

Containment SERs

ADAMS Doc #	Sites	Utility/Org.	GOTHIC Vers.	Date of Approval	Title	Description
ML003685893	Arkansas Nuclear One 1&3	Entergy Nuclear Operations	6.1	17-Feb-00	Response to IR 99-09	Response to IR 99-09 documenting use of a GOTHIC model for evaluation of potential containment cooler boiling.
ML060100325	Beaver Valley 1&2	FirstEnergy Nuclear Operating Co.	6.0/7.0	6-Feb-06	Issuance of Amendments RE: Containment Conversion from Subatmospheric to Atmospheric Operating Conditions	License Amendment documenting use of GOTHIC as an industry standard comparison for containment response during Loss of Coolant Accident (LOCA) and Main Steam Line Breaks (MSLB).
ML020560155	Calvert Cliffs 1&2	Constellation Energy	Not Stated	15-Feb-02	Notification of Use of GOTHIC Computer Code	10 CFR 50.59 Notice documenting use of GOTHIC in analyzing containment pressure and temperature.
ML993230334	McGuire Catawba 1&2	Duke Energy Power Company, LLC	Not Stated	10-Nov-99	Topical Report DPC-NE-3004-PA, Rev. 1 (TAC Nos. MA5511, MA5512, MA5517, and MA5518)	Topical Report for use of GOTHIC for ice condenser based containment pressure and temperature response.
ML003690464	McGuire Catawba 1&3	Duke Energy Power Company, LLC	Not Stated	29-Feb-00	Review of Topical Report DPC-NE-3004-PA, Rev. 1, Regarding Proposed Finer Nodalization of Ice Condenser (TAC Nos. MA5511, MA5512, MA5517, and MA5518)	Review of Topical Report for use of GOTHIC for ice condenser based containment pressure and temperature response.
ML003686666	Columbia Generating Station	Energy Northwest	Not Stated	15-Feb-00	Proposed Secondary Containment/Standby Gas Treatment License Amendment Submittal	License Amendment Submittal discussing change in secondary containment bypass leakage and drawdown time, and the use of GOTHIC models for containment response.
ML022550447	Columbia Generating Station	Energy Northwest	Not Stated	29-Aug-02	License Amendment Request - Alternative Source Term Response to RAI	License Amendment Request referencing previous use of GOTHIC to justify a 40% mixing credit in containment and the applicability for use in AST analyses.
ML081510173	Comanche Peak 1&2	TXU Generating Company	7.2a	27-Jun-08	Issuance of Amendments RE: License Amendment Request 07-004, Revision to Operating License and Technical Specification 1.0, "Use and Application," to Revise Thermal Power From 3458 MWt to 3612 MWt (TAC Nos. MD6615 and MD6616)	Approval of Amendment Request documenting use of GOTHIC containment analysis under Loss of Coolant Accident (LOCA) and Main Steam Line Break (MSLB) conditions.
ML032230339	Davis-Besse	FirstEnergy Nuclear Operating Co.	Not Stated	5-Aug-03	NRC Special Inspection - Containment Integrated Leak Rate Test	NRC Special Inspection Report mentioning the use of GOTHIC for Design Bases (DB) containment response.
ML080390454	Diablo Canyon 1&2	Pacific Gas & Electric Co.	7.2	1-Feb-08	License Amendment Request 08-01, Revision to Technical Specification 5.5.16, "Containment Leakage Rate Testing Program"	License Amendment Request citing the use of GOTHIC for Loss of Coolant Accident (LOCA) containment response analysis to support installation of replacement SGs.
ML033010437	Duane Arnold	NextEra Energy Duane Arnold, LLC	Not Stated	20-Oct-03	Report of Facility Changes, Tests and Experiments, Fire Plan Changes and Commitment Changes	Report of Facility Change documenting use of GOTHIC for High Energy Line Break (HELB) both inside and outside containment and Loss of Coolant Accident (LOCA) as part of the Environmental Qualification (EQ) Program and Extended Power Uprate (EPU).
ML003675775	Farley 1&2	Southern Nuclear Operating Co.	Not Stated	29-Dec-99	Safety Evaluation Related to Amendment Nos. 147 and 138	Safety Evaluation Report discussing the use of GOTHIC for Extended Power Uprate (EPU) analyses, and approving use of GOTHIC for containment pressure and temperature response to Loss of Coolant Accident (LOCA) and Main Steam Line Breaks (MSLB). Short-term subcompartment analyses were also completed with GOTHIC.
ML080660657	Farley 1&2	Southern Nuclear Operating Co.	Not Stated	28-Feb-08	Supplemental Response to GL 2004-02	Supplemental Response documenting use of GOTHIC for design basis containment analysis including containment overpressure.

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ML030360205	Fort Calhoun	Omaha Public Power District (OPPD)	7.0	27-Jan-03	License Amendment Request, "Containment Pressure Analysis using the GOTHIC Computer Code"	License Amendment Request documenting use of GOTHIC for design basis containment analyses such as a Loss of Coolant Accident (LOCA) and Main Steam Line Break (MSLB) for environmental qualification (EQ) purposes as part of the steam generator replacement project.
ML033100290	Fort Calhoun	Omaha Public Power District (OPPD)	7.0	5-Nov-03	Issuance of Amendment	Safety Evaluation and License Amendment for use of GOTHIC to perform containment analyses and to determine the bounding containment temperature profile for environmental equipment qualification.
ML081140390	Fort Calhoun	Omaha Public Power District (OPPD)	7.2a	2-May-08	Issuance of Amendment Re: Modification of Containment Spray Actuation Logic and Dampers in Containment Air Cooling and Filtering System	Issuance of Amendment documenting the use of GOTHIC for containment response to design-basis Main Steam Line Break (MSLB), Loss of Coolant Accident (LOCA) Mass and Energy (M&E), and Equipment Qualification (EQ).
ML051260236	Ginna	Constellation Energy	7.2	29-Apr-05	License Amendment Request Regarding Main Feedwater Isolation Valves	License Amendment Request describing the use of GOTHIC to reanalyze the containment pressure response for Steam Line Breaks (SLBs).
ML061380249	Ginna	Constellation Energy	7.2	11-Jul-06	Safety Evaluation Related to Extended Power Uprate	Safety Evaluation approving the use of GOTHIC in Loss of Coolant Accident (LOCA) and High Energy Line Break (HELB) analyses for calculating pressure and temperature conditions within the containment.
ML020580402	Grand Gulf 1	Entergy Nuclear Operations	6.1	25-Feb-02	License Amendment Request New Special Operations Limiting Condition for Operation Suppression Pool Makeup-Mode 3	License Amendment Request for use of GOTHIC in determining the containment temperature and pressure response as well as hydrodynamic loads during Mode 3 Main Steam Line Breaks (MSLBs) and Loss of Coolant Accidents (LOCAs).
ML022490416	Grand Gulf 1	Entergy Nuclear Operations	6.1	6-Sep-02	Issuance of Amendment Re: Reactor Cavity Pool Draindown	Approval of License Amendment Request to use GOTHIC in determination of the containment temperature and pressure response as well as hydrodynamic loads during Mode 3 Main Steam Line Breaks (MSLBs) and Loss of Coolant Accidents (LOCAs). GOTHIC was also used for calculation of the Mass and Energy (M&E) release during a LOCA.
ML003760486	Kewaunee (Retired)	Dominion Generation	6.0	12-Oct-00	Submittal of Topical Report WPSRSEM-NP "Reload Safety Evaluation Methods for Application to Kewaunee"	Topical Report noting the adoption of GOTHIC for containment analysis in response to Loss of Coolant Accidents (LOCAs) and Main Steam Line Breaks (MSLBs).
ML003770282	Kewaunee (Retired)	Dominion Generation	Not Stated	20-Nov-00	Completion of Follow-Up To Containment Analysis Methodology - Entrainment Assumptions in Updated Final Safety Analysis Report	Follow-Up to Topical Report noting the adoption of GOTHIC for containment analysis in response to Loss of Coolant Accidents (LOCAs) and Main Steam Line Breaks (MSLBs).
ML010230257	Kewaunee (Retired)	Dominion Generation	Not Stated	23-Jan-01	Request for Additional Information Related to Reload Safety Evaluation Methods Topical Report	RAI to Topical Report noting the adoption of GOTHIC for containment analysis in response to Loss of Coolant Accidents (LOCAs) and Main Steam Line Breaks (MSLBs).
ML010320469 (SER)	Kewaunee (Retired)	Dominion Generation	Not Stated	1-Feb-01	Request for Additional Information Related to Reload Safety Evaluation Methods Topical Report	RAI to Topical Report noting the adoption of GOTHIC for containment analysis in response to Loss of Coolant Accidents (LOCAs) and Main Steam Line Breaks (MSLBs).
ML032681050	Kewaunee (Retired)	Dominion Generation	7.0	29-Sep-03	Issuance of Amendment	Approval of Amendment Request for use of GOTHIC in Containment integrity analysis.
ML053180483	Kewaunee (Retired)	Dominion Generation	Not Stated	31-Oct-05	Flooding Significance Determination Process Risk Assessment Report	Report documenting the use of GOTHIC for dynamic flood level analysis and room heatup analysis.
ML053610092	Kewaunee (Retired)	Dominion Generation	Not Stated	1-Dec-05	Safety Significance Evaluation of Kewaunee Power Station Turbine Building Internal Floods, Vol 1	Safety Significance Evaluation documenting the use of GOTHIC for dynamic flood level analysis and room heatup analysis.
ML053610100	Kewaunee (Retired)	Dominion Generation	Not Stated	2-Dec-05	Safety Significance Evaluation of Kewaunee Power Station Turbine Building Internal Floods, Vol 2	Safety Significance Evaluation documenting the use of GOTHIC for dynamic flood level analysis and room heatup analysis.

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ML063190467	Kewaunee (Retired) North Anna 1&2 Surry 1&2 Millstone 2&2	Dominion Generation	7.2dom	6-Nov-06	Approval of Dominion's Topical Report DOM-NAF-3 NP-A, GOTHIC Methodology for Analyzing the Response to Postulated Pipe Ruptures Inside Containment	Approved Topical Report DOM-NAF-3 NP-A: GOTHIC Methodology for Analyzing the Response to Postulated Pipe Ruptures Inside Containment
ML062420511	Kewaunee (Retired) North Anna 1&2 Surry 1&2 Millstone 2&3	Dominion Generation	7.2dom	30-Aug-06	Approval of Dominion's Topical Report DOM-NAF-3, GOTHIC Methodology for Analyzing the Response to Postulated Pipe Ruptures Inside Containment	Safety Evaluation that provides the basis for accepting the Topical Report DOM-NAF-3 NP-A: GOTHIC Methodology for Analyzing the Response to Postulated Pipe Ruptures Inside Containment
ML013270088	McGuire 1&2	Duke Energy Power Company, LLC	Not Stated	25-Nov-97	Issuance of Amendments - TAC No. M99763 and M99764	Safety Evaluation and License Amendment for use of GOTHIC to analyze Large Break Loss of Coolant Accidents (LBLOCAs) in Containment.
ML102920333	Nine Mile Point 2	Constellation Energy	7.2b	8-Oct-10	Supplemental Information Re: License Amendment Request for Extended Power Uprate (TAC No. ME 1476)	Supplemental LAR Information documenting the use of GOTHIC for Loss of Coolant Accident (LOCA) containment analysis.
ML040960040	North Anna 2	Dominion Generation/ Virginia Electric	6.1	1-Apr-04	Issuance of Amendment Re: Use of Framatome ANP Advanced Mark-BW Fuel	Approval of License Amendment comparing GOTHIC as an industry benchmark to ICECON (S-RELAP5) for LOCA phenomena in facilities using dry or ice condenser containments.
ML051740151	Oconee 1, 2, & 3	Duke Energy Power Company, LLC	GOTHIC 7.0/DUKE	24-Sep-03	Issuance of Approved Version of DPC-NE-3005-P Revision 2	Approval of Safety Evaluation Report describing the general use of GOTHIC for reactor building response to High Energy Line Breaks (HELBs) and containment analysis.
ML032670816	Oconee 1, 2, & 3	Duke Energy Power Company, LLC	GOTHIC 7.0/DUKE	24-Sep-03	Safety Evaluation of Revisions to Topical Reports DPC-NE-3000, -3003, and -3005	Safety Evaluation Report describing the general use of GOTHIC for reactor building response to High Energy Line Breaks (HELBs) and containment analysis.
ML050320031	Oconee 1, 2, & 3	Duke Energy Power Company, LLC	GOTHIC 7.0/DUKE	Sep-04	Mass and Energy Release and Containment Response Methodology (DPC-NE-3003-A, Rev. 1)	Report describing the general use of GOTHIC for reactor building response to High Energy Line Breaks (HELBs) and containment analysis.
ML053060340	Palisades	Entergy Nuclear Operations	7.1 (Patch 1)	19-Oct-05	Report of Facility Changes, Tests and Experiments and Summary of Commitment Changes (10 CFR 50.59)	10 CFR 50.59 Summary Report documenting the use of GOTHIC to evaluate containment response to Loss of Coolant Accidents (LOCAs) and Main Steam Line Breaks (MSLBs).
ML11123A168	Palisades	Entergy Nuclear Operations	7.2a	21-Apr-11	Final Safety Analysis Report Update - Revision 29	Update to Final Safety Analysis Report documenting use of GOTHIC for modeling containment air coolers and containment response to a Loss of Coolant Accident (LOCA).
ML060830611	Pilgrim 1	Entergy Nuclear Operations	3.4e	25-Jan-06	Applicant's Environmental Report Operating License Renewal Stage	Environmental Report describing use of GOTHIC for room heatup analyses in HPCI, RCIC, Core Spray, and RHR areas.
ML091250564	Point Beach 1&2	NextEra Energy Point Beach, LLC	7.2a	7-Apr-09	License Amendment Request 261, Extended Power Uprate	License Amendment Request for Extended Power Uprate including use of GOTHIC for compartment response following a Loss of Coolant Accident (LOCA), Main Steam Line Break (MSLB) and High Energy Line Break (HELB) event.
ML052000046	Prairie Island 1&2	Xcel Energy	7.0 and 7.1 (Patch 1)	12-Aug-05	Issuance of Amendments Re: Request for Use of GOTHIC 7 in Containment Response Analyses	Amendment Approval discussing the use of GOTHIC for Loss of Coolant Accident (LOCA) and Main Steam Line Break (MSLB) containment pressure and temperature analysis.

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ML091460809	Prairie Island 1&2	Xcel Energy	7.2a	1-Jul-09	Issuance of Amendments Re: Technical Specifications Changes to Allow Use of Westinghouse 0.422-inch OD 14x14 Vantage+ Fuel	Amendment Approval noting prior approval of GOTHIC for Loss of Coolant Accident (LOCA) and Main Steam Line Break (MSLB) containment pressure and temperature analysis. Amendment adds use of GOTHIC for calculating mass and energy (M&E) release peak pressure and temperatures.
ML130660A420	Quad Cities 1&2	Exelon Generation Co., LLC	Not Stated	28-Feb-13	Overall Integrated Plan for Mitigation Strategies for Beyond-Design-Basis External Events	Overall Integrated Plan (OIP) documenting use of GOTHIC to analyze RCIC and other room heatups under Extended Loss of AC Power (ELAP) and Station Blackout (SBO) conditions.
ML003775096	River Bend 1	Entergy Nuclear Operations	Not Stated	29-Nov-00	Response to RAI on River Bend License Amendment Request to Permit Removal of the Inclined Fuel Transfer System Blind Flange	Response to RAI documenting use of GOTHIC for confirmation of RBS containment response. While GOTHIC is not the containment analysis program of record, the results were used to support the conclusion that the expected leakage value would result in peak pressures in containment below the design value.
ML121070557	River Bend 1	Entergy Nuclear Operations	Not Stated	30-May-12	Issuance of Amendment Re: Technical Specification 3.3.6.1, "Primary Containment and Drywell Isolation Instrumentation"	Amendment Approval accepting Technical Specification changes related to the use of GOTHIC for containment response.
ML13182A008	Robinson 2	Duke Energy Power Company, LLC	8.0	14-Jun-13	Use of GOTHIC Computer Code for Containment Analysis at the H.B. Robinson Steam Electric Plant, Unit No. 2	10 CFR 50.59 Notice documenting use of GOTHIC in analyzing containment pressure and temperature.
ML050140453	Seabrook 1	NextEra Energy Seabrook, LLC	7.0 (Patch 2)	28-Feb-05	Issuance of Amendment RE: 5.2 Percent Power Uprate (TAC No. MC 2364)	Approval of Amendment siting use of GOTHIC for long-term Loss of Coolant Accident (LOCA) and Main Steam Line Break (MSLB) containment response.
ML11291A120	South Texas 1&2	STP Nuclear Operating Co.	Not Stated	10-Oct-11	10CFR50.59 Summary Report	10 CFR 50.59 Summary Report detailing use of GOTHIC for containment pressure and temperature analysis during Main Steam Line Break (MSLB) events.
ML073120506	Surry 1&2	Dominion Generation/ Virginia Electric	Not Stated	15-Nov-07	Issuance of Amendments RE: Alternate Use of GOTHIC Code for Recirculation Spray System - Exigent Circumstances	Amendment approving the use of GOTHIC for Net Positive Suction Head (NPSH) and Loss of Coolant Accident (LOCA) analyses.
ML083170346	Three Mile Island 1	Exelon Generation Co., LLC	Not Stated	10-Nov-08	Response to RAI Related to GL 2004-02, "Potential Impact of Debris Blockage on Emergency Recirculation during Design Basis Accidents at Pressurized-Water Reactors"	Response to RAI describing use of GOTHIC for Low Pressure Injection (LPI) and Building Sump (BS) pump Net Positive Suction Head margin (NPSHm) analyses post-LOCA.
ML083290421	Turkey Point 3&4	Florida Power & Light Co.	Not Stated	10-Nov-08	10 CFR 50.59 Summary Report	Summary Report noting the use of GOTHIC to assess the effects of a loss of RHR event with the reactor vessel upper internals in-place versus removed.
ML011650380	Vermont Yankee	Entergy Nuclear Operations	5.0e	28-Dec-98	Issuance of Amendment to Facility Operating License No. DPR-28	Amendment approving use of GOTHIC to analyze suppression pool heatup following various heat rejection load scenarios (based on DBA-LOCA).
ML060050028	Vermont Yankee	Entergy Nuclear Operations	7.0	2-Mar-06	Safety Evaluation Related to Amendment No. 229	Safety Evaluation and License Amendment for use of GOTHIC for containment conditions after Station Blackout and Appendix R fire events.
ML003760500	Waterford 3	Entergy Nuclear Operations	Not Stated	6-Oct-00	Issuance of License Amendment No. 165, Reduction in Operable Containment Fan Coolers in the Containment Cooling System (TAC No. MA6997)	Amendment approving use of GOTHIC for evaluating containment pressure and temperature response after LOCA and MSLB accidents.

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ML010320373	Waterford 3	Entergy Nuclear Operations	Not Stated	1-Feb-01	Issues Identified by Entergy Operations, Inc. in the Staff Safety Evaluation Issued with License Amendment No. 165, Reduction in Operable Containment Fan Coolers in the Containment Cooling System (TAC No. MA6997)	NRC Approval of use of GOTHIC for containment response to both LOCA and MSLB accidents.
ML051030068	Waterford 3	Entergy Nuclear Operations	7.0	15-Apr-05	Issuance of Amendment RE: Extended Power Uprate	Safety Evaluation and License Amendment for use of GOTHIC to calculate containment response for LOCA and MSLB events, in support of Extended Power Uprate.
ML070800193	Wolf Creek 1	Wolf Creek Nuclear Operating Co.	7.2a	14-Mar-07	Revision to TS 3.3.2, "Engineered Safety Feature Actuation System (ESFAS) Instrumentation," TS 3.7.2, "Main Steam Isolation Valves (MSIVs)," and TS 3.7.3, "Main Feedwater Isolation Valves (MFIVs)"	Technical Specification (TS) Revision discussing the use of GOTHIC for updated containment pressure and temperature analyses during a postulated MSLB.
ML003780723	McGuire Nuclear Station and Catawba Nuclear Station	Duke Energy	4.0/DUKE	18-Dec-00	Mass and Energy Release and Containment Response Methodology	Topical Report documenting the use of GOTHIC to simulate the mass and energy releases (M&E) and containment response to Loss of Coolant Accidents (LOCA) and Main Steam Line Breaks (MSLB) with a non-uniform ice weight distribution in the ice condenser.
ML041980470	PWR Dry Containments	Framatome ANP	7.1	13-Jul-04	Request for Approval of BAW-10252(P), Revision 0, "Analysis of Containment Response to Postulated Pipe Ruptures Using GOTHIC"	A Letter from Framatome ANP requesting approval for the use of GOTHIC to predict the maximum containment pressure and temperature response and mass and energy (M&E) release for a spectrum of High Energy Line Breaks (HELBs).
ML041980475	PWR Dry Containments	Areva/Framatome ANP, Inc	7.1	Jul-04	Analysis of Containment Response to Postulated Pipe Ruptures Using GOTHIC	Report documenting the use of GOTHIC to predict the maximum containment pressure and temperature response and mass and energy (M&E) release for a spectrum of High Energy Line Breaks (HELBs).
ML051400280	Prairie Island 1&2	Nuclear Management Company, LLC	7.1 (Patch 1)	17-May-05	Supplement to License Amendment Request (LAR) Dated September 1, 2004, Request for Use of GOTHIC 7 in Containment Response Analyses (TAC Nos. MC4245 and MC4246)	Request to NRC for the use of GOTHIC 7 to model PINGP containment response for loss of coolant accidents (LOCA) and main steam line break (MSLB) accidents.
ML062430591	--	Westinghouse Electric Company	7.2a	Aug-06	Westinghouse Containment Analysis Methodology	Report discussing the use of GOTHIC for analyzing containment response to Loss of Coolant Accidents (LOCA) and Main Steam Line Breaks (MSLB) for both PWRs and BWRs.
ML072140123	US-APWR	Mitsubishi	7.2a	Jul-07	Large Break LOCA Code Applicability Report for US-APWR	Applicability Report stating use of GOTHIC for APWR containment backpressure analysis during a Loss of Coolant Accident (LOCA).
ML072150282	US-APWR	Mitsubishi	7.2a	Jul-07	LOCA Mass and Energy Release Analysis Code Applicability Report for US-APWR	Applicability Report stating use of GOTHIC for APWR post-reflood mass and energy (M&E) release and containment response using Inter Process Communication (IPC) with WREFLOOD during a Loss of Coolant Accident (LOCA).
ML090230441	--	Westinghouse Electric Company	7.2a	27-Jan-09	Final Safety Evaluation of Topical Report WCAP-16608-P, Rev. 0, "Westinghouse Containment Analysis Methodology"	Final Safety Evaluation from NRC staff approving use of GOTHIC as described in the Westinghouse Containment Analysis Methodology Report.
ML090780493	US EPR	AREVA	Not Stated	24-Mar-11	Chapter 6 of US EPR Safety Evaluation Report	Safety Evaluation Report documenting the use of GOTHIC for containment response analysis during Loss of Coolant Accidents (LOCA) and Main Steam Line Breaks (MSLB).
ML092050277	Turkey Point 3&4	Florida Power & Light Co.	7.2a	25-Jun-09	Alternative Source Term and Conforming Amendment	Amendment detailing the use of GOTHIC for determination of mixing rates for containment sprayed and unsprayed regions.
ML101800220	Turkey Point 3&4	Florida Power & Light Co.	7.2a	24-Jun-10	Attachment to AST Licensing Technical Report, Rev. 2	Attachment to Report detailing the use of GOTHIC for determination of mixing rates for containment sprayed and unsprayed regions.

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ML101800222	Turkey Point 3&4	Florida Power & Light Co.	7.2a	25-Jun-10	Revised Radiological Dose Consequences for Alternative Source Term and Conforming License Amendment Request 196	Amendment referencing calculation which details the use of GOTHIC for determination of mixing rates for containment sprayed and unsprayed regions.
ML110800666	Turkey Point 3&4	Florida Power & Light Co.	Not Stated	23-Jun-11	Issuance of Amendments Regarding Alternative Source Term (TAC Nos. ME1624 and ME 1625)	Approved Amendment referencing calculation which details the use of GOTHIC for determination of mixing rates for containment sprayed and unsprayed regions.
ML11131A133	McGuire 1&2	Duke Energy	Not Stated	12-Sep-11	Issuance of Amendments Regarding Technical Specification Changes to Allow Manual Operation of the Containment Spray System (TAC Nos. ME4051 and ME4052)	Amendment approving use of GOTHIC for containment analysis during Large Break Loss of Coolant Accidents (LBLOCA).
ML120520101	South Texas 3&4	STP Nuclear Operating Co.	7.2b	--	Final Safety Evaluation for WCAP-17065-P, "Westinghouse ABWR Subcompartment Analysis Using GOTHIC"	Safety Evaluation requesting approval for the use of GOTHIC in ABWR containment analysis.
ML14153A495	Fukushima	AREVA	Not Stated	6-Jun-14	Audit Report for the May 8 - June 14, 2013, Audit of AREVA's Fukushima Containment Analysis Using GOTHIC to Support the Safety Review of the US EPR Design Certification	Report describing the use of GOTHIC for containment analysis to support Fukushima event mitigation in response to Station Blackout (SBO) as it pertains to the design certification of the US EPR.
ML050680191	PWR Dry Containments	Framatome ANP	7.0	7-Mar-05	Letter to NRC "Request for Approval of BAW-10252(P), Revision 0, 'Analysis of Containment Response to Postulated Pipe Ruptures Using GOTHIC' "	Letter requesting approval of TR BAW-10252 in which GOTHIC is used for containment response analysis during postulated pipe ruptures.
ML110770177	--	NRC	Not Stated	5-Feb-11	Advisory Committee on Reactor Safeguards Power Upgrades Subcommittee	NRC approval of the use of GOTHIC for containment response analysis during and after a High Energy Line Break (HELB).