composite cored/stranded electrodes
ECCS	emergency core cooling system
EDF	Electricite de France
EFDS	equipment and floor drainage system
EFPY	effective full-power year
EHX	external heat exchanger
EI.	Elevation
EMC	electromagnetic compatibility
ENDF	Evaluated Nuclear Data File
EO	equipment operator
EOF	Emergency Operating Facility
EOL	end-of-life
EOP	emergency operating procedure
EP	expert panel
EPRI	Electric Power Research Institute
EQ	strip electrodes
EQ	environmental qualification
ERO	emergency response organization
ERS	envelope response spectra
ERV	external reactor vessel cooling
ESF	engineered safety feature
ESFAS	engineered safety feature actuation system
ESP	early site permit
F	Fahrenheit
FAC	flow-accelerated corrosion
FCEP	fuel criterion evaluation process
FEA	finite element analysis
FEM	finite element method
FEMA	Federal Emergency Management Agency
FFT	Fast-Fourier Transforms
FHA	fuel handling area
FHA	fuel-handling accident
FHM	fuel handling machine
FIRS	foundation input response spectra
FIV	flow-induced vibration
FME	foreign material exclusion
FMEA	failure modes and effects analysis
FN	ferrite number
FPDS	flat panel display system
FPGA	field programmable gate array
Fps	feet per second

## Abbreviations

FPS	fire protection system
FR	firm rock
FR	<i>Federal Register</i>
FRN	<i>Federal Register Notice</i>
FRS	floor response spectra
FSAR	final safety analysis report
FSER	final safety evaluation report
ft	feet
ft/s	feet per second
ft <sup>2</sup>	square feet
ft <sup>3</sup>	cubic feet
ft <sup>3</sup> /min	cubic feet per minute
g/cm <sup>3</sup>	grams per cubic centimeters
GDC	General Design Criteria
GL	Generic Letter
GMAW	gas metal arc welding
GMRS	ground motion response spectra
GOI	generic open item
GOP	general operating procedure
gpm	gallons per minute
gpm/ft <sup>2</sup>	gallons per minute per square foot
GRCA	gray rod cluster assembly
GSI	generic safety issue
GTS	generic technical specification
H <sub>2</sub>	hydrogen
HA	human action
HAZ	heat affected zone
HCLPF	high confidence in low probability of failure
HDCI	high-duty core index
HDPE	high-density polyethylene
HED	human engineering discrepancy
HEPA	high-efficiency particulate air
HFE	human factors engineering
HFT	hot functional test
HL	hot leg
HMR	hydro-meteorological report
HP	health physics
HR	hard-rock
HRA	human reliability analysis
HRHF	hard rock high frequency
HSI	human-system interface
HSL	high speed link
HVAC	heating, ventilation, and air conditioning
HX	heat exchanger
Hz	Hertz
I&C	instrumentation and control
I/O	input/output
IASCC	irradiation-assisted stress-corrosion cracking

## Abbreviations

ICET	integrated chemical effect test
ICP	integrated communications processor
ICTN	integral clamp top nozzle
ID	inner diameter
IDI	isolated development infrastructure
IEEE	Institute of Electrical and Electronic Engineers
IFM	intermediate flow mixer
IGSCC	intergranular stress-corrosion cracking
IHP	integrated head package
IIS	in-core instrumentation system
IISS	in-core instrumentation-support structure
IITA	in-core instrument thimble assembly
ILP	integrated logic processor
in	inch
IN	Information Notice
in/h	inch per hour
in/ft	inch per foot
in/in	inch per inch
in <sup>2</sup>	square inch(es)
IOZ	inorganic zinc
IPEEE	individual plant examination of external events
IPSAC	Investment Protection Short-Term Availability Control
IRP	important by the regulatory treatment of nonsafety systems (RTNSS) process
IRWST	in-containment refueling water storage tank
ISA	International Society of Automation
ISG	Interim Staff Guidance
ISI	inservice inspection
ISLOCA	intersystem loss-of-coolant accident
ISRS	in-structure response spectra
IST	inservice testing
ISV	integrated system validation
ITAAC	inspection, tests, analyses, and acceptance criteria
ITP	interface and test processor
IV&V	independent verification and validation
JOG	Joint Owners Group
kA	kilo amp
kcf	kips per cubic feet
kg	kilograms
kg/h	kilograms per hour
kg/m <sup>2</sup>	kilograms per square meter
kg/m <sup>3</sup>	kilograms per cubic meter
kg/s	kilograms per second
kip	kilopounds (1000 pounds)
kJ/h	kilojoules per hour
km	kilometers
km/h	kilometers per hour
kPa	kilopascal
ksf	kilopounds per square foot
ksi	kilopounds per square inch



## Abbreviations

kV	kilovolt
kVA	kilovolt amps
kW	kilowatts
kW/ft	kilowatts per foot
L	liters
L/D	length to diameter ratio
lb	pound
lb/ft <sup>2</sup>	pounds per square foot
lb/ft <sup>3</sup>	pounds per cubic foot
lb/h	pounds per hour
lb/s	pounds per second
LBB	leak-before-break
lbf	pounds-force
lbm	pounds-mass
lbm/ft <sup>3</sup>	pounds-mass per cubic foot
lbm/s	pounds-mass per second
lbs	pounds
LCL	local coincidence logic
LCO	limiting condition for operation
LCS	local control station
LCSP	lower core support plate
LLHS	light load handling system
LOAC	loss of alternating current power
LOCA	loss-of-coolant accident
LOCADM	Loss-of-Coolant Accident Deposition Model
LOFT	loss-of-fluid test
LOSP	loss of offsite power
Lpm	liters per minute
Lpm/m <sup>3</sup>	liters per minute per square meter
LPZ	low population zone
LRF	large release frequency
LRFD	load and resistance factor design
LSB	last stage blade
LSSS	limiting safety system setting
LTOP	low-temperature overpressure protection
LWR	light-water reactor
m	meters
m/s	meters per second
m <sup>2</sup>	square meter
m <sup>3</sup>	cubic meters
m <sup>3</sup> /h	cubic meters per hour
Mbit	megabit
MBtu	million British thermal units
MBtu/hr	million British thermal units/hour
MCC	motor control center
MCR	main control room
MCRE	main control room envelope
MEB	moisture extraction blade
MFIV	main feedwater isolation valve

## Abbreviations

MG	motor-generator
MHS	mechanical handling system
MI	mineral insulated
MLO	maximum local oxidation
mm	millimeters
mm/m	millimeters per meter
MOV	motor-operated valve
MOX	Mixed Oxide
MPa	megapascal
MPa/m <sup>3</sup>	megapascal per cubic meter
mph	miles per hour
mrem/h	millirem per hour
MRI	metal reflective insulation
MSE	mechanically stabilized earth
MSIV	main steam isolation valve
MSL	main steam line
MSLB	main steam line break
MSSS	main steam supply system
MSSV	main steam safety valve
MSV	main steam stop valve
MTBF	mean time between failure
MTC	maintenance and test cabinet
MTIS	maintenance, inspection, test, and surveillance
MTP	maintenance and test panel
MUX	multiplexer
MVA	megavolt amp
MVG	mixing vane grid
MW	megawatt
MWDF/MTU	megawatt-days per metric ton of uranium
MWe	megawatts electric
MWh	megawatt-hour
MWt	megawatts thermal
NaAlSi <sub>3</sub> O <sub>8</sub>	sodium aluminum silicate
NACE	National Association of Corrosion Engineers
NDE	nondestructive examination
NEA	Nuclear Energy Agency
NEI	Nuclear Energy Institute
NF	new fuel
NFPA	National Fire Protection Association
NI	nuclear island
NIS	nuclear instrumentation system
NOP	Normal Operating Procedures
NPP	nuclear power plant
NPS	nominal pipe size
NPSH	net positive suction head
NPSHa	net positive suction head available
NQA	Nuclear Quality Assurance
NRC	Nuclear Regulatory Commission (U.S.)
NRCA	nonradiologically controlled area
NS	non-seismic

NSSS	nuclear steam supply system
OBE	operating-basis earthquake
OCS	operations and control centers system
OCS	operational conditions sampling
OECD	Organization for Economic Cooperation and Development
OER	operating experience review
OHLHS	overhead heavy load handling system
OL	operating license
OM	Operation and Maintenance (ASME OM Code)
OPDMS	Online Power Distribution Monitoring System
OPRAA	operational phase reliability assurance activity
OP $\Delta$ T	overpower delta-T
O-RAP	operational reliability assurance program
OSA	operational sequence analysis
OT $\Delta$ T	overtemperature delta-T
P&ID	pipng and instrumentation diagram
P&ID	pipng and instrumentation drawings
P/F	pass/fail
P/T	pressure-temperature
PA	protected area
Pa	pascal
PABX	private automatic branch exchange
PAMS	post-accident monitoring system
PCCAWST	passive containment cooling ancillary water storage tank
PCCS	passive core cooling system
PCCWST	passive containment cooling water storage tank
PCS	passive containment cooling system
PCT	peak cladding temperature
PDSP	primary dedicated safety panel
PFM	probabilistic fracture mechanics
PGA	peak ground acceleration
PI	plus integral
PLS	plant control system
PLS	plant lighting system
P <sub>m</sub>	primary membrane
P <sub>m</sub> + P <sub>b</sub>	primary membrane plus bending
PMF	probable maximum flood
PMP	probable maximum precipitation
PMS	protection and safety monitoring system
PORV	power-operated relief valve
POV	power-operated valve
ppm	parts per million
PRA	probabilistic risk assessment
PRE	pitting resistance equivalent
PRHR	passive residual heat removal
PSAI	plant-specific action item
PSD	power spectral density
psf	pounds per square foot
psi	pounds per square inch

## Abbreviations

PSI	preservice inspection
psia	pounds per square inch absolute
psid	pounds per square inch differential
psig	pounds per square inch gauge
PTLR	pressure-temperature limits report
PTS	plant-specific technical specification
PVC	plasticized polyvinyl chloride
PWR	pressurized-water reactor
PWS	potable water system
PXS	passive core cooling system
QA	quality assurance
QDPS	qualified data processing system
QG	quality group
QMS	quality management system
RAI	request for additional information
RAP	reliability assurance program
RAT	reserve auxiliary transformer
RAW	risk achievement worth
RC	reinforced concrete
RCCA	rod cluster control assembly
RCDT	reactor coolant drain tank
RCL	reactor coolant loop
RCP	reactor coolant pump
RCPB	reactor coolant pressure boundary
RCS	reactor coolant system
RDP	refueling disconnect panel
rem	roentgen equivalent man
REMP	Radiological Environmental Monitoring Program
RESAR	Reference Safety Analysis Report
RETS	radiological effluent technical specifications
RG	regulatory guide
RHR	residual heat removal
RIM	required input motion
RIS	Regulatory Issue Summary
RLE	review-level earthquake
RM	refueling machine
RMI	reflective metallic insulation
RMS	radiation monitoring system
RNC	remote node controller
RNS	residual heat removal system
RO	reactor operator
RPV	reactor pressure vessel
RRAS	repair, replacement, and automation services
RRS	required response spectra
RRW	risk reduction worth
RSA	response spectrum analysis
RSC	remote shutdown console
RSR	remote shutdown room
RSS	remote shutdown station

## Abbreviations

RSW	remote shutdown workstation
RTCB	reactor trip circuit breaker
RTD	resistance temperature detector
RTD	resistance thermowell detector
RTDP	revised thermal design procedure
RTNSS	regulatory treatment of nonsafety systems
RTP	rated thermal power
RT <sub>PTS</sub>	reference temperature-pressurized thermal shock
RTS	reactor trip system
RV	reactor vessel
RVH	reactor vessel head
RVIS	reactor vessel insulation system
RWS	raw water system
SAFDL	specified acceptable fuel design limit
SAM	startup administrative manual
SAMDA	severe accident mitigation design alternative
SAMG	severe accident management guidance
SAR	safety analysis report
SAS	secondary alarm station
SAT	systems approach to training
SC	steel and concrete composite
SCC	stress-corrosion cracking
scf	standard cubic foot
scfm	standard cubic feet per minute
scmh	standard cubic meters per hour
SCP	setpoint control program
SCV	steel containment vessel
SDOE	secure development and operational environment
SDS	sanitary drainage system
SE	safety evaluation
SEP	Systematic Evaluation Program
SER	safety evaluation report
SF	spent fuel
SFHM	spent fuel pool handling machine
SFHT	spent fuel handling tool
SFP	spent fuel pool
SFS	spent fuel pool cooling system
SFW	startup feedwater system
SG	steam generator
SGI	safeguards information
SGS	steam generator system
SGTR	steam generator tube rupture
SHA	software hazards analysis
SL	safety limit
SLC	software lifecycle
SM	soft-to-medium (soil)
SMA	seismic margin analysis
SMS	special monitoring system
SOE	sequence of events
SPC	steam and power conversion

## Abbreviations

SPD	self-powered detector
SPHSE	self-priming high-solids epoxy
SPM	Software Program Manual
SPS	signal processing system
SR	soft rock
SR	surveillance requirement
SRM	Staff Requirements Memorandum
SRNC	safety remote node controller
SRP	standard review plan
SRSS	square root of the sum of the squares
SS	soft soil
SS	stainless steel
SSA	signal selector algorithm
SSCs	structures, systems and components
SSE	safe shutdown earthquake
SSI	soil-structure interaction
SSSI	structure-soil-structure interaction
STA	shift technical advisor
STD	Standard
Std.	Standard (IEEE Standard)
STS	standard technical specifications
Sv	sievert
SWCCF	software common-cause failure
SWS	service water system
SWTP	single wide transition panel
T	thickness
TASCS	thermal stratification, cycling or striping
T <sub>AVG</sub>	average coolant temperature
TC	core inlet temperature signal
TCS	turbine building closed cooling water system
TEDE	total effective dose equivalent
TEM	transmission electron microscopy
TF	transfer functions
TMI	Three Mile Island
TR	technical report
TRS	test response spectra
TS	technical specification
TSC	technical support center
TSP	trisodium phosphate
TSTF	Technical Specification Task Force
UA	heat transfer capacity consisting of the coefficient of heat transfer (U) and required heat transfer area (A)
UAT	unit auxiliary transformer
UBC	Uniform Building Code
UBSM	upper bound soft-to-medium (soil)
UL	Underwriters Laboratories
UMI	upper mounted instrumentations
UNS	unified numbering system
UPS	uninterruptible power supply

URD	Utility Requirements Document
URS	ultimate rupture strength
V	volts
V&V	verification and validation
Vac	volts alternating current
VAS	radiological controlled area ventilation system
VBS	nuclear island nonradioactive ventilation system
VCD	vacuum carbon-deoxidized
VCSNS	Virgil C. Summer Nuclear Station
Vdc	volts direct current
VDU	visual display unit
VES	emergency habitability system
VES	main control room habitability system
VFD	variable frequency drive
VFS	containment air filtration system
VFTP	Ventilation Filter Testing Program
VHS	hot machine shop heating, ventilation, and air conditioning system
VPI	valve position indicator
VRS	radwaste building heating, ventilation, and air conditioning system
Vs	shear wave velocity
VS	void swelling
VTs	turbine building ventilation system
VWS	central chilled water system
VXS	annex/auxiliary buildings nonradioactive heating, ventilation, and air conditioning system
VYS	hot water heating system
VZS	diesel generator building heating and ventilation system
W	watt
WABA	wet annular burnable absorber
WCAP	Westinghouse Commercial Atomic Power
WGS	gaseous radwaste system
WIN	Westinghouse integral nozzle
WLS	liquid radwaste system
WOG	Westinghouse Owners Group
WRS	waste drain system
WSS	solid radwaste system
wt%	weight-percent
WWS	waste water system
ZOI	zone of influence
ZPA	zero period acceleration





**D. PRINCIPAL TECHNICAL REVIEWERS**

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2	Brad Harvey Seshagiri R. Tammara Kenneth R. See Weijun Wang
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Chapter	Principal Technical Reviewer
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8	Om Chopra
9	Pravin Patel Chris Van Wert Jeff Poehler Raul Hernandez Gordon Curran Larry Wheeler Jim Tatum Josh Wilson Angelo Stubbs Steve Schaffer Nan-Pin Chien Thinh Dinh Bill Roggenbrodt Greg Makar Yi-Hsiung Hsii Amrit Patel Eduardo Sastre
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12	Edward Roach
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14	Milton Concepcion Edmund A. Kleeh Nanette Gilles

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## E. WESTINGHOUSE RESPONSES TO REQUESTS FOR ADDITIONAL INFORMATION

Document Date	Accession Number	Title	Case/Reference Number
08/24/06	ML062410492	AP1000 COL Response to Requests for Additional Information (TR #36).	AP1000 DCP/NRC1769 TAC MD2109
09/08/06	ML062560035	AP1000 COL Response to Request for Additional Information (TR #32).	DCP/NRC1772 TAC MD1432
09/15/06	ML062620277	AP1000 COL Response to Requests for Additional Information (TR #37).	AP1000 DCP/NRC1777 TAC MD1433
09/15/06	ML062620350	AP1000 COL Response to Request for Additional Information (TR 6).	DCP/NRC1776
09/22/06	ML062680029	AP1000 COL Response to Requests for Additional Information (TR #36).	DCP/NRC1779
09/27/06	ML062720129	AP1000 COL Response to Requests for Additional Information (TR #6).	
09/29/06	ML062760231	AP1000 COL Response to Requests for Additional Information (TR # 8).	AP1000 APP-GW-GLR-022, Rev. 0 DCP/NRC1786 TAC MD2175
12/12/06	ML063480072	AP1000 COL Response to Request for Additional Information (TR #32).	APP-GW-GLN-002, Rev 0 DCP/NRC1809 RAI-TR32-007 TAC MD1432
12/18/06	ML063540065	AP1000 COL Response to Request for Additional Information (TR #36).	AP1000 DCP/NRC1811
01/29/07	ML070330131	AP1000 COL Response to Request for Additional Information (TR #59).	AP1000 DCP/NRC1819 TAC MD1435
01/29/07	ML070330590	AP1000 COL Response to Request for Additional Information (TR #3).	AP1000 APP-GW-S2R-010, Rev 0 DCP/NRC1822
02/01/07	ML070330598	Westinghouse Electric Co, AP1000 COL Response to Request for Additional Information (TR #6).	AP1000DCP/NRC1823TAC MD2174
02/08/07	ML070430279	AP1000 COL Response to NRC Request for Additional Information (TR#6).	AP1000 APP-GW-GLR-021, Rev 0 DCP/NRC1827
02/08/07	ML070430285	AP1000 COL Response to Request for Additional Information (TR #39).	DCP/NRC1828 TAC MD1849

Westinghouse Responses to Requests for Additional Information

Document Date	Accession Number	Title	Case/Reference Number
02/16/07	ML070520284	AP1000 COL Standard Technical Report Submittal of APP-GW-GLN-003, Revision 1.	DCP/NRC1818
02/21/07	ML070570085	AP1000 COL Response to Request for Additional Information (TR #36).	DCP/NRC1837
02/21/07	ML070570098	AP1000 COL Response to Request for Additional Information (TR #6).	DCP/NRC1836
02/26/07	ML070610091	AP1000 COL Response to Request for Additional Information (TR #3).	APP-GW-S2R-010, Rev 0 DCP/NRC1840 TAC MD2358
02/27/07	ML070610090	Submittal of AP1000 COL Response to Request for Additional Information (TR #59).	AP1000 DCP/NRC1813
3/9/2007	ML070720534	AP1000 COL Response to Request for Additional Information (TR #3).	DCP/NRC1843 TAC MD2358
03/16/07	ML070810211	AP1000 COL Response to Request for Additional Information (TR #3).	AP1000 DCP/NRC1845 TAC MD2358
03/29/07	ML070930690	Submittal of AP1000 COL Response to Request for Additional Information (TR #3).	DCP/NRC1857 TAC MD2358
04/05/07	ML071010096	AP1000 COL Response to Request for Additional Information (TR #3).	DCP/NRC1858 RAI-TR03-021 RAI-TR03-023
04/09/07	ML071010114	AP1000 COL Response to Request for Additional Information (TR #54).	DCP/NRC1860
04/10/07	ML071010532	AP1000 COL Response to Request for Additional Information (TR #54).	APP-GW-GLR-033, Rev 0 DCP/NRC1861 TAC MD2551
04/13/07	ML071060314	AP1000 COL Response to Request for Additional Information (TR #44).	APP-GW-GLR-026, Rev 0 DCP/NRC1866RAI-TR44-01T AC MD2104
04/13/07	ML071060316	AP1000 COL Response to Requests for Additional Information (TR 6).	DCP/NRC1867
04/13/07	ML071070483	AP1000 COL Response to Request for Additional Information (TR #61).	DCP/NRC1868
04/30/07	ML071350571	WCAP-16767-P, Rev. 0, "Response to NRC Request for Additional Information on Westinghouse AP1000 Combined License (COL) Pre-Application Technical Reports Number 42 and Number 88."	APP-PMS-GL-042 DCP/NRC1881

Westinghouse Responses to Requests for Additional Information

Document Date	Accession Number	Title	Case/Reference Number
05/02/07	ML071270244	Westinghouse Electric Co., AP1000 COL Response to Request for Additional Information (TR #12).	DCP/NRC1874 TAC MD2694
05/03/07	ML071280369	Westinghouse - AP1000 COL Response to Request for Additional Information (TR #44).	DCP/NRC1875
05/04/07	ML071280363	Westinghouse - AP1000 COL Response to Request for Additional Information (TR #71A and 71B).	DCP/NRC1859
05/08/07	ML071290575	AP1000 COL Response to Request for Additional Information (TR #6).	DCP/NRC1880
05/11/07	ML071350099	Submittal of AP1000 COL Response to Requests for Additional Information (TR #43).	APP-GW-GLR-018, Rev 0 AW-07-2279 DCP/NRC1884
05/11/07	ML071350103	Enclosure 3, Response to Requests for Additional Information on Technical Report No. 43, RAI-TR43-001 through RAI-TR43-017.	AP1000 APP-GW-JJ-002 DCP/NRC1884 WCAP-16438
05/11/07	ML071350568	AP1000 COL Response to Request for Additional Information (TR #42 and 88).	DCP/NRC1881 TAC MD1850 TAC MD3831 WCAP-16767-NP, Rev 0 WCAP-16767-P, Rev 0
05/11/07	ML071350570	WCAP-16767-NP, Rev. 0, "Response to Request for Additional Information on Westinghouse AP1000 Combined License (COL) Pre-Application Technical Reports Number 42 and Number 88."	APP-PMS-GL-042DCP/ NRC1881
05/17/07	ML071410075	AP1000 COL Response to Request for Additional Information (TR #54).	APP-GW-GLR-033, Rev 0 DCP/NRC1890
05/17/07	ML071410145	AP1000 COL Response to Request for Additional Information (TR #54).	DCP/NRC1891 TAC MD2551
05/17/07	ML071410146	Enclosure 2, "Response to Request for Additional Information on Technical Report No. 54."	DCP/NRC1891 RAI-TR54-021
05/30/07	ML071520070	AP1000 COL Response to Requests for Additional Information (TR #43) Non-Proprietary Responses.	AP1000 APP-GW-GLR-018, Rev 0 DCP/NRC1913 TAC MD2496
06/04/07	ML071580252	AP1000 COL Response to Requests for Additional Information (TR #39).	AP1000 DCP/NRC1918 TR #39

Westinghouse Responses to Requests for Additional Information

<b>Document Date</b>	<b>Accession Number</b>	<b>Title</b>	<b>Case/Reference Number</b>
06/07/07	ML071630144	AP1000 COL Response to Request for Additional Information (TR #33).	DCP/NRC1925
06/07/07	ML071630150	AP1000 COL Response to Request for Additional Information (TR #34).	DCP/NRC1926
06/07/07	ML071630154	AP1000 COL Response to Request for Additional Information (TR #35).	DCP/NRC1923
06/07/07	ML071630161	AP1000 COL Response to Request for Additional Information (TR #44).	DCP/NRC1924
06/08/07	ML071640053	Transmittal of AP1000 COL Response to Requests for Additional Information (TR #28).	AP1000 APP-GW-GLN-024, Rev 0 DCP/NRC1928 TR #28
06/08/07	ML071640055	Enclosure - RAI-TR28-001, Rev 0, "Response to Requests for Additional Information on Technical Report No. 28."	AP1000 APP-GW-GLR-024, Rev 0
06/08/07	ML071640071	AP1000 COL Response to Request for Additional Information (TR #59).	AP1000APP-GW-GLR-011, Rev 0DCP/NRC1927TR #59
06/08/07	ML071640219	Enclosure 3 - Response to Requests for Additional Information on Technical Report No. 31, RAI-TR3 1-001 and RAI-TR31-002.	DPC/NRC1914 RAI-TR31-001 RAI-TR31-002 TR #31
06/08/07	ML071640243	AP1000 COL Response to Request for Additional Information (TR #54).	AP1000 DCP/NRC1929 TAC MD2551 TR #54
06/14/07	ML071690098	AP1000 COL Response to Request for Additional Information (TR #54).	AP1000 DCP/NRC1938 TAC MD2551 TR #54
06/21/07	ML071730474	Westinghouse Electric Company, AP1000 COL Response to Request for Additional Information (TR 6).	APP-GW-GLR-021 DCP/NRC1947
07/05/07	ML071870409	AP1000 COL Response to Request for Additional Information (TR 3).	DCP/NRC1954 TAC MD2358
07/05/07	ML071870411	AP1000 COL Response to Requests for Additional Information (TR 57).	DCP/NRC1955
07/12/07	ML071980057	AP1000 COL Responses to Requests for Additional Information (TR #74A).	AP1000 APP-GW-GLR-064, Rev 0 DCP/NRC1961 TAC MD3838 TR #74A



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Document Date	Accession Number	Title	Case/Reference Number
07/13/07	ML071980059	AP1000 COL Responses to Requests for Additional Information (TR #45).	AP1000 APP-GW-GLR-027, Rev 1 DCP/NRC1960 TAC MD2495 TR #45
07/17/07	ML072010044	Submittal of Response to NRC Request for Additional Information on AP1000 Standard Combined License Technical Report 44, APP-GW-GLR-026, Rev. 0, New Fuel Storage Rack Structural/Seismic Analysis.	DCP/NRC1963TR #44
07/17/07	ML072010045	Enclosure 2, Proprietary Response to Request for Additional Information on Technical Report No. 44.	RAI-TR44-012
07/17/07	ML072010046	AP1000 COL Responses to Requests for Additional Information (TR#93).	AP1000 APP-GW-GLR-073, Rev. 0 DCP/NRC1958 RAI-TR93-ICE2-01 RAI-TR93-ICE2-05 TAC MD4624 TR #93
07/17/07	ML072010048	AP1000 COL Responses to Requests for Additional Information (TR #44).	AP1000 APP-GW-GLR-026, Rev 0 DCP/NRC1962 TAC MD2104 TR #44
07/18/07	ML072040015	AP1000 COL Response to Requests for Additional Information (TR #24).	APP-GW-GLR-060, Rev 0 AW-07-2305 DCP/NRC1959
07/18/07	ML072040016	Response to Requests for Additional Information on Technical Report No. 24, RAI-TR24-EMB2-02 and RAI-TR24-EMB2-04.	APP-GW-GLR-060, Rev 0 AW-07-2305 DCP/NRC1959
07/27/07	ML072130066	AP1000 COL Response to Requests for Additional Information (TR 6).	DCP/NRC1970
07/27/07	ML072130068	AP1000 COL Responses to Requests for Additional Information (TR #86).	AP1000 DCP/NRC1969 RAI-TR86-SBPB-01, Rev 0 TR #86
07/27/07	ML072130070	AP1000 COL Response to Requests for Additional Information (TR #59).	AP1000 DCP/NRC1966 RAI-TR59-COLP-011, Rev 0 TR #59
08/21/07	ML072350135	Westinghouse Electric Company, AP1000 COL Response to Request for Additional Information (TR #12).	DCP/NRC1978

Westinghouse Responses to Requests for Additional Information

<b>Document Date</b>	<b>Accession Number</b>	<b>Title</b>	<b>Case/Reference Number</b>
08/21/07	ML072350140	AP1000 COL Responses to Requests for Additional Information (TR #24).	AP1000 DCP/NRC1977
08/21/07	ML072350220	AP1000 COL Responses to Requests for Additional Information (TR #100).	AP1000 DCP/NRC1976 TR #100
08/21/07	ML072350225	Westinghouse Electric Company - AP1000 COL Responses to Requests for Additional Information (TR #52).	AP1000 DCP/NRC 1975 TR #52
08/21/07	ML072350233	AP1000 COL Response to Request for Additional Information (TR #10).	AP1000 DCP/NRC1972
08/23/07	ML072390022	AP1000 COL Responses to Requests for Additional Information (TR #93).	AP1000 DCP/NRC1982 RAI-TR93-ICE2-06 RAI-TR93-ICE2-07 TR #93
08/23/07	ML072390023	AP1000 COL Response to Requests for Additional Information (TR 102).	AP1000 DCP/NRC1981 RAI-TR102-SPLA-01 RAI-TR102-SPLA-08 TR #102
08/23/07	ML072390024	AP1000 COL Response to Requests for Additional Information (TR 3).	AP1000 APP-GW-S2R-010 DCP/NRC-1858 DCP/NRC1942 DCP/NRC1980 RAI-TR03-021 RAI-TR03-023 TR #03
08/31/07	ML072470706	AP1000 COL Responses to Requests for Additional Information (TR #11e).	DCP/NRC1984
08/31/07	ML072470708	AP1000 COL Responses to Requests for Additional Information (TR #16).	DCP/NRC1985
08/31/07	ML072480187	AP1000 COL Response to Requests for Additional Information (TR 3).	DCP/NRC1987TAC MD2358
09/05/07	ML072500015	AP1000 COL Response to Requests for Additional Information (TR 9).	DCP/NRC1986
09/07/07	ML072530888	AP1000 COL Responses to Requests for Additional Information (TR #94).	APP-GW-GLR-066, Rev 0 DCP/NRC1989
09/07/07	ML072530977	AP1000 COL Responses to Requests for Additional Information (TR #35).	APP-GW-GLN-010, Rev 0 DCP/NRC1991

Westinghouse Responses to Requests for Additional Information

<b>Document Date</b>	<b>Accession Number</b>	<b>Title</b>	<b>Case/Reference Number</b>
09/07/07	ML072530978	AP1000 COL Responses to Requests for Additional Information (TR #97).	APP-GW-GLN-022, Rev. 1 DCP/NRC1992 RAI-TR97-ICE-01 RAI-TR97-ICE-02 RAI-TR97-ICE-03
09/18/07	ML072620349	AP1000 COL Response to Requests for Additional Information (TR 107).	AP1000 DCP/NRC1998 TR 107
09/18/07	ML072620351	AP1000 COL Response to Requests for Additional Information (TR 85).	DCP/NRC1999
09/19/07	ML072640085	AP1000 COL Response to Requests for Additional Information (TR 106).	AP1000 DCP/NRC2000 TR 106
09/21/07	ML072670544	AP1000 COL Response to Requests for Additional Information (TR 85).	DCP/NRC2002
09/28/07	ML072750136	AP1000 COL Response to Requests for Additional Information (TR 85).	AP1000 APP-GW-GLR-044 DCP/NRC2006 TR 85
09/28/07	ML072750139	AP1000 COL Response to Requests for Additional Information (TR 45).	DCP/NRC2007
09/28/07	ML072750140	AP1000 COL Responses to Requests for Additional Information (TR 18).	DCP/NRC2010
09/28/07	ML072750143	AP1000 COL Response to Request for Additional Information (TR 34).	DCP/NRC2008
10/04/07	ML072830018	AP1000 COL Response to Requests for Additional Information (TR 121).	AP1000DCP/NRC2015RAI-TR 121-CHPB-01, Rev 0TR 121
10/04/07	ML072830050	AP1000 COL Response to Request for Additional Information (TR 36).	AP1000 DCP/NRC2017 RAI-TR36-012, Rev 1 TR 36
10/05/07	ML072830016	AP1000 COL Response to Requests for Additional Information (TR 106).	AP1000 DCP/NRC2019 RAI-TR106-CIB1-01, Rev 0 TR 106
10/05/07	ML072830017	AP1000 COL Response to Requests for Additional Information (TR 34).	DCP/NRC2018
11/16/07	ML073240107	AP1000 COL Responses to Requests for Additional Information (TR 52).	DCP/NRC2042
12/04/07	ML073410094	AP1000 COL Responses to Requests for Additional Information (TR 85).	DCP/NRC2050
12/07/07	ML073450093	AP1000 COL Response to Request for Additional Information (TR 66).	AP1000 DCP/NRC2053 TR 66

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<b>Document Date</b>	<b>Accession Number</b>	<b>Title</b>	<b>Case/Reference Number</b>
12/07/07	ML073450095	AP1000 COL Responses to Requests for Additional Information (TR 79).	DCP/NRC2052
12/19/07	ML073551153	AP1000 COL Response to Requests for Additional Information (TR 98).	APP-GW-GLN-098 DCP/NRC2062 TR 98
06/20/08	ML081760189	AP1000 Response to Requests for Additional Information (SRP9.1.2).	DCP/NRC2167
06/20/08	ML081760190	Westinghouse Electric Co. - AP1000 Response to Requests for Additional Information (TR 54).	DCP/NRC2166
06/20/08	ML081760191	AP1000 Response to Requests for Additional Information (SRP10.4.7).	AP1000 DCP/NRC2165 SRP10.4.7
06/20/08	ML081760192	AP1000 Response to Requests for Additional Information (SRP3.9.5).	AP1000DCP/NRC2164
06/20/08	ML081760193	AP1000 Response to Requests for Additional Information (SRP3.9.2).	AP1000 DCP/NRC2163
06/20/08	ML081760195	AP1000 Response to Requests for Additional Information (SRP14.2).	AP1000 DCP/NRC2162
06/20/08	ML081760196	AP1000 Response to Requests for Additional Information (SRP9.3.3).	AP1000 DCP/NRC2169
06/20/08	ML081780174	AP1000 Response to Requests for Additional Information (SRP3.12).	DCP/NRC2173
06/20/08	ML081780175	AP1000 Response to Requests for Additional Information (SRP10).	DCP/NRC2174
06/20/08	ML081780176	AP1000 Response to Requests for Additional Information (SRP3.6).	AP1000 DCP/NRC2171 SRP3.6
06/20/08	ML081780177	AP1000 Response to Requests for Additional Information (SRP3.6.3).	DCP/NRC2172
06/26/08	ML081820722	AP1000 Response to Requests for Additional Information (SRP2.3.1).	DCP/NRC2170
06/26/08	ML081820723	Westinghouse Electric Company, AP1000 Response to Requests for Additional Information (SRP3.9.3).	DCP/NRC2176
06/26/08	ML081820724	AP1000 Response to Requests for Additional Information (SRP9.1.4).	DCP/NRC2177

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Document Date	Accession Number	Title	Case/Reference Number
06/26/08	ML081820725	Westinghouse Electric Company - AP1000 Response to Requests for Additional Information (SRP9.1.5).	DCP/NRC2178
06/26/08	ML081820726	AP1000 Response to Requests for Additional Information (SRP9.2.1).	DCP/NRC2179
06/26/08	ML081820727	AP1000 Response to Requests for Additional Information (SRP9.2.2).	DCP/NRC2180
06/30/08	ML081850613	Westinghouse Electric Company - AP1000 Response to Requests for Additional Information (SRP 15.3).	DCP/NRC2187
07/01/08	ML081900155	AP1000 Response to Request for Additional Information (SRP3.8.4).	AP1000 DCP/NRC2189
07/03/08	ML081900156	AP1000 Response to Request for Additional Information (SRP5.4.1).	AP1000DCP/NRC2191
07/03/08	ML081900157	AP1000 Response to Request for Additional Information (SRP3.6.1).	AP1000 DCP/NRC2192
07/03/08	ML081900158	AP1000 Response to Request for Additional Information (SRP4).	DCP/NRC2193
07/03/08	ML081900159	AP1000 Response to Request for Additional Information (SRP3.4.1).	DCP/NRC2194
07/07/08	ML081910138	AP1000 Response to Request for Additional Information (SRP7).	AP1000 DCP/NRC2195 SRP7
07/08/08	ML081920166	AP1000 Response to Request for Additional Information (TR96), Submitted in Support of the AP1000 Design Certification Amendment Application.	AP1000 APP-GW-GLR-067 DCP/NRC2196 TR 96
07/08/08	ML081920167	Westinghouse Response to Request for Additional Information on AP1000 Standard Combined License Technical Report (TR) 49, APP-GW-GLR-062, AP1000, "Security Enhancement Report."	APP-GW-GLR-062 DCP/NRC2197
07/08/08	ML081920168	Response to Request for Additional Information on AP1000 Technical Report Review.	DCP/NRC2197 RAI-TR49-NSIR-01
07/11/08	ML081970176	AP1000 Response to Request for Additional Information (SRP14.2), in Support of Design Certification Amendment Application.	AP1000 DCP/NRC2199 SRP14.2

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<b>Document Date</b>	<b>Accession Number</b>	<b>Title</b>	<b>Case/Reference Number</b>
07/11/08	ML081970177	AP1000 Response to Request for Additional Information (SRP8.3.1), in Support of Design Certification Application.	DCP/NRC2198
07/14/08	ML081980185	AP1000 Response to Request for Additional Information (RAI) on SRP Section 18, Submitted in Support of Design Certification Amendment Application, Completing Six of Fifteen Requests Received to Date.	DCP/NRC2201
07/14/08	ML081980186	Westinghouse Electric Co., AP1000 Response to Request for Additional Information on SRP Section 3.9.6.	AP1000 DCP/NRC2200
07/15/08	ML081990375	AP1000 Response to Requests for Additional Information (TR 44).	DCP/NRC2203 TR 44
07/17/08	ML082040273	AP1000 Response to Request for Additional Information, Applying to All COL Applications Referencing AP1000 Design Certification and AP1000 Design Certification Amendment Application.	DCP/NRC2204
07/17/08	ML082040274	Westinghouse Electric Co., Response to Request for Additional Information on SRP Section 5.4 in Support of AP1000 Design Certification Amendment Application.	AP1000 DCP/NRC2205
07/18/08	ML082040275	Westinghouse Electric Company - AP1000 Response to Request for Additional Information (SRP5.2.1).	DCP/NRC2206
07/18/08	ML082040276	AP1000 Response to Request for Additional Information (SRP3.9.6) in Support of the Design Certification Amendment Application.	DCP/NRC2207
07/18/08	ML082040277	AP1000 Response to Request for Additional Information (SRP13.3).	DCP/NRC2210
07/18/08	ML082040301	Westinghouse, Response to Request for Additional Information on SRP Section 10.3 in Support of the AP1000 Design Certification Amendment Application.	AP1000 DCP/NRC2208

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<b>Document Date</b>	<b>Accession Number</b>	<b>Title</b>	<b>Case/Reference Number</b>
07/18/08	ML082040302	AP1000 Response to Request for Additional Information (SRP6) in Support of Design Certification Amendment Application.	DCP/NRC2209
07/22/08	ML082060194	Westinghouse Electric Co., Submittal of Response to Request for Additional Information on SRP Section 19.0.	AP1000 DCP/NRC2211
07/22/08	ML082060195	Westinghouse, Submittal of Response to Request for Additional Information on SRP Section 3.8.2.	AP1000 DCP/NRC2212
07/24/08	ML082100163	AP1000 Response to Request for Additional Information (SRP10.4.7) in Support of the Design Certification Amendment Application.	DCP/NRC2214
07/24/08	ML082100164	AP1000 Response to Request for Additional Information (SRP3.9.6).	AP1000 DCP/NRC2213 SRP3.9.6
07/29/08	ML082140228	Westinghouse Electric Co., Response to Request for Additional Information on SRP Section 15 in Support of AP1000 Design Certification Amendment Application.	AP1000 DCP/NRC2216
07/29/08	ML082170396	Westinghouse Electric Co., Response to Request for Additional Information on SRP Section 13 in Support of AP1000 Design Certification Amendment Application.	AP1000DCP/NRC2215
07/31/08	ML082180121	Westinghouse Electric Co., Response to Request for Additional Information on SRP Section 9.5.2 in Support of AP1000 Design Certification Amendment Application.	AP1000 DCP/NRC2220
07/31/08	ML082180122	Westinghouse Electric Co., Response to Request for Additional Information on SRP Section 10.2 in Support of AP1000 Design Certification Amendment Application.	CP/NRC2219
08/04/08	ML082190361	AP1000 Response to Request for Additional Information on Technical Report (TR) 66, APP-GW-GLR-070, "Development of Severe Accident Management Guidance."	DCP/NRC2218

Westinghouse Responses to Requests for Additional Information

<b>Document Date</b>	<b>Accession Number</b>	<b>Title</b>	<b>Case/Reference Number</b>
08/04/08	ML082200546	Westinghouse Electric Company, AP1000 Response to Request for Additional Information (SRP 18).	DCP/NRC2217
08/04/08	ML082200547	AP1000 Response to Request for Additional Information (SRP4), in Support of the Design Certification Amendment Application.	DCP/NRC2221
08/15/08	ML082330097	AP1000 Response to Request for Additional Information (SRP5.2.2).	AP1000 DCP/NRC2224 SRP5.2.2
08/15/08	ML082330098	Westinghouse Electric Company - AP1000 Response to Request for Additional Information (SRP 16.1.1) for RAI-SRP16.1.1-SEB1-01, in Support of the AP1000 Design Certification Amendment Application.	AP1000 DCP/NRC2229 SRP16.1.1
08/15/08	ML082330099	Westinghouse Electric Company - AP1000 Response to Request for Additional Information (SRP8.3) for for RAI-SRP8.3-EEB-01 through -05, in Support of the AP1000 Design Certification Amendment Application.	DCP/NRC2223
08/20/08	ML082350324	Westinghouse, AP1000 Response to Request for Additional Information on APP-GW-S2R-010, Technical Report Number 3 (TR03).	APP-GW-S2R-010 DCP/NRC2225 TR03
08/20/08	ML082350325	AP1000 Response to Request for Additional Information (RAI), (SRP11.3).	AP1000DCP/NRC2231SRP11.3
08/20/08	ML082350326	AP1000 Response to Request for Additional Information (RAI) (SRP2.5).	AP1000 DCP/NRC2230 SRP2.5
08/21/08	ML082390115	AP1000 Response to Requests for Additional Information (SRP9.1.2), in Support of the Design Certification Amendment Application.	DCP/NRC2234
08/21/08	ML082390116	AP1000 Response to Request for Additional Information (SRP3.10) in Support of Design Certification Amendment Application.	DCP/NRC2235



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<b>Document Date</b>	<b>Accession Number</b>	<b>Title</b>	<b>Case/Reference Number</b>
08/21/08	ML082390117	AP1000 Response to Request for Additional Information (SRP19.0) in Support of the Design Certification Amendment Application.	DCP/NRC2233
08/22/08	ML082390029	Westinghouse Electric Company - AP1000 Response to Request for Additional Information (TR 94), in Support of the AP1000 Design Certification Amendment Application.	AP1000 APP-GW-GLR-066, Rev 1 DCP/NRC2237
08/22/08	ML082390112	Westinghouse Electric Co., Withdrawal of AP1000 Response to Request for Additional Information, SRP8.3.1-EEB-03.	AP1000 DCP/NRC2236
08/28/08	ML082460513	Westinghouse Submittal of a Revised Response to the NRC Request for Additional Information (RAI) on SRP Section 3.9.2 in Support of the AP1000 Design Certification Amendment Application.	AP1000 DCP/NRC2241 SRP3.9.2
08/28/08	ML082460517	Westinghouse Submittal a Revised Response to the NRC Request for Additional Information (RAI) on SRP Section 3.9.5 in Support of the AP1000 Design Certification Amendment Application.	AP1000 DCP/NRC2239 SRP3.9.5
08/29/08	ML082470022	Westinghouse Electric Co., Response for Additional Information on TR 94 (APP-GW-GLR-066 Rev. 1) in Support of the AP1000 Design Certification Amendment Application.	APP-GW-GLR-066, Rev 1 DCP/NRC2238
08/29/08	ML082480501	AP1000 Response to Request for Additional Information (SRP3.12) in Support of the Design Certification Amendment Application.	DCP/NRC2240
08/29/08	ML082480520	AP1000 Response to Request for Additional Information (SRP14.2), in Support of the Design Certification Amendment Application.	DCP/NRC2242
09/03/08	ML082520228	AP1000 Response to Request for Additional Information (SRP9.1.5) in Support of the Design Certification Amendment Application.	DCP/NRC2246

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<b>Document Date</b>	<b>Accession Number</b>	<b>Title</b>	<b>Case/Reference Number</b>
09/03/08	ML082520229	AP1000 Response to Request for Additional Information (SRP7) In Support of the Design Certification Amendment Application.	DCP/NRC2245
09/05/08	ML082520821	Westinghouse Electric Company - AP1000 Response to Request for Additional Information (SRP19.0), for RAI-SRP19.0-SPLA-05, in Support of the AP1000 Design Certification Amendment Application.	AP1000 DCP/NRC2247
09/05/08	ML082520823	Westinghouse Electric Company - AP1000 Response to Request for Additional Information (SRP 17.4) for RAI-SRP17.4-SPLA-03, in Support of the AP1000 Design Certification Amendment Application.	AP1000 DCP/NRC2248
09/05/08	ML082520826	AP1000 Response to Request for Additional Information (SRP5.3.2) - for RAI-SRP5.3.2-CIB1-01 and -02.	DCP/NRC2250
09/05/08	ML082520828	Westinghouse Electric Company, AP1000 Response to Request for Additional Information (SRP3.7.2), for RAI-SRP3.7.2-SEB1-03, in Support of the AP1000 Design Certification Amendment Application.	AP1000 DCP/NRC2249
09/05/08	ML082520830	Westinghouse Electric Company, AP1000 Response to Request for Additional Information (SRP3.2), in Support of the AP1000 Design Certification Amendment Application for RAI-SRP3.2.1-EMB2-01,-02, and -03 and RAI-SRP3.2.2-EMB2-01,-02, and -03.	AP1000 DCP/NRC2251
09/05/08	ML082520832	Westinghouse Electric Company - AP1000 Response to Request for Additional Information (SRP3.9.1) for RAI-SRP3.9.1-EMB1-01 and -02, in Support of the AP1000 Design Certification Amendment Application.	AP1000DCP/NRC2252

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Document Date	Accession Number	Title	Case/Reference Number
09/05/08	ML082530040	Westinghouse, Response to the NRC Request for Additional Information (RAI) on SRP Section 3.8.4 in Support of the AP1000 Design Certification Amendment Application.	DCP/NRC2253
09/09/08	ML082560236	Westinghouse Electric Company - AP1000 Response to Request for Additional Information (SRP14.3).	DCP/NRC2259
09/09/08	ML082560237	Westinghouse Electric Company - AP1000 Response to Request for Additional Information (SRP 12) for RAI-SRP12.1-CHPB-01 and RAI-SRP12.2-CHPB-01 and -02, in support of the AP1000 Design Certification Amendment Application.	AP1000 DCP/NRC2257 SRP12
09/09/08	ML082560238	AP1000 Response to Request for Additional Information (SRP1 1.2).	DCP/NRC2256 SRP11.2
09/09/08	ML082560239	AP1000 Response to Request for Additional Information (SRP3.9.6) In Support of the Design Certification Amendment Application.	DCP/NRC2255
09/09/08	ML082560240	AP1000 Response to Request for Additional Information (SRP2.5).	AP1000 DCP/NRC2254 SRP2.5
09/09/08	ML082560241	Westinghouse Electric Company - Transmittal of AP1000 Response to Request for Additional Information (SRP7.1) for RAI-SRP7.1-ICE-15 in Support of the AP1000 Design Certification Amendment Application.	AP1000 DCP/NRC2258 SRP7.1
09/09/08	ML082560242	Enclosure 3 - Response to Request for Additional Information on SRP Section 7.1 RAI-SRP7.1-ICE-15.	AP1000 DCP/NRC2258
05/14/09	ML091390055	AP1000 Response to Request for Additional Information (SRP 6) in Support of the Design Certification Amendment Application.	DCP/NRC2477
05/27/09	ML091520091	AP1000 Response to Request for Additional Information (SRP 6) in Support of the Design Certification Amendment Application.	DCP/NRC2502

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Document Date	Accession Number	Title	Case/Reference Number
05/27/09	ML091540301	AP1000 Security Related Response to Request for Additional Information (SRP 6) in Support of the Design Certification Amendment Application.	DCP/NRC2502
11/09/09	ML093170459	Enclosure 3, Response to Request for Additional Information on SRP Section 7.1, RAI-SRP7.1-FMEA-02.	DCP_NRC_002676
11/09/09	ML093420275	Westinghouse - AP1000 Response to Request for Additional Information (TR 44).	AP1000 DCP_NRC_002688 TR 44
11/11/09	ML093200643	AP1000 Response to Request for Additional Information (SRP 9), in Support of the Design Certification Amendment Application.	DCP_NRC_002690
12/28/09	ML100050275	AP1000 Response to Request for Additional Information (SRP 10), RAI-SRP10.2-SBPA-02 R3, in Support of the Design Certification Amendment Application.	DCP_NRC_002723
02/11/10	ML100480094	AP1000 Response to Request for Additional Information (SRP 16), RAI-SRP16-CTSB-20 R1, in Support of the Design Certification Amendment Application.	DCP_NRC_002773
02/11/10	ML100480096	AP1000 Response to Request for Additional Information (SRP 7) RAI-SRP7.8-DAS-01, RAI-SPR7.8-DAS-3 and RAI-SRP7.8-DAS-04 in Support of the Design Certification Amendment Application.	DCP_NRC_002772
04/07/10	ML101020695	AP1000 Response to Request for Additional Information RAI-SRP5.2.3-CIB1-01 R2.	DCP_NRC_002847
04/12/10	ML101040256	Westinghouse Electric Co., Response to Request for Additional Information on SRP Section 2 in Support of AP1000 Design Certification Amendment Application.	DCP_NRC_002849
04/16/10	ML101090299	Westinghouse Electric Co., Response to Request for Additional Information on SRP Section 6 in Support of AP1000 Design Certification Amendment Application.	DCP_NRC_002851

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<b>Document Date</b>	<b>Accession Number</b>	<b>Title</b>	<b>Case/Reference Number</b>
04/20/10	ML101121005	Westinghouse Electric Co., Response to Request for Additional Information on SRP Section 17 in Support of AP1000 Design Certification Amendment Application.	DCP_NRC_002853
04/21/10	ML101121004	AP1000 Response to Request for Additional Information (SRP 5).	AP1000 DCP_NRC_002854 SRP 5
04/26/10	ML101180082	Westinghouse Electric Company, Response to Request for Additional Information on SRP Section 6.2.2 in Support of AP1000 Design Certification Amendment Application.	DCP_NRC_002859
04/26/10	ML101180083	Response to Request for Additional Information on SRP Section 6.2.2 RAI SRP6.2.2-CIB1-28 R1.	DCP_NRC_002859
04/26/10	ML101230335	AP1000 Response to Request for Additional Information (SRP6.2.2), RAI SRP6.2.2-CIB1-31 in Support of the Design Certification Amendment Application.	AW-10-2806 DCP_NRC_002860
04/26/10	ML101230336	Enclosure 3 to DCP_NRC_002860 - Response to Request for Additional Information on SRP Section 6.2.2 RAI SRP6.2.2-CIB1-31.	DCP_NRC_002860
04/30/10	ML101230613	Westinghouse Electric Co., Response to Request for Additional Information on SRP Section 2 in Support of AP1000 Design Certification Amendment Application.	DCP_NRC_002861
04/30/10	ML101241173	AP1000 Response to Request for Additional Information (SRP 3), RAI-SRP3.9.4-EMB1-01 in Support of the Design Certification Amendment Application.	DCP_NRC_002862
05/06/10	ML101300517	Westinghouse Electric Company - Response to Request for Additional Information (SRP 16), RAI-SRP16.3-CTSB-SCP-1 R1, in Support of the AP1000 Design Certification Amendment Application.	AP1000 DCP_NRC_002864 SRP 16

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Document Date	Accession Number	Title	Case/Reference Number
05/07/10	ML101340549	AP1000 Response to Proposed Open Item (Chapter 8), OI-SRP8.3.2-EEB-09 R2 in Support of the Design Certification Amendment Application.	DCP_NRC_002866
05/10/10	ML101320314	2010/05/10 AP-1000 DCD Review - OI-SRP9.1.3-SBPA-13 SFP AP1000 (1A)] for Review / Comments Due: 5/13/2010	
05/10/10	ML101320318	2010/05/10 AP-1000 DCD Review - OI-SRP9.1.5-SBPB-01 AP1000 (2A)] for Review / Comments Due: 5/13/2010	
05/10/10	ML101340545	Westinghouse Electric Co., Response to Request for Additional Information on SRP Section 8 in Support of AP1000 Design Certification Amendment Application.	DCP_NRC_002868
05/11/10	ML101330142	AP1000 Response to Request for Additional Information (RAI-TR94-NSIR-20, Revision 1).	AP1000 DCP_NRC_002871
05/11/10	ML101340456	AP1000 Response to Request for Additional Information (SRP 8), OI-SRP8.3.2-EBB-08 R1 in Support of the Design Certification Amendment Application.	DCP_NRC_002870
05/11/10	ML101340590	AP1000 Response to Request for Additional Information (SRP6.2.2), RAI SPR6.2.2-SPCV-25 R1, in Support of the Design Certification Amendment Application.	AW-10-2816 DCP_NRC_002872
05/11/10	ML101340591	Enclosure 3 to DCP_NRC_002872, Response to Request for Additional information on SRP Section 6.2.2, RAI-SRP6.2.2-SPCV-25 R1.	DCP_NRC_002872
05/12/10	ML101340551	AP1000 Response to Request for Additional Information (TR 85), RAI-TR85-SEB1-10, R4 in Support of the Design Certification Amendment Application.	DCP_NRC_002873

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05/13/10	ML101380126	Westinghouse Electric Co. - Response to Request for Additional Information on SRP Section 6 in Support of AP1000 Design Certification Amendment Application.	AP1000 DCP_NRC_002875 SRP 6
05/14/10	ML101380123	AP1000 Response to Request for Additional Information (TR 85) RA1-TR85-SEB1-37 R4 in Support of the Design Certification Amendment Application.	DCP_NRC_002878
05/14/10	ML101380124	AP1000 Response to Request for Additional Information (SRP 3), RAI-SRP3.7.1-SEB1-18, in Support of the Design Certification Amendment Application.	DCP_NRC_002877
05/14/10	ML101380127	Response to Request for Additional Information on SRP Section 11 in Support of AP1000 Design Certification Amendment Application.	DCP_NRC_002876
05/17/10	ML101390225	Westinghouse Electric Company, Response to Request for Additional Information (SRP 6), RAI-SRP6.2.4-SPCV-04, in support of the AP1000 Design Certification Amendment Application.	DCP_NRC_002880
05/19/10	ML101440391	AP1000 Response to Proposed Open Item (Chapter 9) OI-SRP9.1.3-SBPA-13 R1, OI-SRP9.1.4-SBPA-03 R2 & OI-SRP9.1.5-SBPB-01 R2.	DCP_NRC_002881
05/21/10	ML101450248	Westinghouse Electric Company, AP 1000 Response to Request for Additional Information (SRP 18), in support of the AP1000 Design Certification Amendment Application.	DCP_NRC_002883
05/21/10	ML101460209	Westinghouse Electric Company, Response to Request for Additional Information (SRP 3), RAI-SRP3.9.4-EMB1-01 R1, in Support of the AP1000 Design Certification Amendment Application.	DCP_NRC_002888

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05/24/10	ML101470410	AP1000 Response to Request for Additional Information (SRP 6), RAI-SRP6.4-SPCV-15 R1 in Support of the Design Certification Amendment Application, Cover Letter through AP1000 Technical Report Review Page 46-134.	DCP_NRC_002885
05/24/10	ML101470411	AP1000 Response to Request for Additional Information (SRP 6), RAI-SRP6.4-SPCV-15 R1 in Support of the Design Certification Amendment Application, AP1000 Technical Report Review Page 47-134 through End.	DCP_NRC_002885
06/14/10	ML101670133	AP1000 Response to Request for Additional Information (SRP6.2.2), RAI-SRP6.2.2-SRSB-44 in Support of the Design Certification Amendment Application.	AW-10-2853 DCP_NRC_002917
07/09/10	ML101960267	AP1000 Response to Request for Additional Information (SRP 3) in Support of the Design Certification Amendment Application, Cover Letter.	DCP_NRC_002952
07/13/10	ML101970025	AP1000 Response to Request for Additional Information (TR54) RAI-TR54-01 R1.	DCP_NRC_002963
07/13/10	ML101970026	AP1000 Response to Request for Additional Information RAI-TR03-037.	AP1000 DCP_NRC_002964
07/15/10	ML102000079	AP1000 Response to Request for Additional Information (SRP 3).	AP1000 DCP_NRC_002966 SRP 3
07/15/10	ML102000080	AP1000 Response to Request for Additional Information (SRP TR85).	AP1000 DCP_NRC_002965 SRP TR85
07/20/10	ML102040034	Westinghouse Electric Co., Response to Request for Additional Information on SRP Section TR54 in Support of AP1000 Design Certification Amendment Application.	DCP_NRC_002976
07/20/10	ML102040035	Westinghouse Electric Co., Response to Request for Additional Information on SRP Section TR44 in Support of AP1000 Design Certification Amendment Application.	DCP_NRC_002975



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Document Date	Accession Number	Title	Case/Reference Number
09/13/10	ML102630020	Westinghouse, AP1000 Response to Request for Additional Information (TR44).	DCP_NRC_003044 TR44
09/15/10	ML102630017	AP1000 Response to Request for Additional Information (SRP 19).	AP1000 DCP_NRC_003045 SRP 19
09/15/10	ML102630018	AP1000 Technical Report Review, Enclosure 1 to DCP_NRC_003045.	AP1000 DCP_NRC_003045 SRP 19
09/23/10	ML102670584	AP1000 Response to Request for Additional Information (TR85).	AP1000 DCP_NRC_003049 TR85
09/29/10	ML102770328	AP1000 COL Standard Technical Report Submittal of APP-GW-GLR-005, Revision 4 (TR-09).	DCP_NRC_003051 TR-09
09/29/10	ML102770329	Westinghouse Revised RAI Response to RAI-SRP3.9.1-EMB-03, Rev. 2.	DCP_NRC_003046
09/30/10	ML102780277	Enclosure 1 to DCP_NRC_003052, AP1000 Response to Request for Additional Information (SRP 19), RAI-SRP19F-AIA-01 R2, and RAI-SRP19F-AIA-09 R1.	DCP_NRC_003052
09/30/10	ML102780286	AP1000 Response to Request for Additional Information (SRP 19), RAI-SRP19F-AIA-01 R2, and RAI-SRP19F-AIA-09 R1.	DCP_NRC_003052
10/19/10	ML102940228	Enclosure 3 - Westinghouse Markup of NRC Chapter 6 ASE Review Indicating Proprietary Sections.	DCP_NRC_003067
10/21/10	ML102990048	Westinghouse, Response to Request for Additional Information on SRP Section 3 in Support of AP1000 Design Certification Amendment Application.	DCP_NRC_003071
10/21/10	ML102990054	AP1000 Response to Request for Additional Information on SRP Section 3.	DCP_NRC_003070
10/21/10	ML102990055	AP1000 Response to Request for Additional Information (SRP 3) (Proprietary).	DCPNRC_003070
10/22/10	ML103010046	Westinghouse Electric Company, Response to Request for Additional Information (TR85) in support of the AP1000 Design Certification Amendment Application.	

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<b>Document Date</b>	<b>Accession Number</b>	<b>Title</b>	<b>Case/Reference Number</b>
11/12/10	ML103210409	Reply to Notice of Violation Cited in NRC Inspection Report No. 05200006/2010-203 dated October 28, 2010.	DCP_NRC_003084 IR 10-203
11/12/10	ML103210455	Westinghouse - Response to Request for Additional Information on SRP Section 10 in Support of AP1000 Design Certification Amendment Application.	DCP_NRC_003088 SRP 10
11/19/10	ML103470566	AP1000 Response to Request for Open Item (SRP 19), RAI-SRP19F-AIA-01 R3 and RAI-SRP19F-AIA-09 R2 In Support of the Design Certification Amendment Application.	DCP_NRC_003093
11/19/10	ML103470567	Enclosure 1 to DCP_NRC_003093, AP1000 Response to Request for Open Item (SRP 19), RAI-SRP19F-AIA-01 R3 and RAI-SRP19F-AIA-09 R2 In Support of the Design Certification Amendment Application.	DCP_NRC_003093
11/22/10	ML103300210	AP1000 Response to Request for Additional Information (SRP 19).	DCP_NRC_003094 RAI-SRP19F-AIA-01, Rev 4
11/22/10	ML103300211	Enclosure 1, Response to Request for Additional Information on SRP Section 19.	DCP_NRC_003094 RAI-SRP19F-AIA-01, Rev 4 SRP 19
1/28/2011	ML110330046	AP1000 Response to Request for Additional Information (CI-SRP9.1.1 -SRSB-01 and RAI-SRP4.3-SRSB-03).	AW-11-3067 CI-SRP9.1.1-SRSB-01 DCP_NRC_003114 RAI-SRP4.3-SRSB-03
2/9/2011	ML110450101	AP1000 Response to Request for Additional Information (SRP 3).	AP1000 DCP_NRC_003124 SRP 3
3/1/2011	ML110630109	Response to Requests for Additional Information on PCS Operation.	DCP_NRC_003147

## **F. REPORTS BY THE ADVISORY COMMITTEE ON REACTOR SAFEGUARDS**

1. Report on the Final Safety Evaluation Report Associated with the Amendment to the AP1000 Design Control Document, December 13, 2010
2. Long-Term Core Cooling for the Westinghouse AP1000 Pressurized Water Reactor, December 20, 2010
3. Report on the Safety Aspects of the Aircraft Impact Assessment for the Westinghouse AP1000 Design Certification Amendment Application, January 19, 2011
4. Response to the February 5, 2011, EDO Letter Regarding the Final Safety Evaluation Report Associated with the Amendment to the AP1000 Design Control Document," May 19, 2011
5. Revision 19 to the AP1000 Design Control Document and the AP1000 Final Safety Evaluation Report, September 19, 2011



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
ADVISORY COMMITTEE ON REACTOR SAFEGUARDS  
WASHINGTON, DC 20555 - 0001**

December 13, 2010

The Honorable Gregory B. Jaczko  
Chairman  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

**SUBJECT: REPORT ON THE FINAL SAFETY EVALUATION REPORT ASSOCIATED  
WITH THE AMENDMENT TO THE AP1000 DESIGN CONTROL DOCUMENT**

Dear Chairman Jaczko:

During the 578<sup>th</sup> meeting of the Advisory Committee on Reactor Safeguards (ACRS), December 2-4, 2010, we reviewed the NRC staff's Advanced Final Safety Evaluation Report (AFSER) for the pending AP1000 Design Certification Amendment (DCA) application. The amendment is to be reflected in a revision to the AP1000 Design Control Document (DCD). The amendment involves changes to Tier 1 information, and its approval will require rulemaking. We had a number of subcommittee and full committee meetings to review the technical aspects of the amendment. During these meetings, we had the benefit of discussions with representatives of the NRC staff, Westinghouse (WEC), and members of the public. We also had the benefit of the documents referenced.

**CONCLUSION AND RECOMMENDATION**

The changes proposed in the AP1000 DCA maintain the robustness of the previously certified design. We conclude that there is reasonable assurance that the revised design can be built and operated without undue risk to the health and safety of the public. This conclusion is contingent on the results of our concurrent reviews of the aircraft impact assessment and long-term core cooling issues which will be discussed in separate letters.

This conclusion relies in part on information and commitments provided by WEC during the course of our meetings which have not yet been confirmed to be included in the DCA application. This information and commitments are noted in the discussion following, and the staff should ensure they are appropriately documented as part of the DCA.

**BACKGROUND**

For its initial design approval and certification of the AP1000 design, the NRC issued NUREG-1793, "Final Safety Evaluation Report Related to Certification of the AP1000 Design," in September 2004 and published the proposed design certification rule on April 18, 2005. In December 2005, the NRC staff evaluated the conforming Revision 15 to the AP1000 DCD in Supplement 1 to NUREG-1793. The NRC published a final rule certifying the AP1000 standard plant design on January 27, 2006.

Thus, the existing AP1000 certification rule is reflected in DCD Revision 15. Revision 18 was submitted by WEC in a letter dated December 1, 2010, and it includes changes identified in Revision 16, submitted May 26, 2007, and in Revision 17, submitted September 22, 2008, as well as those changes made subsequent to submittal of Revision 17 which are identified in the AFSER, Chapter 23.

In addition, WEC submitted letters to supplement its DCA application dated October 26, November 2, and December 12, 2007, as well as January 11, and 14, 2008. Finally, NuStart Energy Development, LLC and WEC submitted a number of technical reports (TRs) for review. TRs typically address a topical area, such as the design of a component, structure, or process, in support of the AP1000 design.

The DCA application proposes to incorporate changes in the AP1000 certification rule reflecting the following:

- Design standardization, which was enhanced by elimination of numerous combined license (COL) open items currently in the existing rule.
- New regulatory requirements, including requirements related to aircraft impact. (As previously noted, review of compliance with the aircraft impact requirements will be discussed in a separate letter).
- Design finalization, which was required to produce construction drawings and procurement specifications. This includes reduced reliance on design acceptance criteria (DAC).

Significant changes proposed in the DCA application include the following:

- Redesign of the shield building to use a modular, steel concrete composite (SC) structure, replacing the existing reinforced concrete (RC) design. The redesign reduces passive heat removal air flow and affects seismic, aircraft impact, and other loading analyses.
- Redesign of the Reactor Vessel Support System to increase stiffness.
- Increase in the range of foundation soil conditions considered.
- Closure of four digital instrumentation and control (DI&C) DAC, with only one remaining open. Numerous I&C changes were made to reflect design evolution, such as addition of a reactor trip function, implementation of a rod withdrawal prohibit, and modification of the containment isolation logic for the Component Cooling System.
- Closure of four human factors engineering (HFE) DAC, with none remaining open.
- Modification of the reactor coolant pump (RCP) design, including an increase in its rotational inertia.
- Addition of a flow skirt at the inlet to the reactor vessel lower plenum.
- Redesign of the Steam and Power Conversion Systems.

Our review of the DCA application began with a status review by the Full Committee during the 562<sup>nd</sup> meeting in May 2009. Subsequently, our AP1000 subcommittee held 12 meetings, totaling 21 days of meetings, as listed in the appendix to this letter.

## DISCUSSION

### Shield Building Redesign

The AP1000 shield building described in AP1000 DCD, Revision 15, is an RC design. In AP1000 DCD, Revisions 16 and 17, WEC proposed a new shield building design. The new design includes provisions to meet the requirements of the new aircraft impact rule, 10 CFR 50.150. (As indicated previously, the results of our review for compliance with the aircraft impact rule will be reported in a separate letter).

The key features of the new shield building are: a cylindrical wall which comprises the bulk of the structure constructed of SC modules; a conical RC roof structure with an integral RC water tank which contains approximately 7 million pounds of water; a tension ring at the intersection of the roof with the cylindrical wall consisting of a built-up closed section of steel plates filled with concrete; and mechanical connections that join the SC wall to the basemat and the RC wall of the auxiliary building.

The tension ring is designed as a steel structure in accordance with the American National Standards Institute/American Institute of Steel Construction (ANSI/AISC) N690. The steel frame for the roof is designed to the applicable building code, ANSI/AISC N690. The concrete roof is designed to American Concrete Institute (ACI) 349 requirements without credit for the steel plate on the bottom of the concrete. The SC modules have not been used previously in nuclear construction in the United States and were a focus of our review.

In the initial design proposed for the new shield building, the SC wall module for the 3-foot thick cylindrical wall consisted of steel faceplates with attached 6-inch long steel studs which are embedded in the 35-inch thick concrete fill between the two plates. In a letter dated October 15, 2009, the NRC staff determined that this design would require modifications to ensure its ability to perform its safety function under design basis loading conditions. Some key issues identified in the letter are listed below:

- The need to demonstrate the adequacy of the design and detailing of the SC module to function as a fully composite unit, as assumed in the WEC design and analysis.
- The need to demonstrate the adequacy of the design and detailing of the connection between the SC module wall and RC wall of the auxiliary building to withstand all design basis loads.
- The need to support the design and analysis of the shield building tension ring (i.e., ring girder) and the air-inlet region with a validated analysis method (i.e., benchmarked to experimental data) or by confirmatory model tests.

Staff concerns focused particularly on the lack of transverse reinforcement that would tie one faceplate to the opposite faceplate to ensure that the SC modules would function as a unit for either out-of-plane demands or in-plane demands.

WEC developed a revised design for the shield building that added tie bars welded to opposite faceplates in the SC wall modules, and also revised the design of the ring girder and the connections between the SC wall module and the RC wall. The revised SC wall module has thicker faceplates, as well as tie bars between the plates to help ensure that the module acts as a composite unit with increased out-of-plane shear strength. The spacing between the tie bars is greater in regions of the wall away from discontinuities and connections, which have low out-

of-plane demands, than it is in the regions near discontinuities and the SC to RC connections, where out-of-plane shear demands are higher.

Although design codes for SC modular construction for some applications have been developed in Japan, codes and standards for the design of SC structural components do not exist in the United States. WEC used ACI-349, a design code for RC in nuclear safety-related structures, to guide their design of the SC cylindrical wall modules. Even though the scope of ACI-349 does not include SC construction, the underlying design philosophy, elastic behavior and strength for design basis loads and resilience through ductility for beyond design-basis loads, does apply. Also, the underlying assumptions on composite behavior of steel and concrete materials in RC structural elements do apply to SC structural elements.

To validate this adaptation of ACI-349, WEC conducted a testing program at Purdue University. The tests were intended (1) to demonstrate that the adaptations of ACI-349 proposed by WEC could be used to predict the out-of-plane shear strength, flexural capacity, and in-plane shear strength of SC structures and (2) to investigate the failure behavior of the SC modules.

The test results were also used to benchmark the finite element analyses performed to support the design of the shield building. WEC's approach to developing the design basis involved three levels of analysis with increasing levels of model refinement. Level 1 was used for determining the load magnitudes (seismic demands) imposed on the structure. It was a linear elastic analysis with a fairly coarse mesh that uses simplified models to account for concrete cracking. Level 2 was also a linear elastic analysis with a more refined mesh used for determining the member forces and deformation demands. Level 3 was a nonlinear analysis used to assess the region with high stresses, strains, and displacements in the shield building, such as the connection regions. Detailed submodels were used which included elements such as concrete, steel plates, studs, and tie bars. A strain-based failure criterion was selected to define acceptable limits under design-basis loads. The analysis models were benchmarked against the Purdue tests.

The Office of New Reactors (NRO) requested that the Office of Nuclear Regulatory Research (RES) provide assistance in evaluating the structural analysis, design, construction, and inspection methods for the AP1000. The findings in the RES report were used to inform the evaluation of the shield building design by the staff of NRO. RES engaged outside recognized experts in the field of reinforced concrete structures and composite structures. RES staff assessed and consolidated the inputs from each expert and performed their own independent assessment to develop their report.

The RES staff concluded that the agreement between the experimental results and the predictions of the Level 3 finite element models were adequate to benchmark the models for loads up to and beyond the design-basis safe shutdown earthquake (SSE). The RES staff also concluded that the models would provide useful predictions of SC module behavior for load levels beyond the design-basis level and below the self-imposed analysis strain limits.

The NRO staff concludes that WEC has shown that the models used for the analysis of the shield building predict the observed experimental behavior and response with acceptable accuracy up to the design-basis SSE seismic load level. Also, the staff finds that the design has acceptable stress and strain values in the SC steel plates, tie bars, and studs. The staff also finds that WEC's adaptation of the ACI-349 Code for the design of the SC modules is

acceptable. Finally, the staff finds the WEC's confirmatory analysis approach to be acceptable. We concur with the staff's conclusion.

The test specimens representing the SC modules with the closer tie-bar spacing used in regions of high out-of-plane demands failed in a ductile manner in all the tests. Some of the test specimens representing the SC wall modules with the tie-bar spacing used in the regions of low out-of-plane shear demands failed in a non-ductile manner in out-of-plane shear tests. This non-ductile behavior is the basis for a non-concurrence by an NRC staff member on the acceptability of the design of the shield building. In the view of the staff member, the behavior of the modules with increased tie-bar spacing is unacceptable. This non-concurrence was reviewed in both AP1000 Subcommittee and in full committee meetings.

As a matter of principle, structures important to nuclear safety should be designed so that, in the unlikely event the loads acting on the structure are larger than anticipated, the structure would behave in a ductile manner.

The staff member contends that this principle should be met by every element of the structure. WEC contends that it is the structure as a whole, not its elements, that ultimately matters, and that the design of the shield building does provide a structure that will behave in a ductile manner, because the low-ductility elements will approach their elastic limits only after those elements of the structure that do behave in a ductile manner have undergone significant plastic deformation. This approach is consistent with the intent of ACI-349, which requires ductile behavior only where demands are high and plastic deformation is expected to occur.

In the regions of low out-of-plane shear demands, the analysis shows that the out-of-plane shear capacity of the low ductility module is about 5 times greater than the applied shear load under design-basis loads. Indeed, except for some very small regions, the capacity is typically 10 times greater than the demand. Because the structural analysis follows typical seismic engineering practice and the finite element models used to describe the behavior of the SC models have been benchmarked to show satisfactory agreement with experiments even for loads greater than the design-basis loads, the NRO staff finds this margin to be acceptable, despite the uncertainties associated with any seismic analysis. We concur with the staff's conclusion. This conclusion is also consistent with the independent evaluation by the RES staff. All four of the consultants engaged by RES also agreed that the demand-to-capacity ratio was acceptable with sufficient margin. An additional expert consultant engaged by the ACRS, also agreed that margins were sufficient to ensure that the overall structural behavior was ductile.

The effort and scope of analysis and assessment required for the shield building in this case suggests that if SC composites are to be more widely used in nuclear applications, a consensus code should be developed, as has been done for other types of nuclear construction.

#### Analysis of Containment Vessel Cooling

The Passive Containment Cooling System is a safety-related system which is capable of transferring heat directly from the 130-foot diameter steel containment vessel (CV) to the environment. The Passive Containment Cooling System makes use of both the CV and the shield building surrounding the containment. A water distribution system, with two sets of weirs, is mounted on the outside surface of the steel CV and functions to distribute water flow on the containment exterior. The shield building directs natural draft air flow over the wetted exterior



surface of the CV. The redesigned shield building reduces this air flow by about 20%, as compared to the existing, certified RC design.

Our review of WCAP-15846, Volume 1, Revision 1, "WGOthic Application to AP600 and AP1000," revealed that the calculated time required to establish steady state coverage of the water film on the containment surface at prototypical flow rates was underestimated because of incorrect scaling of the 1/8 sector experimental result. This is non-conservative, inasmuch as a shorter time to reach steady state reduces the calculated peak containment pressure. WEC acknowledged the error and stated that correct scaling of the test data would result in a longer time to reach steady state film coverage at prototypical flow rates. However, WEC indicated that the analysis of record is based on an assumed value for the time to reach steady state coverage which is greater than that calculated using the correct scaling. Hence, the error should not impact the calculated peak containment pressure in the analysis of record. The staff should verify that the assumed time to reach steady state film coverage in the analysis of record is indeed longer than the corrected value obtained using the correct scaling.

### Reactor Coolant Pump

The AP1000 utilizes four, hermetically sealed, high-rotational inertia, centrifugal canned-motor RCPs. The pump motor and all rotating components are contained inside a robust housing. The pumps circulate large volumes of high temperature, high pressure cooling water through the reactor vessel, loop piping, and steam generators.

In order to provide the rotational inertia necessary for flow coastdown, each pump uses two heavy flywheels of unique design. The flywheels contain high density tungsten alloy segments. A shrink fitting process uses a high strength retaining ring to hold the segments against a heavy-wall stainless steel inner hub. This retaining ring must resist all the centrifugal forces resulting from pump operation. The retaining ring is fabricated from a high strength 18% Cr, 18% Mn, iron based stainless steel (a material commonly used in electric generator applications but not in PWR primary coolant circuits). This assembly is seal-welded within a thin wall Alloy 625 (nickel base) cylindrical enclosure. The primary function of this enclosure is to isolate the tungsten segments and the retaining ring from the primary coolant surrounding the flywheel. After fabrication and inspection, the entire flywheel is then mated to the stainless steel pump shaft by a second shrink-fitting operation.

The design of the AP1000 pump makes it impractical (but not impossible) to perform periodic inservice inspection (ISI) of the Alloy 625 welds to assure that the enclosure remains leak tight. Providing assurance that the flywheel can operate without leaks for the 60-year life of the plant in the absence of ISI, is a daunting challenge. In the absence of a reliable leak detection method, our assessment is that the enclosure must be assumed to leak and that the retaining ring must be capable of operating in the primary water chemistry environment, and at temperatures at which the flywheel is designed to operate. The greatest threat to the integrity of the retaining ring is stress corrosion cracking (SCC).

If the retaining ring is susceptible to SCC, it can fracture after the cracks have reached a critical flaw size, releasing the heavy tungsten segments and causing rotor seizure. Such a seizure could have significant consequences, as discussed in Chapter 15 of the AP1000 DCD, Revision 17, including short term departure from nucleate boiling in the core, potential fuel failures, and offsite dose consequences. Because of the robustness of the pump housing, analysis has shown there is no significant risk of missiles from a flywheel failure exiting the pump.

WEC and the staff have stated that successful operation of the 18% Cr, 18% Mn retaining ring material in electric generator applications provides sufficient evidence to assure adequate SCC resistance in the flywheel application. We were not persuaded by this evidence. Electric generator environments are not prototypical of the PWR primary coolant environment. Further, no specific SCC nucleation or crack growth testing of the 18% Cr, 18% Mn retaining ring material has been performed to qualify the material for PWR service. We believe that the use of untested materials in such an important component as the RCP is fundamentally incompatible with General Design Criterion (GDC) 4. Consequently, we were concerned that adequate SCC resistance of the AP1000 flywheel retaining ring had not been demonstrated by testing in the primary water environment in which the flywheel is designed to operate.

WEC has responded to our concerns, and has stated that it will perform a test program to demonstrate the SCC resistance of the retaining ring material. The staff should incorporate this WEC commitment into the regulatory process, and should review the results of this testing with the Committee when available.

### Flow Skirt

In the AP1000 DCD, Revisions 16 and 17, WEC proposed a change to its reactor internals. A flow skirt attached to the reactor vessel bottom head was added. The flow skirt is intended to provide a more uniform core inlet flow distribution and reduce the potential for excessive cross-flow, which could result in grid-to-rod fretting and fuel damage. We reviewed the effect of the flow skirt on core flow and flow distribution. Our review concluded that the addition of the flow skirt improves core inlet flow distribution and is satisfactory.

### Human Factors Engineering

The staff review of HFE information included in the DCA was thorough, evaluating the HFE program, analyses, and design against the detailed guidelines of NUREG-0711. We are pleased that the four HFE DAC were closed as part of the DCA. This relieves substantial burden in the review of future combined license applications (COLAs). These four HFE DAC are listed below:

- Human Reliability Analysis is integrated with HFE design.
- Task Analysis is performed in accordance with the task analysis implementation plan.
- The human-system interface (HSI) design is performed for the Operation and Control Centers System in accordance with the HSI design implementation plan.
- An HFE program verification and validation implementation plan is developed in accordance with the programmatic level description of the AP1000 human factors verification and validation plan.

The staff review went well beyond the brief acceptance criteria stated in the DAC. For example, when the DAC required that a report exists that concludes the design is in conformance with the implementation plan, the review examined the content of the report, identifying omissions, incomplete analyses, and apparent errors through requests for additional information (RAIs) and open items. The review included staff audits of WEC analysis documents to ensure that all these issues were resolved.

### Probabilistic Risk Assessment

The Probabilistic Risk Assessment (PRA) was completed as part of DCD Revision 15 and the most recent revision of the PRA Report is Revision 8 from 2007. DCD Revision 17, Chapter 19 includes very little new PRA information. During the staff review of DCD Revision 17, the staff performed an audit of the PRA at the WEC's headquarters. They reviewed changes to the PRA model that occurred after the submittal of the AP1000 PRA Report, Revision 8, including those related to RAls and the amended design, as well as how the model had been converted from WEC's proprietary computer code to a more widely used linked-fault-tree code. The audit team explored the PRA by exercising the computer model and reviewing calculation notes documenting the bases for revisions to the PRA model that account for changes in the AP1000 design.

The audit team identified omissions and errors that were documented in open items that now have been closed. They found no other issues that required update of the DCD. In the audit report the staff reiterated their expectation that "before COLs begin to operate, they will develop plant-specific PRAs that conform to the appropriate revision and addenda of ASME/ANS-RA-S."

### Digital Instrumentation and Control

The DCA submitted by WEC makes the following major changes to the DI&C System:

- Revised Chapter 7 to delete the use of the Eagle 21 System as an option for the Protection and Safety Monitoring System (PMS) and to provide for the use of the Common Q Platform as the microprocessor based computing platform in a DI&C architecture defined by WEC topical report WCAP-16675, "AP1000 Protection and Safety Monitoring System Architecture Technical Report."
- Revised the Diverse Actuating System (DAS) to be designed using field programmable gate arrays instead of a microprocessor based system.
- Revised the design of the Turbine Generator Overspeed Trip System from redundant, independent mechanical and electrical systems to redundant, independent electrical systems.
- Proposed the closure of DAC associated with the design requirements and system definition phases for the PMS and DAS, based on the more detailed descriptions of the designs provided in the DCA and referenced documents.

We completed a review of the proposed PMS architecture based on evaluating compliance with the four fundamental pillars of reliable DI&C microprocessor based system designs: redundancy, independence, deterministic processing behavior, and diversity and defense in depth (D3). Our review concluded that the redundancy and D3 pillars were met.

The staff found that the AP1000 design for DAS voting logic and diversity met the requirements and was acceptable. However, the staff identified that Automatic Depressurization System (ADS) spurious actuation could be a potential safety concern. WEC resolved this concern by making a change in the DCA to mitigate the potential for spurious ADS actuation. This resolution is acceptable.

During the review, it was noted that the watchdog timers were critical to ensuring that the independence criteria were met and that the PMS would actuate a reactor trip if all of the voting

processors in each division locked up due to a common cause failure (CCF). However, the design architecture for the watchdog timer operations was not clearly defined in the DCA or in referenced documents. Subsequently, WEC provided a detailed description of the watchdog timer design and operation. We consider this additional detail to be necessary and should be included in the DCA.

Our review of deterministic processing behavior noted that the topical report for the Common Q Platform identified that the bus loading in the processor should be limited to less than 70% of its capacity to ensure that deterministic processing was maintained. The DCD Tier 1 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) for the PMS did not include a test of the time response of the system from parameter input to control device actuation with the processor loaded to 70% of its capacity. WEC committed to including time response testing to verify system performance at maximum processor loading. We agree with this resolution, which should be reflected in the DCA.

Our review of the Turbine Generator Overspeed Trip System found that there was no specific test to confirm that the trip system would prevent exceeding 120% of rated speed as specified in the note following DCD Tier 2, Table 10.2.2, "Turbine Overspeed Protection." WEC identified two tests in DCD Chapter 14, (100% Load Rejection and Plant Trip from 100% Power) that will demonstrate that the Table 10.2.2 peak transient overspeed value of  $\leq 108\%$  is not exceeded. However, a review of those tests found that the performance criteria did not mention confirming the peak transient overspeed value, and WEC agreed to incorporate the  $\leq 108\%$  in the performance criteria for these tests. This commitment should be included in the DCA.

The removal of the DAC resulting from these DI&C changes was evaluated by the staff. We agree with the staff resolutions for these DAC.

#### Diverse Actuating System Out of Service Limits

During the course of our review, we identified a concern which appears to apply to the existing certification, as well as to the proposed amendment. There are two actuation logic modes: automatic and manual. The automatic DAS logic mode functions to logically combine the automatic signals from the two redundant automatic systems on a two-out-of-two basis. The manual DAS is implemented by hard wiring the controls directly to the final loads, bypassing the normal path through the PMS and the DAS automatic logic. The manual DAS has a 30-day Technical Specification out of service (OOS) allowance and the automatic DAS has a 14-day investment protection reporting time for OOS time. The PMS Engineered Safeguards Features Actuation System (ESFAS) is a two-out-of-four system which is designed to fail as-is. The voting units for the system are the same microprocessor based units that are used for the reactor trip functions in the PMS. If a CCF locks up all of the voting units, the system fails as-is and will not perform a safeguards actuation if requested. The backup to PMS is the automatic and manual DAS. As presently specified, both of these backup systems are allowed to be OOS at the same time. If a safeguards action is requested while both are OOS, there is no backup available for independent actuation. We are concerned that allowing both automatic and manual DAS to be OOS at the same time results in an unnecessary and significant reduction in diversity of protection capability which is credited in the AP1000 PRA. Accordingly, we recommend that the staff seek commitments from COL holders to not allow both automatic and manual DAS to be OOS at the same time.

In summary, we agree with the staff's resolution of all of the open items for the AP1000 DCA with respect to the specific safety issues. The changes proposed in the AP1000 DCA maintain the robustness of the previously certified design. We conclude that there is reasonable

assurance that the revised design can be built and operated without undue risk to the health and safety of the public. This conclusion is contingent on the results of our concurrent reviews of the aircraft impact assessment and long-term core cooling issues which will be discussed in separate letters.

Additional comments by ACRS Members Charles H. Brown Jr. and J. S. Armijo are presented below.

Sincerely,

*/RA/*

Said Abdel-Khalik  
Chairman

## **Additional Comments by ACRS Members Charles H. Brown Jr. and J. S. Armijo**

### Squib Valve Post Seismic Testing

The Automatic Depressurization System (ADS) ADS-4 squib valves must operate to achieve post LOCA passive long-term cooling. They are actuated by an explosive charge and are one-time-use valves until the internals are replaced. Thus, once installed, they cannot be tested in service.

We asked if the entire valve was operationally tested after being subjected to qualification seismic testing. WEC stated NO, the basis being that the valves are extensively analyzed in accordance with ASME code requirements; motor operated valves (MOV) are not operationally tested after seismic testing; and the critical actuating parts, the charge and tension bolts, are individually tested after seismic testing in simulated prototype fixtures.

We do not agree with this position and recommend that they be operationally tested after seismic testing for the following reasons:

1. Failure of the ADS-4 squib valves due to an unknown common cause mechanism prevents initiation of post LOCA passive long-term cooling.
2. This is a first time application for this service in nuclear power plants.
3. The valve actuation is a one-time pulse that ignites a charge, pushes a piston through the range of a cylindrical channel to rupture a shear cap causing the released cap to rotate about a pin to allow flow to occur. The only force to push the shear cap out of the way other than gravity is the pressure of the fluid. If seismic forces warp the channel, inhibiting or reducing piston travel; or warp the shear cap such that the shear cap does not break cleanly; or bend the pin preventing rotation of the valve disk, then the valve becomes non-operational.
4. An MOV is not a valid basis for comparison since it has a torque applying continuous force to drive a valve open or shut.
5. While an analysis for this unique valve is useful to assess the potential of the design to pass the post seismic test, it has not been validated as being satisfactory for full qualification without actual post seismic qualification operational testing.

### Additional Amplifying Discussion

The ability to achieve satisfactory post LOCA passive long-term cooling has been extensively analyzed and tested in excruciating detail relative to types of debris, particulates, chemistry, and environment temperature to ensure sump and other screens do not become clogged. In our opinion, it is incongruous to now conclude that the valves critical to ensuring post LOCA passive long-term cooling will perform satisfactorily without post seismic qualification prototypical operational testing.

**REFERENCES**

1. U.S. Nuclear Regulatory Commission, "Advanced Copy of the Final Safety Evaluation Report Related to Certification of the AP1000 Standard Design," (ML103260072)
2. Letter to U.S. Nuclear Regulatory Commission, "Westinghouse Application to Amend the AP1000 Design Certification," APP-GW-GL-700, Revision 16, 05/26/2007 (ML071580757)
3. Letter to U.S. Nuclear Regulatory Commission, "Update to Westinghouse's Application to Amend the AP1000 Design Certification Rule," APP-GW-GL-700, Revision 17, 09/22/2008 (ML083220482)
4. Westinghouse, AP1000 Design Control Document (DCD), APP-GW-GL-700, Revision 18, December 1, 2010, APP-GW-GL-700, Revision 18
5. NUREG-1793, "Final Safety Evaluation Report Related to Certification of the AP1000 Standard Design (NUREG-1793)," 09/2004 (ML043450344, ML043450354, ML043450284, ML043450290, and ML043450274)
6. NUREG-1793 Supplement 1, "Final Safety Evaluation Report Related to Certification of the AP1000 Standard Design" 12/2005 (ML060330557)

## APPENDIX

CHRONOLOGY OF THE ACRS REVIEW OF THE WESTINGHOUSE  
AMENDMENT TO THE AP1000 DESIGN CONTROL DOCUMENT

The extensive ACRS review of the AP1000 DCD and its interactions with representatives of the NRC staff and Westinghouse are discussed in the minutes and transcripts of the following ACRS meetings.

ACRS MEETING/DATES	SUBJECT
562 <sup>nd</sup> ACRS Meeting 5/7-9/2009	Status and Update Concerning Revisions to the AP1000 Design Control Document
AP1000 Subcommittee 7/23-24/2009	AP1000 DCD and NRC Staff's AFSER for Chapters 1, 4, 5, 10, 11, 12, 14, 16, 17, and 19
AP1000 Subcommittee 10/6-7/2009	AP1000 DCD and NRC Staff's AFSER for Chapters 3, 8, and 18
AP1000 Subcommittee 11/19-20/2009	AP1000 DCD and NRC Staff's AFSER for Chapters 7 and 9 Long-Term Core Cooling
AP1000 Subcommittee 2/2-3/2010	AP1000 DCD and NRC Staff's AFSER for Chapter 15 Gas Intrusion Loss of Large Areas Regulatory Treatment of Non-Safety Systems RCP Issues
AP1000 Subcommittee 4/22/2010	Loss of Large Areas RCP Materials Elbow Taps Screening Criteria for Thermal Striping High-Density Polyethylene Connections Shield Building



ACRS MEETINGS/DATES	SUBJECT
AP1000 Subcommittee 6/24-25/2010	AP1000 DCD and NRC Staff's AFSER for Chapters 4, 10, 11, 12, 14, and 22
AP1000 Subcommittee 7/21-22/2010	AP1000 DCD and NRC Staff's AFSER for Chapters 2, 3, 16, and 17
AP1000 Subcommittee 9/20-21/2010	AP1000 DCD and NRC Staff's AFSER for Chapters 5, 7, 8, 13, and 18 AP1000 Containment Corrosion Prevention
AP1000 Subcommittee 10/5/2010	AP1000 DCD and NRC Staff's AFSER for Chapters 6 and 15 Long-Term Core Cooling
AP1000 Subcommittee 11/2-3/2010	AP1000 DCD and NRC Staff's AFSER for Chapters 9 and 19 Aircraft Impact Assessment
577 <sup>th</sup> ACRS Meeting 11/4-6/2010	Long-Term Core Cooling
AP1000 Subcommittee 11/17-19/2010	AP1000 DCD and NRC Staff's AFSER for Chapters 3, 15, and 23 Shield Building Issues Long-Term Core Cooling Aircraft Impact Assessment
AP1000 Subcommittee 12/1/2010	Action Items
578 <sup>th</sup> ACRS Meeting 12/2-4/2010	Final ACRS Review of the AP1000 DCD



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
ADVISORY COMMITTEE ON REACTOR SAFEGUARDS  
WASHINGTON, DC 20555 - 0001**

December 20, 2010

The Honorable Gregory B. Jaczko  
Chairman  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

**SUBJECT: LONG-TERM CORE COOLING FOR THE WESTINGHOUSE AP1000  
PRESSURIZED WATER REACTOR**

Dear Chairman Jaczko:

During the 577<sup>th</sup> and 578<sup>th</sup> meetings of the Advisory Committee on Reactor Safeguards (ACRS), November 4-6, and December 2-4, 2010, we reviewed the NRC staff's safety evaluation of the adequacy of long-term core cooling as it applies to the AP1000 design certification amendment application. AP1000 long-term core cooling performance was also reviewed during subcommittee meetings held on November 19-20, 2009, October 5, November 17-19, and December 1, 2010. During these meetings, we had the benefit of discussions with representatives of the NRC staff and the Westinghouse (WEC or applicant). We also had the benefit of the documents referenced.

**CONCLUSION AND RECOMMENDATION**

1. The regulatory requirements for long-term core cooling for design basis accidents have been adequately met, and the issue is closed for the AP1000 design.
2. This conclusion is based on the cleanliness requirements specified in the amendment. Any future proposed relaxation of these requirements will require substantial additional data and analysis.

**BACKGROUND**

On May 8, 2008, the Commission issued a Staff Requirements Memorandum (SRM) stating that, "the ACRS should advise the staff and Commission on the adequacy of the design basis long-term core cooling approach for each new reactor design based, as appropriate, on either its review of the design certification or the first license application referencing that reactor design." The main focus of the Commission's concern was the ability of the safety systems to provide adequate core cooling over extended time periods when the Emergency Core Cooling System (ECCS) recirculation mode is activated during a design basis accident (DBA).

The AP1000 is a pressurized light water reactor design that incorporates new passive safety features not found in current operating pressurized water reactors (PWRs). These include a Passive Containment Cooling System (PCS) to transport heat to the ultimate heat sink for accident scenarios.

Many aspects of long-term cooling (LTC), excluding the effects of debris, were considered as part of the AP1000 certification process that was completed in January 2006. This letter report addresses the effect of debris on LTC.

## DISCUSSION

For AP1000 LTC, coolant is driven by gravity head through the core. The coolant exits, as a steam-water mixture, mainly through the Automatic Depressurization System (ADS-4) valves. The steam flowing out from the core removes decay heat and is condensed on the inside of the steel containment shell. The condensed water flows down the containment walls, is collected in the In-Containment Refueling Water Storage Tank (IRWST), and is recirculated. Screens placed between the IRWST and the core capture debris. Sump screens are placed in another possible flow path, which is through the loop compartment to the core.

During loss-of-coolant accidents (LOCAs) the level in the IRWST tank drops, redistributing water to the region around the reactor vessel and associated piping, causing much of the piping to be submerged. Breaks in this piping, such as in the cold legs or the direct vessel injection (DVI) lines, can be submerged and provide an unfiltered flow path to the reactor core.

The main sources of debris are: 1) latent containment debris, such as hair and clothing fibers; 2) debris generated by LOCA jets and exposure to post LOCA conditions; and 3) chemical precipitates that form in the recirculating water stream. WEC has taken advantage of what has been learned with regard to the GSI-191 issue for the fleet of operating PWRs. Efforts have been made in the design to minimize LOCA-generated debris by selecting low fiber, low particulate insulation and LOCA resistant qualified coatings. Stringent containment cleanliness requirements have been imposed in the amendment that limit fibrous latent debris and the amount of aluminum that can be submerged. Sump screens have been designed to assure negligible reduction in recirculation flows due to debris accumulation on them.

Because of these actions, any potential problems with LTC would primarily be due to flow blockage in the core which may trap materials that pass through the screens, and more importantly, materials that enter the core directly through submerged breaks. The possibility that unfiltered water, carrying in some cases a major portion of the suspended fibrous and particulate debris, will gain ingress directly to the core is unique to the AP1000 design. Furthermore, the gravity head available in the AP1000 for driving flow through a core in which debris has accumulated is limited. Both of these factors add to the difficulties in determining the adequacy of AP1000 LTC.

In the certified design, the applicant carried out a series of calculations using WCOBRA/TRAC, which had been accepted for analysis of LTC, without considering debris. Resolution of debris effects was deferred to the combined license (COL) stage but is now being addressed in the amendment. In the calculations for the design certification amendment, WCOBRA/TRAC was also used. The effect of debris, which mainly causes in-vessel head losses, was modeled by introducing a constant loss factor at the core inlet. The purpose of these calculations was to determine how the loss factor affected ADS-4 vent qualities (the mass fraction of steam), pressure loss across the debris bed, and mass flux through the core. Based on analysis of the results, the applicant proposed what is effectively an acceptance criterion that requires pressure drop through the debris bed to be less than a specified amount at a specified flow rate. When the criterion was met, the WCOBRA/TRAC results indicated that the ADS-4 vent quality would be less than 50 percent which resulted in acceptable boron concentration. At our request, additional results were obtained with higher loss factors to elucidate the margins inherent in the

proposed acceptance criterion with regard to critical heat flux and boron concentrations. These indicated sufficient margin to account for uncertainties, and we agree that the acceptance criterion should be as proposed by the applicant.

To determine whether blockage under representative debris loadings and flow conditions would meet the acceptance criterion, the applicant conducted a series of tests in a pumped flow loop. The loop incorporated a part-length fuel bundle with representative inlet and spacer geometries. Flow rates were varied to simulate the transient mass flux through the core as the debris bed built up, though the lowest flow rates studied were somewhat higher than the value of the flow rate for the acceptance criterion. Fibrous and particulate debris loadings were conservative but were varied over a narrow range. An approved surrogate material was added over a period of time to simulate the effect of chemical precipitates, such as aluminum oxyhydroxide that might form. The reference experimental protocol was selected to follow the sequence of events expected for the long term recirculation phase of a DBA. However, the exact protocol that should be used is unclear, and tests have shown that variations in protocol can result in significant differences in pressure losses. For example, in a test where the protocol was inadvertently varied to follow a non-representative event sequence, a significantly larger debris-bed pressure loss was obtained than for the same case run with the reference protocol. However, the pressure loss still remained within acceptable limits.

For the tests used to determine whether the acceptance criterion could be met, the fibrous debris used was derived from NUKON insulation which may not be typical of the latent debris that might accumulate in the core in an AP1000 DBA. Two tests were conducted with non-reference protocols using debris containing hair and clothing fibers. While the pressure loss behavior was somewhat different from that observed in the NUKON-based test, the pressure losses were within the acceptable range.

Most of the tests were conducted at room temperature. In two exploratory tests, debris-bed pressure losses decreased significantly when the temperature was raised to values closer to those expected during LTC. The lower pressure losses are consistent with the effect of increasing temperatures on water viscosity. However, the net effect of increased temperature on head loss is still uncertain since organic materials may behave differently at LTC temperatures than the NUKON-based debris used in the tests. Absent additional experiments at LTC temperatures using organic fibers (hair, clothing) and prototypical water chemistry, it is not certain that the observed benefit of higher temperature will provide additional margin.

In the tests, the head losses that arose from debris accumulation in the fuel inlet region were rather low when the debris consisted of fibers and particulates alone. However, when the surrogate chemical precipitates were added gradually, head losses rose sharply initially, but generally leveled off as more was added. The effect of the chemical precipitates will depend on the rate of their formation. Although this is uncertain, the rate at which surrogates were added in the tests appears to be conservative.

Radiolysis in the containment atmosphere and doses to cable insulation might form small amounts of nitrogen oxides and hydrogen chloride which may acidify the water condensed on the containment wall. The acidified water may leach zinc from the containment coating. If some zinc does dissolve into the recirculating water stream, the chemical load that should be considered in evaluating debris head losses would be increased. While the experiments indicating that head losses level off with the addition of chemical surrogates suggest that the effect of the possible zinc load could be small, the effect has not been investigated and adds to the uncertainties.

In view of the relatively narrow range of conditions explored in the applicant's test program and the significant uncertainties in the results, a site visit was conducted to better understand the AP1000 related results in the context of in-core debris effects found in the PWR Owner's Group (PWROG) experiments. These cover a wide range of conditions and, while not directly applicable to the AP1000, offer valuable insights into the effects of various experimental parameters.

As a result of the issues arising in subcommittee meetings and the site visit, additional experimental results from the PWROG program at lower flow rates and higher fiber loadings were made available to us.

When the additional WCOBRA/TRAC analyses and the additional experimental results are taken into account, in-core debris bed pressure losses appear to meet the acceptance criterion with sufficient margin to account for the uncertainties, including those due to chemical effects, experimental protocol, and debris constituents. This conclusion is based on the limits on latent debris and submerged aluminum specified in the amendment. These cleanliness specifications should not be relaxed without additional analyses, a much wider range of experiments at prototypical conditions, and NRC review of these findings.

In summary, debris generation during DBAs has been minimized by the choice of LOCA-resistant insulation and coatings. This, together with the large flow area sump screens, results in negligible head losses except in the inlet regions of the core. With regard to in-vessel debris effects, the acceptance criterion established by the applicant is adequate to assure LTC. The criterion is met with sufficient margin to account for uncertainties provided the stringent cleanliness requirements specified in the amendment are maintained. The AP1000 design, therefore, meets the regulatory requirements for LTC during design basis accidents.

Sincerely,

*/RA/*

Said Abdel-Khalik  
Chairman

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5. Letter to U.S. Nuclear Regulatory Commission, "Transmittal of IRWST and CR Screen Related Documents," 02/26/2010 (ML100640574)
6. Letter to U.S. Nuclear Regulatory Commission, "Transmittal of IRWST and CR Screen Related Documents, Enclosure 21," 02/26/2010 (ML100640578)
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9. Letter to U.S. Nuclear Regulatory Commission, "Transmittal of Technical Report APP-GW-GLR-079 Revision 8 (TR-026), (Proprietary & Non-Proprietary) "AP1000 Verification of Water Sources for Long-Term Recirculation Cooling Following a LOCA" Enclosure 3, 07/20/2010 (ML102170124)
10. Letter to U.S. Nuclear Regulatory Commission, "Submittal of APP-GW-GLE-002 Revision 7 - Impacts to the AP 1000™ to Address Generic Safety Issue (GSI)-191," 12/13/2010 (ML101970030)
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**UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
ADVISORY COMMITTEE ON REACTOR SAFEGUARDS  
WASHINGTON, DC 20555 - 0001**

January 19, 2011

The Honorable Gregory B. Jaczko  
Chairman  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

**SUBJECT: REPORT ON THE SAFETY ASPECTS OF THE AIRCRAFT IMPACT  
ASSESSMENT FOR THE WESTINGHOUSE AP1000 DESIGN CERTIFICATION  
AMENDMENT APPLICATION**

Dear Chairman Jaczko:

During the 579th meeting of the Advisory Committee on Reactor Safeguards, January 13-15, 2011, we reviewed the staff's Safety Evaluation Report (SER) on the Aircraft Impact Assessment (AIA), which is part of the Westinghouse (WEC or the Applicant) AP1000 Design Certification Amendment (DCA) application. Our AP1000 subcommittee held meetings on November 2-3, November 17-19, and December 15-16, 2010, and reviewed the staff's SER and AIA inspection report. During these meetings, we had the benefit of discussions with representatives of the NRC staff and WEC. The AIA was made available to us by the applicant for review prior to our AP1000 subcommittee meeting of November 2-3, 2010. We also had the benefit of the documents referenced. This letter fulfills the requirement of 10 CFR 52.53 that the ACRS report on those portions of the application which concern safety.

**CONCLUSION AND RECOMMENDATION**

The WEC AIA for the design described in the AP1000 DCA application, as modified to resolve NRC inspection findings, complies with the requirements of 10 CFR 50.150. Analyses show that the containment remains intact following the impact of a large commercial aircraft. The reactor core remains cooled, and spent fuel pool integrity is maintained.

The staff should evaluate information and analyses presented to the ACRS, but not subjected to staff review or inspection, to determine if there is a need for further revision of the design control document (DCD), or a need for further inspections.

## **BACKGROUND**

The results of the AP1000 AIA are a part of the AP1000 DCA application. The AP1000 design was previously certified and the existing AP1000 certification rule references DCD Revision 15. DCD Revision 18 was submitted by WEC in a letter dated December 1, 2010, and it incorporates changes in Revision 16, submitted on May 26, 2007; in Revision 17, submitted on September 22, 2008; as well as those changes made subsequent to the submittal of Revision 17, which are identified in Chapter 23 of the Advanced Final Safety Evaluation Report. We held a series of meetings with the NRC staff and the applicant on the AP1000 DCA application. We wrote a letter, dated December 13, 2010, following our review of the amendment. Our assessment of the AP1000 AIA was not included in the letter.

As required by 10 CFR 50.150, applicants for new nuclear power plants must perform an assessment of the effects of the impact of a large, commercial aircraft. Using realistic analyses, applicants must identify and incorporate into the facility those design features and functional capabilities needed to show that, with reduced use of operator action; (1) the reactor core remains cooled or the containment remains intact, and (2) spent fuel cooling or spent fuel pool integrity is maintained (referred to as the acceptance criteria). Applicants are required to submit a description of the design features and functional capabilities relied upon in the AIA and a description of how these features and capabilities ensure that the acceptance criteria are met. Since the impact of a large, commercial aircraft is a beyond-design-basis event, applicants may use non-safety-related features or capabilities to satisfy the requirements of 10 CFR 50.150.

From September 27, 2010, through October 1, 2010, the staff conducted an inspection of the WEC AP1000 AIA. Based on the results of this inspection, the staff determined that NRC requirements had not been fully met. The inspection revealed that WEC did not use realistic analyses for certain aspects of its AIA and did not fully identify and incorporate into the DCD those design features and functional capabilities credited. WEC responded to the inspection report and proposed corrective actions in its letter to the NRC dated November 12, 2010. The staff issued a letter, dated November 23, 2010, stating that the proposed corrective actions were satisfactory. The staff may review the implementation of the corrective actions during a future inspection to determine that full compliance has been achieved and maintained.

## **DISCUSSION**

The AIA performed by the applicant uses the industry guidance in NEI 07-13, Revision 7, endorsed in Draft Regulatory Guide DG-1176. The results of the AIA show that the modified AP1000 design, described in the application, meets the acceptance criteria of the AIA rule by maintaining containment integrity and spent fuel pool integrity.



The key AP1000 design features identified by WEC to satisfy the requirements of 10 CFR 50.150 include: presenting a small target with a reduced set of safety-related structures, systems, and components (SSCs); a redesigned shield building which protects the steel containment vessel from penetration due to impact<sup>8</sup>; simplified, passive safety equipment for core cooling; no active equipment required for spent fuel pool cooling; and redundancy and defense-in-depth in equipment design. In accordance with 10 CFR 50.150, WEC provided an assessment in the respective technical areas of structures, reactor systems, fire, and shock.

For the structural assessment, WEC used the impulse curve supplied by the NRC and the finite element analysis code LS-DYNA. All of the aircraft strikes analyzed using this code was on the shield building. The redesigned shield building, using a modular, steel concrete composite (SC) structure, reduces passive heat removal air flow. The effects of air flow reduction on containment integrity during accidents were analyzed and shown to be acceptable. Based on the results of the assessment, WEC concluded, and the staff agreed, that both the containment and spent fuel pool remain intact and that core and spent fuel cooling are maintained.

During our November 2-3, 2010 AP1000 subcommittee meeting, we questioned whether the worst-case locations for aircraft impact had been considered. WEC addressed this issue during our November 17-19, 2010, AP1000 subcommittee meeting.

The AP1000 shield building includes a 32 ft. diameter opening in the conical roof which is an essential feature of the passive containment cooling design. This opening is surrounded by the Passive Containment Cooling System water storage tank. During our November 2-3, 2010, subcommittee meeting, issues arose concerning the potential for significant aircraft impact debris to pass through the opening and impact the steel containment vessel. WEC conducted appropriate analyses, which we reviewed during our November 17-19, 2010, subcommittee meeting. Using realistic assumptions for the impact locations of concern, these analyses demonstrated that no significant debris would impact the steel Containment Vessel (CV). In addition, WEC performed a more conservative analysis in which a large mass consisting of debris and the shield plate, was assumed to fall on the steel CV. This impact resulted in only a relatively small amount of plastic deformation and no penetration of the CV.

Our December 13, 2010, letter concerning the AP1000 DCA application describes the SC design, including the addition of tie bars between opposite faceplates of the SC modules. The spacing of these tie bars is smaller in areas of higher, out-of-plane, design basis shear demands - i.e., near discontinuities and connections - than it is in the majority of the shield building wall structure where these demands are lower. Aircraft impacts, unlike design basis events, can impart high out-of-plane shear demands in regions of the shield building wall with greater tie bar spacing. As discussed in our letter of December 13, 2010, these areas can fail in

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<sup>8</sup> The shield building redesign is discussed in our letter dated December 13, 2010.

a non-ductile manner under such loads. In order to assure acceptable realism in the analyses, it must be demonstrated that the finite element models used in the AIA adequately describe this non-ductile behavior under high out-of-plane shear loads. WEC provided comparisons of the predictions of the LS-DYNA model with an experiment on a beam representing a SC structure with greater tie bar spacing under high out-of-plane shear loads. The load-deformation behavior predicted by the model agreed well with the results of the experiment; the comparison adequately supports the use of the model for these analyses.

In addition to the possibility of global structural failure, there is also a potential for local failure due to penetration by hard objects such as an engine or landing gear. The AIA analysis included comparisons of the predictions of the LS-DYNA model with penetration tests conducted in Japan on SC structures. The predictions show adequate agreement with the tests. Although the geometry of the specimens in these tests differs from that of the shield building, the comparisons support the use of the model to predict local failures associated with aircraft impact.

WEC demonstrated that AIA requirements with respect to core and spent fuel cooling are met. This is because the systems required for design basis core cooling are located inside containment, which is protected by the redesigned shield building, and there are no active systems required for cooling of spent fuel. In addition, WEC demonstrated that at least one backup water source is always available for cooling.

Similarly, for the fire aspect of AIA, based on the limited systems required for core cooling in the AP1000, and their location within the intact containment, WEC demonstrated that the requirements of 10 CFR 50.150 are met.

Finally, with regard to the effects of shock associated with aircraft impact, WEC demonstrated that these shock loadings are less than those resulting from a design basis seismic event.

The AP1000 AIA was reviewed in parallel with the development of DCD Revision 18, which was submitted on December 1, 2010. Also, the staff conducted an inspection of the AIA and resolved their findings with WEC, as described in a letter dated November 23, 2010. In parallel with these activities, we conducted subcommittee meetings to review the AIA during which WEC responded with information and analyses, some of which may not be reflected in the DCD, as revised, or within the scope of the staff's inspection. In view of these parallel activities, the staff should evaluate information and analyses presented to the ACRS, but not subjected to staff review or inspection, to determine if there is a need for further revision of the DCD, or a need for further inspections.

The AIA for the design described in the AP1000 DCA application, as modified to resolve the staff's inspection findings, complies with the requirements of 10 CFR 50.150. Following the impact of a large commercial aircraft, the containment remains intact, the reactor core remains cooled, and spent fuel pool integrity is maintained.

Sincerely,

*/RA/*

Said Abdel-Khalik  
Chairman

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3. Letter to U.S. Nuclear Regulatory Commission, "Update to Westinghouse's Application to Amend the AP1000 Design Certification Rule," APP-GW-GL-700, Revision 17, September 22, 2008 (ML083220482)
4. Westinghouse, AP1000 Design Control Document (DCD), APP-GW-GL-700, Revision 18, December 1, 2010 (ML103480059 and ML103480572)
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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
ADVISORY COMMITTEE ON REACTOR SAFEGUARDS  
WASHINGTON, DC 20555 - 0001

May 19, 2011

Mr. R.W. Borchardt  
Executive Director for Operations  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

SUBJECT: RESPONSE TO THE FEBRUARY 5, 2011, EDO LETTER REGARDING THE  
FINAL SAFETY EVALUATION REPORT ASSOCIATED WITH THE  
AMENDMENT TO THE AP1000 DESIGN CONTROL DOCUMENT

Dear Mr. Borchardt:

During the 583<sup>rd</sup> meeting of the Advisory Committee on Reactor Safeguards, May 12 - 14, 2011, we reviewed your February 5, 2011, letter responding to our December 13, 2010, letter regarding the staff's final Safety Evaluation Report associated with the amendment to the AP1000 Design Control Document (DCD). In our December 13, 2010, letter, we expressed concern that the potential for failure of the reactor coolant pump (RCP) flywheel due to stress corrosion cracking (SCC) should be addressed by demonstrating that the material used is qualified for the primary water environment in which the flywheel is designed to operate. Your letter states that the staff believes this qualification testing is unnecessary because the safety consequences of a RCP flywheel failure have been adequately addressed by designing the pump casing to contain any potential missiles.

Westinghouse has committed to qualification testing as discussed further below. However, we also wish to respond to the rationale provided for the staff's determination that qualification testing of the flywheel material is unnecessary. As noted in our letter, a rotor seizure resulting from flywheel failure "could have significant consequences, as discussed in Chapter 15 of the AP1000 DCD, Revision 17, including short term departure from nucleate boiling in the core, potential fuel failures, and offsite dose consequences." The potential for these effects of a locked rotor accident, and the dynamic forces which would result at the bolted connection of the RCP to the primary system, should be minimized by using flywheel material which has been qualified to be resistant to SCC in the primary system.

Requiring use of available means to reduce the potential for a locked rotor event by using qualified flywheel material is warranted notwithstanding the fact that the flywheel is intended to be protected from exposure to the primary coolant by a surrounding Alloy 625 enclosure, because the integrity of the enclosure is not subject to periodic in-service inspection and therefore cannot be assured.

We have received a copy of the stress corrosion test program to be performed by Westinghouse to demonstrate the SCC resistance of the AP1000 RCP flywheel retaining ring material. We are concerned with the ability of the test program to provide reasonable assurance that the material will be resistant to SCC in the primary coolant environment. Our specific concern is with the proposed use of elastically loaded bent beam samples to demonstrate resistance to the

initiation of stress corrosion cracks. This test method has been found to be unreliable for all but highly susceptible materials. For example, testing of hundreds of bent beam specimens for thousands of hours by the General Electric Company in the early 1960s failed to predict the susceptibility of welded Type 304 stainless steel components to SCC in boiling water reactors (BWRs). The crack growth rate (CGR) tests proposed by Westinghouse can provide a sensitive assessment of susceptibility, but the test protocols are not easily standardized. Slow strain rate tests (SSRT) demonstrated SCC susceptibility for BWR environments consistent with in-reactor performance. Today, the SSRT method is widely used to demonstrate resistance to SCC initiation, and a standard protocol is available (ASTM G129-00). Passing this test provides a high degree of assurance that a material is highly resistant to SCC initiation, and SSRT are generally easier and quicker to perform than CGR tests. Furthermore, we consider SSRT to be the most appropriate method for demonstrating SCC resistance of the retaining ring material.

In our December 13, 2010, letter, we also identified a concern that allowing both the automatic and manual modes of actuation of the Diverse Actuation System (DAS) to be out of service at the same time would result in an unnecessary and significant reduction in diversity of the protection capability, which is credited in the AP1000 probabilistic risk assessment (PRA). Thus, we recommended that the staff seek commitments from combined license holders to not allow both automatic and manual DAS to be out of service at the same time. Following review of the staff's response to our letter, we continue to make this recommendation for all the reasons enumerated in our letter. Some compensatory actions should be taken, if both automatic and manual DAS are out of service.

While we understand the logic described by the staff, common cause failure of the Protection and Safety Monitoring System is poorly understood, and no credible reliability models or data are available. Therefore, there is substantial unquantified uncertainty in the PRA results used to evaluate the importance of DAS. We consider both automatic and manual DAS as defense-in-depth measures against a poorly understood set of "common cause" failure mechanisms that could disable a reactor trip. To ensure that the defense-in-depth role is fulfilled, unavailability of manual DAS should be minimized, limited to on the order of no more than 72 hours. The current limiting condition for operation on manual DAS of 30 days is too long. This is in addition to requiring compensatory action in the event that both automatic and manual DAS are out of service, as indicated above.

Sincerely,

*/RA/*

Said Abdel-Khalik  
Chairman

References:

1. Letter to Chairman Jaczko, AP1000 DCD Amendment Review, 12/13/2010, (ML103410351)
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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
ADVISORY COMMITTEE ON REACTOR SAFEGUARDS  
WASHINGTON, DC 20555 - 0001

September 19, 2011

The Honorable Gregory B. Jaczko  
Chairman  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

SUBJECT: REVISION 19 TO THE AP1000 DESIGN CONTROL DOCUMENT AND THE  
AP1000 FINAL SAFETY EVALUATION REPORT

Dear Chairman Jaczko:

During the 586<sup>th</sup> meeting of the Advisory Committee on Reactor Safeguards (ACRS), September 8-10, 2011, we reviewed those portions of the NRC staff's Final Safety Evaluation Report (FSER) for the AP1000 Design Control Document (DCD) amendment which were affected by Revision 19 to the DCD. The Westinghouse Electric Company (WEC) submitted Revision 19 on June 13, 2011, and the NRC staff's FSER is dated August 5, 2011. Our Subcommittee on AP1000 also reviewed changes contained in Revision 19 during a meeting on August 16, 2011. During these meetings, we had the benefit of discussions with representatives of the NRC staff, WEC, and members of the public. We also had the benefit of the documents referenced.

We have previously reviewed other changes contained in the DCD amendment, as documented in our letters dated December 13, 2010; December 20, 2010; and January 19, 2011.

#### **CONCLUSION**

The changes proposed in the AP1000 DCD amendment, including those made in Revision 19, maintain the robustness of the previous certified design. We conclude that there is reasonable assurance that the revised design can be built and operated without undue risk to the health and safety of the public.

#### **BACKGROUND**

Most of the changes to the DCD contained in Revision 19 involve editorial corrections and inclusion of conforming items previously identified in the Advanced FSER which was the basis for our prior letters. A few of the Revision 19 changes include new information, and several of these changes are discussed further below.

## **DISCUSSION**

### Enhanced Shield Building (ESB)

There have been no changes to the ESB design since the review documented in our letters of December 13, 2010, and January 19, 2011. However, WEC has performed additional analyses and included Tier 2\* information, as requested by NRC staff.

### Passive Cooling System (PCS) Tank

The ESB rooftop PCS tank wall is identified in the DCD as a critical structural section. The overall behavior of the building is obtained by a response spectrum analysis of a global finite-element model, which is referred to as the NI05 model. Results for the tank wall from this model were reported in Revision 18 to the DCD.

Revision 19 included new results based on an equivalent static analysis of a more detailed finite-element model of the tank and ESB roof. The analysis applied the maximum acceleration from time-history calculations with the hydrodynamic loads due to sloshing of water in the tank applied as a pressure on the tank wall. Because of the symmetry of the tank and roof, a quarter of the structure was modeled.

This new, more detailed, analysis confirmed that the design of the PCS tank is acceptable, and no changes to the design were required. We agree with the NRC staff that the more detailed analysis of this area of the ESB was appropriate and should be included in the DCD.

### ESB Seismic and Thermal Load Combination

Prior to Revision 19, the ESB was analyzed for a number of loads including those due to a safe shutdown earthquake (SSE) and those due to extreme ambient temperatures. At the request of the NRC staff, these loads were combined and the analysis results were included in Revision 19.

The worst-case ambient conditions are represented by a winter condition with an external temperature of  $-40^{\circ}\text{F}$  and an internal temperature of  $70^{\circ}\text{F}$ , and a summer condition with an external temperature of  $115^{\circ}\text{F}$  and an internal temperature of  $70^{\circ}\text{F}$ . The analysis shows that the winter condition is the most limiting due to the larger temperature difference. For this case, the out-of-plane shear capacity of the structure exceeds the out-of-plane shear demand in the regions of the structure with steel composite modules.

The governing demand-to-capacity ratio in the critical region for thermal loading is steel plate yielding, which is a ductile limit state. We agree with the staff's conclusion that the WEC's analysis of the thermal and seismic load combination for the shield building satisfies ACI 349 code provisions and is acceptable.



### Radiative Effects on Thermal Loads

A concern was raised by a member of the public (Ref. 6) that the estimation of thermal loads on the ESB did not include the effects of radiative heating or cooling. WEC performed additional calculations to quantify the impacts of these effects.

An American Society of Heating, Refrigerating and Air-Conditioning Engineers publication includes tables of effective temperatures that provide the same rate of heat transfer into the surface as would the combination of solar gain, radiant energy exchange with the sky and other outdoor surroundings, and convective heat exchange with the outdoor air. These tables were used to estimate the temperature history of the ESB wall.

WEC calculated that the resulting maximum ESB surface temperature, including solar gain, is approximately 129°F. Their stress analysis using this surface temperature showed that the solar gain has no significant effect on the load combination of ambient thermal plus SSE, and there is no significant reduction in the overall design margin. This result is consistent with our expectation that any change would be relatively small, as compared to that due to the winter ambient temperature difference of 110°F. We therefore conclude that this issue can be considered resolved.

### Inclusion of ESB Design Details in the DCD

Revision 19 includes additional Tier 2\* material describing the steel modules that comprise the bulk of the ESB wall and the connection of the modules to both the basemat and the conventional reinforced concrete roof of the auxiliary building.

As we noted in our December 13, 2010, letter, there are no consensus standards governing the steel module construction used in the ESB, although the DCD does commit to use of AISC-N690, ACI-349, and AWS structural and reinforcing steel welding codes as applicable to the modules and their connections. The added Tier 2\* information provides regulatory control over additional details of the module design to address the lack of specific code requirements for some features.

As examples, the added information includes a performance requirement of the tie bar to steel face plate welds, which have no counterpart in AISC-N690, and a weld geometry requirement on the plate-to-plate welds for modules. This information, together with the other Tier 2\* information, including 14 critical structural sections, provide appropriate regulatory control over the design of the ESB.

The staff and WEC have expended substantial efforts in deciding which details need to be included in the DCD, in lieu of reference to codes and standards which presently do not address such details for the design used. We again note, as we did in our December 13, 2010, letter, that it would be preferable to have codes and standards for such structures that have broad consensus concerning such details.

### Containment Accident Pressure Analysis

The calculation of containment accident pressure was updated in Revision 19, increasing the peak pressure to 58.3 psig as compared to 57.8 psig previously. The most significant contributions to the increase resulted from the increase in time assumed to reach steady-state PCS water coverage and from updates of the estimates of the mass and energy release into containment during a loss of coolant accident. The first of these contributions arose from the resolution of an earlier ACRS comment.

Changes were also made in the evaluation model which tended to decrease the peak pressure, the most important of these being the inclusion of certain heat sinks such as floor gratings.

These changes to the containment evaluation model inputs took into account the updated plant design information. The analysis, primarily done using WGOETHIC, including the consideration of heat sinks, was performed using a previously accepted methodology which results in conservatively high containment pressures. Independent calculations performed by NRC staff using MELCOR also confirmed that the WGOETHIC-based results were conservative. The heat sinks added in the Revision 19 calculation update were incorporated as Tier 2\* information.

While the containment peak pressure of 58.3 psig is close to the containment design pressure of 59 psig, we find the re-evaluated containment pressure documented in Revision 19 to be based on a sufficiently conservative methodology and to be acceptable.

### Radiative Effects on Containment Evaluation Model Validation

An additional concern was raised by the member of the public (Ref. 6) regarding the effect of radiative heating due to insolation and radiative cooling on the quality of the data obtained from the Large Scale Tests (LSTs) which were performed outdoors.

The LSTs provided data on condensation in the presence of non-condensable gases inside large containment-like vessels cooled by an evaporating water film flowing down the outside surface. The test vessel itself was surrounded by an acrylic enclosure that formed an annulus through which air was drawn to simulate the natural convection of air between the containment and ESB. While the LSTs were reduced in scale compared to the plant, they were still large enough to assess the validity of the evaluation model correlations, which were developed from much smaller scale tests.

The concern was that solar radiation incident on the evaporating water film, which cools the outside of the LST vessel, would cause a higher evaporation rate than would otherwise result, thus leading to non-conservatively high heat transfer coefficients.

The LST heat fluxes used to estimate the heat transfer coefficients both on the inside and outside of the pressure vessel, and on the outside of the pressure vessel due to the water film, were evaluated in three different ways. The first involved measuring the amount of steam condensed within the pressure vessel, the second involved measuring the heat transfer through the wall using embedded thermocouples, and the third involved performing a heat balance on the water and air cooling the outside of the pressure vessel. If insolation had an effect, the heat balance on the water and air would yield a markedly higher value than the other measures of heat flux.

Examination of the data indicates that the heat fluxes measured by these three independent methods were the same, within the scatter of the data, over the whole range of conditions. Following our assessment and an independent assessment provided by WEC, we conclude that radiative heating or cooling had no effect on the LSTs and the data from the tests are suitable for validating the evaluation model.

We also considered whether insolation on the ESB exterior would affect the removal of accident heat load by the PCS. WEC provided analyses that showed this effect was negligible for two reasons. First, because the ESB has a large thermal mass, the temperature changes on its inside wall resulting from insolation are very small. Second, because the heat removal from the containment is due primarily to evaporative cooling, even significant increases in the air temperature at the ESB inlet to the annulus would have a small effect on the peak containment pressure. Prior parametric analyses by WEC showed that an increase of 10°F in inlet air temperature results in an increase in peak containment pressure of only ~0.05 psi. We therefore conclude that solar heating will not result in an unacceptable increase in peak containment pressure.

#### Reactor Coolant Pump (RCP) Flywheel Retaining Ring Material Testing

In our letter dated December 13, 2010, we recommended that the material selected for an RCP flywheel retaining ring designed for long term service without periodic inservice inspection should be qualified by testing in a reactor coolant environment. WEC responded to this concern by implementing a testing program. We commented on this program in a letter to the EDO dated May 19, 2011, and WEC responded with an updated plan during the August 16, 2011, subcommittee meeting. We concur with the updated WEC test program as described to us.

In summary, we agree with the staff's FSER, including Revision 19 to the DCD. The changes incorporated by Revision 19 maintain the robustness of the previously certified design. We conclude that there is reasonable assurance that the revised design can be built and operated without undue risk to the health and safety of the public.

Sincerely,

*/RA/*

Said Abdel-Khalik  
Chairman

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10. ACRS Letter, Response to the February 5, 2011, EDO Letter Regarding the Final Safety Evaluation Report Associated with the Amendment to the AP1000 Design Control Document, May 19, 2011 (ML11136A214)

<b>NRC FORM 335</b> (12-2010) NRCMD 3.7  <p style="text-align: center;"><b>BIBLIOGRAPHIC DATA SHEET</b>  <i>(See instructions on the reverse)</i></p>	<b>U.S. NUCLEAR REGULATORY COMMISSION</b>  <b>1. REPORT NUMBER</b> (Assigned by NRC, Add Vol., Supp., Rev., and Addendum Numbers, if any.)  <b>NUREG 1793 Supplement 2          Volume 3</b>												
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<b>10. SUPPLEMENTARY NOTES</b>													
<b>11. ABSTRACT</b> <i>(200 words or less)</i>  This report supplements the final safety evaluation report (FSER) for the AP1000 standard plant design. The FSER was issued by the U.S. Nuclear Regulatory Commission (NRC) as NUREG-1793 in September 2004, and NUREG-1793 Supplement 1 in December 2005, to document the NRC staff's technical review of the AP1000 design. The application for the AP1000 design was submitted on June 28, 2002, by Westinghouse Electric Corporation (Westinghouse) in accordance with Subpart B, "Standard Design Certifications," of Title 10 of the Code of Federal Regulations (10 CFR) Part 52, and Appendix O, "Standardization of Design: Staff Review of Standard Designs." This supplement documents the NRC staff's review of Westinghouse's changes to the AP1000 design documentation in the design control document (DCD) since the issuance of Supplement 1 of the FSER. On the basis of the evaluation described in the AP1000 FSER (NUREG-1793, NUREG-1793 Supplement 1) and this report, the NRC staff concludes that the changes to the DCD (up to and including Revision 19 to the AP1000 DCD) are acceptable and that Westinghouse's application for design certification meets the requirements of Subpart B to 10 CFR Part 52 that are applicable and technically relevant to the AP1000 standard plant design.													
<b>12. KEY WORDS/DESCRIPTORS</b> <i>(List words or phrases that will assist researchers in locating the report.)</i>  10 SFR Part 52, 10CFR52, AP1000, Westinghouse, passive, shield building	<table border="1" style="width: 100%;"> <tr> <td><b>13. AVAILABILITY STATEMENT</b></td> <td style="text-align: center;">unlimited</td> </tr> <tr> <td><b>14. SECURITY CLASSIFICATION</b></td> <td style="text-align: center;">unclassified</td> </tr> <tr> <td><i>(This Page)</i></td> <td style="text-align: center;">unclassified</td> </tr> <tr> <td><i>(This Report)</i></td> <td style="text-align: center;">unclassified</td> </tr> <tr> <td><b>15. NUMBER OF PAGES</b></td> <td></td> </tr> <tr> <td><b>16. PRICE</b></td> <td></td> </tr> </table>	<b>13. AVAILABILITY STATEMENT</b>	unlimited	<b>14. SECURITY CLASSIFICATION</b>	unclassified	<i>(This Page)</i>	unclassified	<i>(This Report)</i>	unclassified	<b>15. NUMBER OF PAGES</b>		<b>16. PRICE</b>	
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