EXAMINATION OUTLINE SUBMITTAL WITH NRC COMMENTS

FOR THE CLINTON INITIAL EXAMINATION - JANUARY 2004

AmerGen

An Exelon/British Energy Company

Clinton Power Station
R.R. 3 Box 228
Clinton, IL 61727-9351
Phone: 217 935-8881

U-603625
July 10, 2003

Mr. James E. Dyer
Regional Administrator
U. S. Nuclear Regulatory Commission
801 Warrenville Road
Lisle, Illinois 60532-4351

Clinton Power Station, Unit 1
Facility Operating License No. NPF-62
NRC Docket No. 50-461

Subject: Submittal of Integrated Initial License Training Examination Outline

Enclosed are the examination outlines which Amergen Energy Company (AmerGen), LLC is submitting in support of the Initial License Examination scheduled for the weeks of 1/5/2004 and 1/12/2004 at Clinton Power Station. This submittal includes the Senior Reactor Operator and Reactor Operator Written Examination Outlines, Job Performance Measures Outlines, Integrated Plant Operation Scenario Outlines and Clinton Power Station Suppressed K/As.

These examination outlines have been developed in accordance with NUREG-1021, "Operating Licensing Examination Standards," Draft Revision 9. In accordance with NUREG-1021, Section ES-201, "Initial Operator Licensing Examination Process", please ensure that these materials are withheld from public disclosure until after the examinations are complete.

Should you have any questions related to this information, please contact Mr. Tom Pickley at (217) 937-4135.

Respectfully,

William S. Iliff
Regulatory Assurance Manager
Clinton Power Station

EET/blf

JUL 14 2003

Attachments: (Hand delivered to NRC Region III Chief Examiner)
Examination Security Agreement (Form ES-201-3),
Administrative Topics Outline (Form ES-301-1),
Control Room/In-Plant Systems Outline (Form ES-301-2),
BWR Examination Outline (Form ES-401-1),
Record of Rejected K/As (Form ES-401-4),
Operational Scenarios Outline (Form ES-D-1),
Examination Outline Quality Checklist (Form ES-201-2), and
Transient and Event Checklist (Form ES-301-5).
Outline Methodology for 2004 Clinton Power Station Written NRC Exam
Clinton Power Station Suppressed K/As

cc: R. S. Bement, V-275 (w/o Attachments)
K. J. Polson, T-31A (w/o Attachments)
T. J. Shortell, V-922 (w/o Attachments)
K. A. McCall, V-922 (w/o Attachments)
L. T. Pickley, V-922 (w/o Attachments)

Facility: CLINTON POWER STATION Date of Examination: 1/5/2004

Item	Task Description	Initials a	Initials b*	Initials c#	
1. WRITTEN	a. Verify that the outline(s) fit(s) the appropriate model per ES-401.				
	b. Assess whether the outline was systematically and randomly prepared in accordance with Section D.1 of ES-401 and whether all K/A categories are appropriately sampled.				
	c. Assess whether the outline over-emphasizes any systems, evolutions, or generic topics.				
	d. Assess whether the justifications for deselected or rejected K/A statements are appropriate.				NOTE 1.
2. SIM	a. Using Form ES-301-5, verify that the proposed scenario sets cover the required number of normal evolutions, instrument and component failures, and major transients.				NOTE 2.
	b. Assess whether there are enough scenario sets (and spares) to test the projected number and mix of applicants in accordance with the expected crew composition and rotation schedule without compromising exam integrity; ensure each applicant can be tested using at least one new or significantly modified scenario, that no scenarios are duplicated from the applicants' audit test(s)*, and scenarios will not be repeated ~~over successive~~ on subsequent days.				NOTE 3.
	c. To the extent possible, assess whether the outline(s) conform(s) with the qualitative and quantitative criteria specified on Form ES-301-4 and described in Appendix D.				NOTE 4.
3. W / T	a. Verify that: (1) the outline(s) contain(s) the required number of control room and in-plant tasks, ✓ (2) no more than 30% of the test material is repeated from the last NRC examination, ✓ (3)* no tasks are duplicated from the applicants' audit test(s), and ? (4) no more than 80% of any operating test is taken directly from the licensee's exam banks. ✓				NOTE 5.
	b. Verify that: (1) the tasks are distributed among the safety function groupings as specified in ES-301, ✓ (2) one task is conducted in a low-power or shutdown condition, ✓ (3) ~~40%~~4 - 6 (2 - 3 for SRO-U) of the tasks require the applicant to implement an alternate path ✓ procedure, (4) one in-plant task tests the applicant's response to an emergency or abnormal condition, and ✓ (5) the in-plant walk-through requires the applicant to enter the RCA. ✓				
	c. Verify that the required administrative topics are covered~~, with emphasis on performance-based activities~~.				
	d. Determine if there are enough different outlines to test the projected number and mix of applicants and ensure that no items are duplicated on ~~successive~~ subsequent days.				
4. GENERAL	a. Assess whether plant-specific priorities (including PRA and IPE insights) are covered in the appropriate exam section.				
	b. Assess whether the 10 CFR 55.41/43 and 55.45 sampling is appropriate.				
	c. Ensure that K/A importance ratings (except for plant-specific priorities) are at least 2.5.				
	d. Check for duplication and overlap among exam sections.				
	e. Check the entire exam for balance of coverage.				
	f. Assess whether the exam fits the appropriate job level (RO or SRO).				

	Printed Name / Signature	Date	
a. Author	TOM PICKLER	7/2/03	
b. Facility Reviewer (*)	PK KUAN	7/2/03	
c. NRC Chief Examiner (#)	Hironori Peterson	7/16/03	(See notes attached)
d. NRC Supervisor	RD Lanksbury	7/8/03	

Note: * Not applicable for NRC-developed examinations.
Independent NRC reviewer initial items in Column "c;" chief examiner concurrence required.

EXAMINATION OUTLINE QUALITY CHECKLIST ES-201-2

1. Minor error in attention to details. Identified three K/As which were suppressed in one part of the written examination Tier group, but not in another. In addition, several selected K/As (15) for the SRO only questions does not have specific 10 CFR 55.43 references. Remind licensee that these questions must exam on SRO responsibilities.

2. ES 301-5 shows that there is inadequate number of events for an SRO in the BOP position for scenario NRC 1-2. Although a normal evolution is noted for the BOP position, an SRO is not required to have a normal evolution as an RO. Given that the BOP also doe not have a reactivity for scenario NRC 1-2, an SRO standing only in the position of a BOP will not have sufficient credit of events (i.e., overall 3 C/I malfunction events). The scenario will require additional events.

3. Although approximately 30.4% (7 out of 23) of the total scenario malfunctions (not including reactivity or normal evolutions) are duplicated from the last NRC exam, they are not all assigned to just one scenario. The duplicated events are distributed between three submitted scenarios. It may require adjustments or modifications to lessen the potential of predictability.

4. Added enhancements may be required to include additional events and/or initial conditions for better discriminating value.

5. Excessive duplication (>30%) of Admin JPMs from last NRC exam. It will require modification and/or new JPMs.

Facility: Clinton Power Station Date of Exam: 01/05/04

Tier	Group	RO K/A Category Points												SRO-Only Points				
		K 1	K 2	K 3	K 4	K 5	K 6	A 1	A 2	A 3	A 4	G *	Total	K	A	A 2	G *	Total
1. Emergency & Abnormal Plant Evolutions	1	1	2	3				6	4			4	20	1	0	3	4	8
	2	1	2	1				1	1			1	7	2	0	1	1	4
	Tier Totals	2	4	4				7	5			5	27	3	0	4	5	12
2. Plant Systems	1	2	2	3	3	3	1	1	3	4	2	2	26	0	1	1	2	4
	2	1	0	2	0	3	1	1	0	2	1	1	12	0	0	1	1	2
	Tier Totals	3	2	5	3	6	2	2	3	6	3	3	38	0	1	2	3	6
3. Generic Knowledge and Abilities Categories		1			2			3			4		10	1	2	3	4	7
		4			2			2			2			1	2	1	3	

Note:

1. Ensure that at least two topics from every K/A category are sampled within each tier of the RO Outline (i.e., the "Tier Totals" in each K/A category shall not be less than two). Refer to Section D.1.c for additional guidance regarding SRO sampling.
2. The point total for each group and tier in the proposed outline must match that specified in the table. The final point total for each group and tier may deviate by ± 1 from that specified in the table based on NRC revisions. The final RO exam must total 75 points and the SRO-only exam must total 25 points.
3. Select topics from many systems and evolutions; avoid selecting more than two K/A topics from a given system or evolution unless they relate to plant-specific priorities.
4. Systems/evolutions within each group are identified on the associated outline.
5. The shaded areas are not applicable to the category/tier.
6. The generic (G) K/As in Tiers 1 and 2 shall be selected from Section 2 of the K/A Catalog, but the topics must be relevant to the applicable evolution or system. The SRO K/As must also be linked to 10 CFR 55.43 or an SRO-level learning objective.
7. On the following pages, enter the K/A numbers, a brief description of each topic, the topics' importance ratings (IR) for the applicable license level, and the point totals for each system and category. Enter the group and tier totals for each category in the table above; summarize all the SRO-only knowledge and non-A2 ability categories in the columns labeled "K" and "A". Use duplicate pages for RO and SRO-only exams.
8. For Tier 3, enter the K/A numbers, descriptions, importance ratings, and point totals on Form ES-401-3.
9. Refer to ES-401, Attachment 2, for guidance regarding the elimination of inappropriate K/A statements.

ES-401	BWR Examination Outline							Form ES-401-1	
Emergency and Abnormal Plant Evolutions – Tier 1/ Group 1 RO									
E/APE #/ Name / Safety Function	K 1	K 2	K 3	A 1	A 2	G	K/A Topic(s)	IR	#
295001 Partial or Complete Loss of Forced Core Flow Circulation / 1 & 4						X	2.4.4 Ability to recognize abnormal indications for system operating parameters which are entry-level conditions for emergency and abnormal operating procedures. (CFR 41.10 / 43.2 / 45.6)	4.0	1
295003 Partial or Complete Loss of AC/ 6				X			AA1.04 Ability to operate and/or monitor the following as they apply to PARTIAL OR COMPLETE LOSS OF A.C. POWER: D.C. electrical distribution system (CFR 41.7 / 45.6)	3.6	1
295004 Partial or Total Loss of DC Pwr / 6				X			AA1.02 Ability to operate and/or monitor the following as they apply to PARTIAL OR COMPLETE LOSS OF D.C. POWER: Systems necessary to assure safe plant shutdown (CFR 41.7 / 45.6)	3.8	1
295005 Main Turbine Generator Trip / 3	X						AK1.02 Knowledge of the operational implications of the following concepts as they apply to MAIN TURBINE GENERATOR TRIP: Core thermal limit considerations (CFR 41.8 to 41.10)	3.2	1
295006 SCRAM / 1					X		AA2.03 Ability to determine and/or interpret the following as they apply to SCRAM: Reactor water level (CFR 41.10 / 43.5)	4.0	1
295016 Control Room Abandonment / 7				X			AA1.08 Ability to operate and/or monitor the following as they apply to CONTROL ROOM ABANDONMENT: Reactor pressure (CFR: 41.7 / 45.7)	4.0	1
295018 Partial or Total Loss of CCW / 8		X					AK2.02 Knowledge of the interrelations between PARTIAL OR COMPLETE LOSS OF COMPONENT COOLING WATER and the following: Plant operations (CFR 41.7, 45.8)	3.4	1
295019 Partial or Total Loss of Inst. Air / 8				X			AA1.01 Ability to operate and/or monitor the following as they apply to PARTIAL OR COMPLETE LOSS OF INSTRUMENT AIR: Backup air supply (CFR 41.7 / 45.6)	3.5	1
295021 Loss of Shutdown Cooling / 4			X				AK3.01 Knowledge of the reasons for the following responses as they apply to LOSS OF SHUTDOWN COOLING: Raising reactor water level (CFR 51.5 / 41.6)	3.3	1
295023 Refueling Acc Cooling Mode / 8					X		AA2.01 Ability to determine and/or interpret the following as they apply to REFUELING ACCIDENTS: Area radiation levels (CFR: 41.10 / 43.5 / 45.13)	3.6	1

E/APE #/ Name / Safety Function	K 1	K 2	K 3	A 1	A 2	G	K/A Topic(s)	IR	#
295024 High Drywell Pressure / 5			X				EK3.08 Knowledge of the reasons for the following responses as they apply to HIGH DRYWELL PRESSURE: Containment spray: Plant Specific (CFR: 41.5 / 45.6)	3.7	1
295025 High Reactor Pressure / 3					X		EA2.04 Ability to determine and/or interpret the following as they apply to HIGH REACTOR PRESSURE: Suppression pool level (CFR: 41.10 / 43.5 / 45.13)	3.9	1
295026 Suppression Pool High Water Temp. / 5						X	2.1.27 Knowledge of system purpose and/or function. (CFR: 41.7)	2.8	1
295027 High Containment Temperature / 5						X	2.4.31 Knowledge of annunciators alarms and indications, and use of the response instructions. (CFR: 41.10 / 45.3)	3.3	1
295028 High Drywell Temperature / 5			X				EK3.01 Knowledge of the reasons for the following responses as they apply to HIGH DRYWELL TEMPERATURE: Emergency depressurization (CFR: 41.5 / 45.6)	3.6	1
295030 Low Suppression Pool Wtr Lvl / 5						X	2.4.50 Ability to verify system alarm setpoints and operate controls identified in the alarm response manual. (CFR: 45.3)	3.3	1
295031 Reactor Low Water Level / 2		X					EK2.04 Knowledge of the interrelations between REACTOR LOW WATER LEVEL and the following: Reactor core isolation cooling: Plant-Specific (CFR: 41.7 / 45.8)	4.0	1
295037 SCRAM Condition Present and Power Above APRM Downscale or Unknown / 1				X			EA1.04 Ability to operate and/or monitor the following as they apply to SCRAM CONDITION PRESENT AND REACTOR POWER ABOVE APRM DOWNSCALE OR UNKOWN: SBLC (CFR: 41.7 / 45.6)	4.5	1
295038 High Off-site Release Rate / 9					X		EA2.04 Ability to determine and/or interpret the following as they apply to HIGH OFF-SITE RELEASE RATE: Source of off-site release (CFR: 41.10 / 43.5 / 45.13)	4.1	1
600000 Plant Fire On Site / 8				X			AA1.01 Ability to operate and/or monitor the following as they apply to PLANT FIRE ON SITE: Respirator air pack	3.0	1
K/A Category Totals:	1	2	3	6	4	4	Group Point Total:		20

ES-401 BWR Examination Outline Emergency and Abnormal Plant Evolutions – Tier 1/ Group 2 RO							Form ES-401-1		
E/APE #/ Name / Safety Function	K 1	K 2	K 3	A 1	A 2	G	K/A Topic(s)	IR	#
295002 Loss of Main Condenser Vac / 3									
295007 High Reactor Pressure / 3									
295008 High Reactor Water Level / 2									
295009 Low Reactor Water Level / 2						X	2.4.49 Ability to perform without reference to procedures those actions that require immediate operation of system components and controls. (CFR: 41.10 / 43.2 / 45.6)	4.0	1
295010 High Drywell Pressure / 5					X		AA2.02 Ability to determine and/or interpret the following as they apply to HIGH DRYWELL PRESSURE: Drywell pressure (CFR: 41.10 / 43.5 / 45.13)	3.8	1
295011 High Containment Temperature / 5	X						AK1.01 Knowledge of the operational implications of the following concepts as they apply to HIGH CONTAINMENT TEMPERATURE (MARK III CONTAINMENT ONLY): Containment pressure: Mark-III (CFR: 41.8 to 41.10)	4.0	1
295012 High Drywell Temperature / 5									
295013 High Suppression Pool Temp. / 5		X					AK2.01 Knowledge of the interrelations between HIGH SUPPRESSION POOL TEMPERATURE and the following: Suppression pool cooling (CFR: 41.7 / 45.8)	3.6	1
295014 Inadvertent Reactivity Addition / 1									
295015 Incomplete SCRAM / 1									
295017 High Off-site Release Rate / 9									
295020 Inadvertent Cont. Isolation / 5 & 7									
295022 Loss of CRD Pumps / 1				X			AA1.02 Ability to operate and/or monitor the following as they apply to LOSS OF CRD PUMPS: RPS (CFR: 41.7 / 45.6)	3.6	1
295029 High Suppression Pool Wtr Lvl / 5									
295032 High Secondary Containment Area Temperature / 5									
295033 High Secondary Containment Area Radiation Levels / 9									
295034 Secondary Containment Ventilation High Radiation / 9									
295035 Secondary Containment High Differential / 5									
295036 Secondary Containment High Sump/Area Water Level / 5		X					EK2.01 Knowledge of the interrelations between SECONDARY CONTAINMENT HIGH SUMP/AREA WATER LEVEL and the following: Secondary containment equipment and floor drain system (CFR: 41.7 / 45.8)	3.1	1
500000 High CTMT Hydrogen Conc. / 5			X				EK3.01 Knowledge of the reasons for the following responses as they apply to HIGH PRIMARY CONTAINMENT HYDROGEN CONCENTRATIONS: Initiation of containment atmosphere control system (CFR: 41.5 / 45.6)	2.9	1
K/A Category Totals:	1	2	1	1	1	1	Group Point Total:		7

ES-401	BWR Examination Outline Plant Systems - Tier 2/ Group 1 RO											Form ES-401-1		
System # / Name	K 1	K 2	K 3	K 4	K 5	K 6	A 1	A 2	A 3	A 4	G	K/A Topic(s)	IR	#
203000 RHR/LPCI: Injection Mode	X											K1.18 Knowledge of the physical connections and/or cause- effect relationships between RHR/LPCI: INJECTION MODE and the following: Reactor vessel: Plant-Specific (CFR: 41.2 to 41.9 / 45.7 to 45.8)	3.8	1
203000 RHR/LPCI: Injection Mode			X									K3.04 Knowledge of the effect that a loss or malfunction of the RHR/LPCI: INJECTION MODE will have on following: Adequate core cooling (CFR: 41.7 / 45.4)	4.6	1
205000 Shutdown Cooling							X					A1.09 Ability to predict and/or monitor changes in parameters associated with operating the SHUTDOWN COOLING SYSTEM/MODE controls including: SDC/RHR pump/system discharge pressure (CFR: 41.5 / 45.5)	2.8	1
205000 Shutdown Cooling										X		A4.05 Ability to manually operate and/or monitor in the control room: Minimum flow valves (CFR: 41.7 / 45.5 to 45.8)	3.2	1
206000 HPCI												SUPPRESSED		
207000 Isolation (Emergency) Condenser												SUPPRESSED		
209001 LPCS								X				A2.04 Ability to (a) predict the impacts of the following on the LOW PRESSURE CORE SPRAY SYSTEM; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions or operations: D.C. failures (CFR: 41.5 / 45.6)	2.9	1
209002 HPCS						X						K6.03 Knowledge of the effect that a loss or malfunction of the following will have on the HIGH PRESSURE CORE SPRAY SYSTEM (HPCS): Component cooling water systems: BWR-5, 6 (CFR: 41.7 / 45.7)	2.5	1
211000 SLC		X										K2.02 Knowledge of electrical power supplies to the following: Explosive valves (CFR: 41.7)	3.1	1
212000 RPS	X											K1.10 Knowledge of the physical connections and/or cause- effect relationships between REACTOR PROTECTION SYSTEM and the following: Main turbine (CFR: 41.2 to 41.9 / 45.7 to 45.8)	3.2	1

System # / Name	K 1	K 2	K 3	K 4	K 5	K 6	A 1	A 2	A 3	A 4	G	K/A Topic(s)	IR	#
212000 RPS									X			A3.04 Ability to monitor automatic operations of the REACTOR PROTECTION SYSTEM including: System status lights and alarms (CFR: 41.7 / 45.7)	3.9	1
215003 IRM			X									K3.04 Knowledge of the effect that a loss or malfunction of the INTERMEDIATE RANGE MONITOR (IRM) SYSTEM will have on following: Reactor power indication (CFR: 41.7 / 45.4)	3.6	1
215004 Source Range Monitor									X			A3.04 Ability to monitor automatic operations of the SOURCE RANGE MONITOR (SRM) SYSTEM including: Control rod block status (CFR: 41.7 / 45.7)	3.6	1
215005 APRM / LPRM											X	2.2.22 Knowledge of limiting conditions for operations and safety limits. (CFR: 43.2 / 45.2)	3.4	1
217000 RCIC									X			A3.01 Ability to monitor automatic operations of the REACTOR CORE /SOLATION COOLING SYSTEM (RCIC) including: Valve operation (CFR: 41.7 / 45.7)	3.5	1
218000 ADS					X							K5.01 Knowledge of the operational implications of the following concepts as they apply to AUTOMATIC DEPRESSURIZATION SYSTEM: ADS logic operation (CFR: 41.5 / 45.3)	3.8	1
223002 PCIS/Nuclear Steam Supply Shutoff											X	2.1.30 Ability to locate and operate components, including local controls. (CFR: 41.7 / 45.7)	3.9	1
239002 SRVs								X				A2.03 Ability to (a) predict the impacts of the following on the RELIEF/SAFETY VALVES; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions or operations: Stuck Open SRV (CFR: 41.5 / 45.6)	4.1	1
259002 Reactor Water Level Control				X								K4.03 Knowledge of REACTOR WATER LEVEL CONTROL SYSTEM design feature(s) and/or interlocks which provide for the following: Reactor feedpump runout protection: MDFP (CFR: 41.7)	2.8	1

System # / Name	K 1	K 2	K 3	K 4	K 5	K 6	A 1	A 2	A 3	A 4	G	K/A Topic(s)	IR	#
261000 SGTS			X									K3.02 Knowledge of the effect that a loss or malfunction of the STANDBY GAS TREATMENT SYSTEM will have on following: Off-site release rate (CFR: 41.7 / 45.7)	3.6	1
262001 AC Electrical Distribution					X							K5.02 Knowledge of the operational implications of the following concepts as they apply to A.C. ELECTRICAL DISTRIBUTION: Breaker control (CFR: 41.5 / 45.3)	2.6	1
262002 UPS (AC/DC)										X		A4.01 Ability to manually operate and/or monitor in the control room: Transfer from alternative source to preferred source (CFR: 41.7 / 45.5 to 45.8)	2.8	1
263000 DC Electrical Distribution				X								K4.02 Knowledge of D.C. ELECTRICAL DISTRIBUTION design feature(s) and/or interlocks which provide for the following: Breaker interlocks, permissives, bypasses and cross ties: Plant-Specific (CFR: 41.7)	3.1	1
263000 DC Electrical Distribution								X				A2.01 Ability to (a) predict the impacts of the following on the D.C. ELECTRICAL DISTRIBUTION; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions or operations: Grounds (CFR: 41.5 / 45.6)	2.8	1
264000 EDGs					X							K5.06 Knowledge of the operational implications of the following concepts as they apply to EMERGENCY GENERATORS (DIESEL/JET): Load sequencing (CFR: 41.5 / 45.3)	3.4	1
300000 Instrument Air				X								K4.03 Knowledge of (INSTRUMENT AIR SYSTEM) design feature(s) and or interlocks which provide for the following: Securing of IAS upon loss of cooling water (CFR: 41.7)	2.8	1
300000 Instrument Air		X										K2.01 Knowledge of electrical power supplies to the following: Instrument air compressor (CFR: 41.7)	2.8	1
400000 Component Cooling Water									X			A3.01 Ability to monitor automatic operations of the CCWS including: Setpoints on instrument signal levels for normal operations, warnings, and trips that are applicable to the CCWS (CFR: 41.7 / 45.7)	3.0	1
K/A Category Point Totals:	2	2	3	3	3	1	1	3	4	2	2	Group Point Total:		26

ES-401	BWR Examination Outline Plant Systems - Tier 2/ Group 2 RO											Form ES-401-1		
System # / Name	K 1	K 2	K 3	K 4	K 5	K 6	A 1	A 2	A 3	A 4	G	K/A Topic(s)	IR	#
201001 CRD Hydraulic							X					A1.10 Ability to predict and/or monitor changes in parameters associated with operating the CONTROL ROD DRIVE HYDRAULIC SYSTEM controls including: CRD cooling water flow (CFR: 41.5 / 45.5)	2.8	1
201002 RMCS												Suppressed		
201003 Control Rod and Drive Mechanism														
201004 RSCS												Suppressed		
201005 RCIS														
201006 RWM												Suppressed		
202001 Recirculation														
202002 Recirculation Flow Control														
204000 RWCU														
214000 RPIS	X											K1.06 Knowledge of the physical connections and/or cause- effect relationships between ROD POSITION INFORMATION SYSTEM and the following: RCIS: Plant-Specific (CFR: 41.2 to 41.9 / 45.7 to 45.8)	3.4	1
215001 Traversing In-core Probe														
215002 RBM												Suppressed		
216000 Nuclear Boiler Inst.									X			A3.01 Ability to monitor automatic operations of the NUCLEAR BOILER Instrumentation including: Relationship between meter/recorder readings and actual parameter values: Plant-Specific (CFR: 41.7 / 45.7)	3.4	1
219000 RHR/LPCI: Torus/Pool Cooling Mode														
223001 Primary CTMT and Aux.														
226001 RHR/LPCI: CTMT Spray Mode						X						K6.04 Knowledge of the effect that a loss or malfunction of the following will have on the RHR/LPCI: CONTAINMENT SPRAY SYSTEM MODE: Keep fill system (CFR: 41.7 / 45.7)	2.7	1

System # / Name	K 1	K 2	K 3	K 4	K 5	K 6	A 1	A 2	A 3	A 4	G	K/A Topic(s)	IR	#
230000 RHR/LPCI: Torus/Pool Spray Mode												Suppressed		
233000 Fuel Pool Cooling/Cleanup					X							K5.06 Knowledge of the operational implications of the following concepts as they apply to FUEL POOL COOLING AND CLEAN-UP: Maximum normal heat load (CFR: 41.5 / 45.3)	2.5	1
234000 Fuel Handling Equipment														
239001 Main and Reheat Steam														
239003 MSIV Leakage Control										X		A4.03 Ability to manually operate and/or monitor in the control room: Main steamline pressures BWR-4,5,6 (CFR: 41.7 / 45.5 to 45.8)	3.3	1
241000 Reactor/Turbine Pressure Regulator														
245000 Main Turbine Gen. and Auxiliaries									X			A3.03 Ability to monitor automatic operations of the MAIN TURBINE GENERATOR AND AUXILIARY SYSTEMS including: Generator megawatt output (CFR: 41.7 / 45.7)	2.8	1
256000 Reactor Condensate											X	2.1.32 Ability to explain and apply system limits and precautions. (CFR: 45.2 / 45.6)	3.4	1
259001 Reactor Feedwater														
268000 Radwaste			X									K3.04 Knowledge of the effect that a loss or malfunction of the RADWASTE will have on following: Drain sumps (CFR: 41.7 / 45.4)	2.7	1
271000 Offgas					X							K5.08 Knowledge of the operational implications of the following concepts as they apply to OFFGAS SYSTEM: Charcoal absorption of fission product gases (CFR 41.7 / 45.4)	2.5	1
272000 Radiation Monitoring														
286000 Fire Protection			X									K3.03 Knowledge of the effect that a loss or malfunction of the FIRE PROTECTION SYSTEM will have on following: Plant protection (CFR: 41.7 / 45.4)	3.6	1
288000 Plant Ventilation														
290001 Secondary CTMT														
290003 Control Room HVAC														
290002 Reactor Vessel Internals					X							K5.07 Knowledge of the operational implications of the following concepts as they apply to REACTOR VESSEL INTERNALS: Safety limits (CFR: 41.5 / 45.3)	3.9	1
K/A Category Point Totals:	1	0	2	0	3	1	1	0	2	1	1	Group Point Total:		12

ES-401 BWR Examination Outline Form ES-401-1 Emergency and Abnormal Plant Evolutions – Tier 1/ Group 1 SRO									
E/APE #/ Name / Safety Function	K 1	K 2	K 3	A 1	A 2	G	K/A Topic(s)	IR	#
295001 Partial or Complete Loss of Forced Core Flow Circulation / 1 & 40									
295003 Partial or Complete Loss of AC/ 6						X	2.2.22 Knowledge of limiting conditions for operation and safety limits. (CFR: 43.2 / 45.2)	4.1	1
295004 Partial or Total Loss of DC Pwr / 6									
295005 Main Turbine Generator Trip / 3									
295006 SCRAM / 1						X	2.1.32 Ability to explain and apply system limits and precautions. (CFR: 41.10 / 43.2 / 45.12)	3.8	1
295016 Control Room Abandonment / 7					X		AA2.02 Ability to determine and/or interpret the following as they apply to CONTROL ROOM ABANDONMENT : Reactor Water Level (CFR: 41.10 / 43.5 / 45.13)	4.3	1
295018 Partial or Total Loss of CCW / 8						X	2.4.30 Knowledge of which events related to system operations/status should be reported to outside agencies. (CFR: 43.5 / 45.11)	3.6	1
295019 Partial or Total Loss of Inst. Air / 8					X		AA2.02 Ability to determine and/or interpret the following as they apply to PARTIAL OR COMPLETE LOSS OF INSTRUMENT AIR: Status of safety-related instrument air system loads (see AK2.1-AK2.19) (CFR: 41.10 / 43.5 / 45.13)	3.7	1
295021 Loss of Shutdown Cooling / 4									
295023 Refueling Acc Cooling Mode / 8									
295024 High Drywell Pressure / 5	X						EK1.01 Knowledge of the operational implications of the following concepts as they apply to HIGH DRYWELL PRESSURE: Drywell integrity: Plant-Specific (CFR: 41.8 to 41.10)	4.2	1
295025 High Reactor Pressure / 3					X		EA2.06 Ability to determine and/or interpret the following as they apply to HIGH REACTOR PRESSURE: Reactor Water Level	3.7	3.8
295026 Suppression Pool High Water Temp. / 5						X	2.4.4 Ability to recognize abnormal indications for system operating parameters which are entry-level conditions for emergency and abnormal operating procedures. (CFR: 41.10 / 43.2 / 45.6)	4.3	1

E/APE #/ Name / Safety Function	K 1	K 2	K 3	A 1	A 2	G	K/A Topic(s)	IR	#
295027 High Containment Temperature / 5									
295028 High Drywell Temperature / 5									
295030 Low Suppression Pool Wtr Lvl / 5									
295031 Reactor Low Water Level / 2									
295037 SCRAM Condition Present and Power Above APRM Downscale or Unknown /1									
295038 High Off-site Release Rate / 9									
600000 Plant Fire On Site / 8									
K/A Category Totals:	1	0	0	0	3	4	Group Point Total:		8

ES-401 BWR Examination Outline Form ES-401-1 Emergency and Abnormal Plant Evolutions – Tier 1/ Group 2 SRO									
E/APE #/ Name / Safety Function	K 1	K 2	K 3	A 1	A 2	G	K/A Topic(s)	IR	#
295002 Loss of Main Condenser Vac / 3									
295007 High Reactor Pressure / 3									
295008 High Reactor Water Level / 2									
295009 Low Reactor Water Level / 2					X		AA2.01 Ability to determine and/or interpret the following as they apply to LOW REACTOR WATER LEVEL : Reactor water level (CFR: 41.10 / 43.5 / 45.13)	4.2	1
295010 High Drywell Pressure / 5									
295011 High Containment Temperature / 5						X	2.4.30 Knowledge of which events related to system operations/status should be reported to outside agencies. (CFR: 43.5 / 45.11)	3.6	1
295012 High Drywell Temperature / 5		X					AK2.02 Knowledge of the interrelations between HIGH DRYWELL TEMPERATURE and the following: Drywell cooling (CFR: 41.7 / 45.8)	3.7	1
295013 High Suppression Pool Temp. / 5									
295014 Inadvertent Reactivity Addition / 1									
295015 Incomplete SCRAM / 1									
295017 High Off-site Release Rate / 9									
295020 Inadvertent Cont. Isolation / 5 & 7									
295022 Loss of CRD Pumps / 1	X						AK1.01 Knowledge of the operational implications of the following concepts as they apply to LOSS OF CRD PUMPS: Reactor pressure vs. rod insertion capability (CFR: 41.8 to 41.10)	3.4	1
295029 High Suppression Pool Wtr Lvl / 5									
295032 High Secondary Containment Area Temperature / 5									
295033 High Secondary Containment Area Radiation Levels / 9									
295034 Secondary Containment Ventilation High Radiation / 9									
295035 Secondary Containment High Differential / 5									
295036 Secondary Containment High Sump/Area Water Level / 5									
500000 High CTMT Hydrogen Conc. / 5									
K/A Category Totals:	1	1	0	0	1	1	Group Point Total:		4

ES-401	BWR Examination Outline Plant Systems - Tier 2/ Group 1 SRO											Form ES-401-1		
System # / Name	K 1	K 2	K 3	K 4	K 5	K 6	A 1	A 2	A 3	A 4	G	K/A Topic(s)	IR	#
203000 RHR/LPCI: Injection Mode														
205000 Shutdown Cooling											X	2.1.23 Ability to perform specific system and integrated plant procedures during different modes of plant operation. (CFR: 45.2 / 45.6)	4.0	1
206000 HPCI												Suppressed		
207000 Isolation (Emergency) Condenser												Suppressed		
209001 LPCS														
209002 HPCS														
211000 SLC											X	2.1.12 Ability to apply technical specifications for a system. (CFR: 43.2 / 43.5 / 45.3)	4.0	1
212000 RPS														
215003 IRM														
215004 Source Range Monitor														
215005 APRM / LPRM														
217000 RCIC														
218000 ADS														
223002 PCIS/Nuclear Steam Supply Shutoff														
239002 SRVs														
259002 Reactor Water Level Control														
261000 SGTS														
262001 AC Electrical Distribution														
262002 UPS (AC/DC)														
263000 DC Electrical Distribution														
264000 EDGs							X					A1.01 Ability to predict and/or monitor changes in parameters associated with operating the EMERGENCY GENERATORS (DIESEL/JET) controls including: Lube oil temperature (CFR: 41.5 / 45.5)	3.0	1

System # / Name	K 1	K 2	K 3	K 4	K 5	K 6	A 1	A 2	A 3	A 4	G	K/A Topic(s)	IR	#
300000 Instrument Air								X				A2.01 Ability to (a) predict the impacts of the following on the INSTRUMENT AIR SYSTEM and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal operation: Air Dryer and Filter malfunctions (CFR: 41.5 / 45.6)	2.8	1
400000 Component Cooling Water														
K/A Category Point Totals:	0	0	0	0	0	0	1	1	0	0	2	Group Point Total:		4

ES-401	BWR Examination Outline Plant Systems - Tier 2/ Group 2 SRO											Form ES-401-1		
System # / Name	K 1	K 2	K 3	K 4	K 5	K 6	A 1	A 2	A 3	A 4	G	K/A Topic(s)	IR	#
201001 CRD Hydraulic														
201002 RMCS												Suppressed		
201003 Control Rod and Drive Mechanism														
201004 RSCS												Suppressed		
201005 RCIS														
201006 RWM												Suppressed		
202001 Recirculation														
202002 Recirculation Flow Control											X	2.2.22 Knowledge of limiting conditions for operations and safety limits. (CFR: 43.2 / 45.2)	4.1	1
204000 RWCU														
214000 RPIS														
215001 Traversing In-core Probe														
215002 RBM												Suppressed		
216000 Nuclear Boiler Inst.														
219000 RHR/LPCI: Torus/Pool Cooling Mode														
223001 Primary CTMT and Aux.														
226001 RHR/LPCI: CTMT Spray Mode														
230000 RHR/LPCI: Torus/Pool Spray Mode												Suppressed		
233000 Fuel Pool Cooling/Cleanup														
234000 Fuel Handling Equipment														
239001 Main and Reheat Steam														
239003 MSIV Leakage Control														
241000 Reactor/Turbine Pressure Regulator														
245000 Main Turbine Gen. and Auxiliaries														
256000 Reactor Condensate														
259001 Reactor Feedwater														
268000 Radwaste														
271000 Offgas														
272000 Radiation Monitoring														
286000 Fire Protection														
288000 Plant Ventilation														
290001 Secondary CTMT														
290003 Control Room HVAC														
290002 Reactor Vessel Internals								X				A2.06 Ability to (a) predict the impacts of the following on the REACTOR VESSEL INTERNALS ; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions or operations: Exceeding safety limits (CFR: 41.5 / 45.6)	4.5	1
K/A Category Point Totals:	0	0	0	0	0	0	0	1	0	0	1	Group Point Total:		2

ES-401	Generic Knowledge and Abilities Outline (Tier 3)		Form ES-401-3			
Facility: Clinton Power Station		Date of Exam: 01/05/04				
Category	K/A #	Topic	RO		SRO	
			IR	#	IR	#
1. Conduct of Operations	2.1.17	Ability to make accurate, clear and concise verbal reports. (CFR: 45.12 / 45.13)	3.5	1		
	2.1.18	Ability to make accurate, clear and concise logs, records, status boards, and reports. (CFR: 45.12 / 45.13)	2.9	1		
	2.1.11	Knowledge of less than one hour technical specification action statements for systems. (CFR: 43.2 / 45.13)	3.0	1		
	2.1.30	Ability to locate and operate components, including local controls. (CFR: 41.7 / 45.7)	3.9	1		
	2.1.13	Knowledge of facility requirements for controlling vital / controlled access. (CFR: 41.10 / 43.5 / 45.9 / 45.10)			2.9	1
	Subtotal			4		1
2. Equipment Control	2.2.24	Ability to analyze the affect of maintenance activities on LCO status. (CFR: 43.2 / 45.13)	2.6	1		
	2.2.2	Ability to manipulate the console controls as required to operate the facility between shutdown and designated power levels. (CFR: 45.2)	4.0	1		
	2.2.29	Knowledge of SRO fuel handling responsibilities. (CFR: 43.6 / 45.12)			3.8	1
	2.2.32	Knowledge of the effects of alterations on core configuration. (CFR: 43.6)			3.3	1
	Subtotal			2		2
3. Radiation Control	2.3.1	Knowledge of 10 CFR 20 and related facility radiation control requirements. (CFR: 41.12 / 43.4. 45.9 / 45.10)	2.6	1		
	2.3.10	Ability to perform procedures to reduce excessive levels of radiation and guard against personnel exposure. (CFR: 43.4 / 45.10)	2.9	1		
	2.3.7	Knowledge of the process for preparing a radiation work permit. (CFR: 41.10 / 45.12)			3.3	1
	Subtotal			2		1
4. Emergency Procedures / Plan	2.4.16	Knowledge of EOP implementation hierarchy and coordination with other support procedures. (CFR: 41.10 / 43.5 / 45.13)	3.0	1		
	2.4.14	Knowledge of general guidelines for EOP flowchart use. (CFR: 41.10 / 45.13)	3.0	1		
	2.4.22	Knowledge of the bases for prioritizing safety functions during abnormal/emergency operations. (CFR: 43.5 / 45.12)			4.0	1
	2.4.46	Ability to verify that the alarms are consistent with the plant conditions. (CFR: 43.5 / 45.3 / 45.12)			3.6	1
	2.4.26	Knowledge of facility protection requirements including fire brigade and portable fire fighting equipment usage. (CFR: 43.5 / 45.12)			3.3	1
	Subtotal			2		3
Tier 3 Point Total				10		7

NRC Outline Submittal Copy #1
Outline Methodology for 2004 Clinton Power Station Written NRC Exam

Tier 1 and 2

Tier 1 and Tier 2 items were reviewed to determine those items that could be eliminated from the selection process due to inapplicability to Clinton Power Station (CPS). No Tier 1 items were eliminated from the selection process. Five (5) items in Tier 2 were eliminated from the selection process. Only those items with all their K and A's suppressed were eliminated from the selection process. All items that were eliminated from the selection process are indicated by the notation "suppressed" in their K/A Topic(s) column.

For each individual group, the remaining items in the Tier groups were then sequentially numbered. Tokens were then gathered, one token for each of the sequentially numbered items in that group.

If a group required the same number of points as items remaining in that group (following elimination of inapplicable items) then each item in the group was selected for sampling.

If the required number of points in a group was greater than the items remaining in the group (following elimination of inapplicable items) then all items were automatically selected once and then tokens were randomly selected to determine the topics to be sampled twice.

If the required number of points in the group was less than the number of items remaining in the group (following elimination of inapplicable items) then tokens were randomly selected until the required number of items were selected for sampling.

After selection of the items for sampling in each of the Tier 1 and Tier 2 groups, a determination of the K/A category was made for each item using the following method: Tokens were gathered to represent each of the K/A categories (K1, K2, K3, A1, A2 and G for Tier 1 and K1 through K6, A1 through A4 and G for Tier 2). For each of the items selected for sampling, a token was randomly selected to determine the K/A category to sample. (Note: If a K/A category for an item selected for sampling did not include any statements with importance equal or greater than 2.5 for the applicable license level, the token representing that K/A category was not included for random selection).

After selection of the K/A category, tokens were gathered to represent each of the unsuppressed statements in that category with an importance of 2.5 or greater for the applicable license level. A token was then randomly selected to determine the specific K/A to sample.

For those items in Tier 1 and Tier 2 whose K/A category was determined to be G, sixteen (16) tokens were gathered into a set, each token representing one of the following general K/As: 2.1.2, 2.1.14, 2.1.23, 2.1.27, 2.1.28, 2.1.30, 2.1.32, 2.1.33, 2.2.22, 2.2.25, 2.4.4, 2.4.6, 2.4.30, 2.4.31, 2.4.49, and 2.4.50. For each of the G category items in Tier 1 and

Tier 2, one of the sixteen tokens was randomly selected to determine which general K/A to sample.

Tier 3

Four tokens were gathered into a set, each token representing one of the four groups of Tier 3. For the RO portion of the outline one of the four tokens was randomly drawn from the set of tokens. Each time a token was drawn from the set, one sampling of that area was designated and then the token replaced in the set. This process continued until the number of items selected for sampling in Tier 3 was equal to ten (10).

The specific K/A was then selected by gathering tokens representing all unsuppressed K/As with an importance rating in the RO license level of 2.5 or greater in the respective area. A token was then selected to determine the K/A for sampling. This process was used for all four groups in Tier 3.

The process in the above two (2) paragraphs was utilized for the SRO position except that the tokens gathered represented K/As with an importance rating of 2.5 or greater for the SRO license level and only seven (7) total points were required.

Results were recorded on the ES-401-1 cover sheet to verify that two topics from every category were sampled as required in the RO license level. Tier 2 category K2 was sampled only one time. Further review showed that K/A category K5 was sampled seven (7) times. Since K5 was over sampled compared to the other catedgories it was selected to have one of its items moved to the K2 category.

Equalization of Sampling of RO K/As

In order to provide a minimum sampling of two items in the K2 area, one K5 item was deselected for sampling and changed to a K2 item using the following method. Seven (7) tokens were gathered into a set representing each of the K5 category items sampled in Tier 2. One token was randomly selected and the item was then changed to a K2 item. 300000K5.13 was randomly deselected and replaced with 300000K2.01 (K2.01 being the only unsuppressed K2 item for 300000). Since this change followed the initial random sampling, this change was recorded on Form ES-401-4.

Selection of Replacement K/As in the SRO Outline in Tier 1 and Tier 2

Several SRO K/As were deselected from sampling due to limited applicability to 10 CFR 55.43 and no specific SRO-only objective. All K/As deselected were recorded on Form Form ES-401-4. The K/As were replaced by first randomly selecting the K/A category (Note: When an SRO-only K/A was rejected for the above reason only K/A categories A2 and G were considered for replacement of the K/A. This was done to ensure the SRO exam outline was weighted sufficiently in the G and A2 category per D.1.c of ES-401). If category A2 was selected, tokens were gathered to represent each of the unsuppressed

K/As in that category with an SRO importance of 2.5 or greater. A token was then randomly selected to replace the deselected K/A. If category G was selected, then sixteen (16) tokens were gathered into a set, each token representing one of the following general K/As: 2.1.2, 2.1.14, 2.1.23, 2.1.27, 2.1.28, 2.1.30, 2.1.32, 2.1.33, 2.2.22, 2.2.25, 2.4.4, 2.4.6, 2.4.30, 2.4.31, 2.4.49, and 2.4.50. One of the sixteen tokens was then randomly selected to determine the replacement K/A to sample.

Selection of Replacement K/As in the SRO Outline in Tier 3

One SRO K/A was deselected from sampling in Tier 3 due to limited applicability to 10 CFR 55.43 and no specific SRO-only objective. The replacement K/A was selected from the remaining K/As by gathering tokens to represent the K/As in that General category. The replacement token was then randomly selected to replace the deselected K/A.

Clinton Power Station Suppressed KAs

System #	System / Evolution Name	
KA #	**KA Statement**	**Basis For Suppression**
201001	**Control Rod Drive Hydraulic System**	
A1.04	Head spray flow: BWR-3	Clinton is a BWR 6 and does not have this configuration
K1.04	Head spray: BWR-3	Clinton is a BWR 6 and does not have this configuration
K1.05	Feedwater (or reactor water cleanup)-CRD return to vessel: Plant-Specific	CRD does not return to the vessel through Feedwater or Reactor Water Cleanup.
K3.04	Head spray: BWR-3	Clinton is a BWR 6 and does not have this configuration
201002	**Reactor Manual Control System**	
A1.01	CRD drive water flow	Clinton is a BWR 6 and does not utilize this system.
A1.02	Control rod position	Clinton is a BWR 6 and does not utilize this system.
A1.03	Rod movement sequence lights	Clinton is a BWR 6 and does not utilize this system.
A1.04	Overall reactor power	Clinton is a BWR 6 and does not utilize this system.
A1.05	Local reactor power	Clinton is a BWR 6 and does not utilize this system.
A2.01	Rod movement sequence timer malfunctions	Clinton is a BWR 6 and does not utilize this system.
A2.02	Rod drift alarm	Clinton is a BWR 6 and does not utilize this system.
A2.03	Select block	Clinton is a BWR 6 and does not utilize this system.
A2.04	Control rod block	Clinton is a BWR 6 and does not utilize this system.
A3.01	Control rod block actuation	Clinton is a BWR 6 and does not utilize this system.
A3.02	Rod movement sequence lights	Clinton is a BWR 6 and does not utilize this system.
A3.03	Rod drift alarm	Clinton is a BWR 6 and does not utilize this system.
A3.04	Rod movement sequence timer malfunction alarm: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
A4.01	Rod movement control switch	Clinton is a BWR 6 and does not utilize this system.
A4.02	Emergency in/notch override switch	Clinton is a BWR 6 and does not utilize this system.
A4.03	Rod drift test switch	Clinton is a BWR 6 and does not utilize this system.
A4.04	Timer malfunction test switch: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
A4.05	Rod select matrix	Clinton is a BWR 6 and does not utilize this system.
A4.06	Rod select matrix power switch	Clinton is a BWR 6 and does not utilize this system.
K1.01	Control rod drive hydraulic system	Clinton is a BWR 6 and does not utilize this system.
K1.02	Control rod and drive mechanism	Clinton is a BWR 6 and does not utilize this system.
K1.03	Control rod block interlocks/power operation refueling	Clinton is a BWR 6 and does not utilize this system.
K1.04	Rod block monitor: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K1.05	Rod worth minimizer: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K1.06	Rod sequence control system: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K1.07	Process computer: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.

System #	*System / Evolution Name*	
KA #	***KA Statement***	***Basis For Suppression***
K1.08	Refueling interlocks: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K2.01	Select matrix	Clinton is a BWR 6 and does not utilize this system.
K2.02	CRD HCU directional control valves	Clinton is a BWR 6 and does not utilize this system.
K3.01	Ability to move control rods	Clinton is a BWR 6 and does not utilize this system.
K3.02	Rod block monitor: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K3.03	Ability to process rod block signals	Clinton is a BWR 6 and does not utilize this system.
K4.01	Detection of sequence timer malfunction	Clinton is a BWR 6 and does not utilize this system.
K4.02	Control rod blocks	Clinton is a BWR 6 and does not utilize this system.
K4.03	Detection of drifting control rods	Clinton is a BWR 6 and does not utilize this system.
K4.04	Single notch rod withdrawal and insertion	Clinton is a BWR 6 and does not utilize this system.
K4.05	Notch override rod withdrawal	Clinton is a BWR 6 and does not utilize this system.
K4.06	Emergency In rod insertion	Clinton is a BWR 6 and does not utilize this system.
K4.07	Timing of rod insert and withdrawal cycles (rod movement sequence timer)	Clinton is a BWR 6 and does not utilize this system.
K4.08	Continuous In rod insertion	Clinton is a BWR 6 and does not utilize this system.
K6.01	Select matrix power	Clinton is a BWR 6 and does not utilize this system.

201004 Rod Sequence Control System (Plant Specific)

A1.01	Reactor manual control system: BWR-4, 5	Clinton is a BWR-6 and does not utilize this system.
A2.01	Loss of rod position information: BWR-4, 5	Clinton is a BWR-6 and does not utilize this system.
A2.02	Attempting to move a stuck control rod: BWR-4, 5	Clinton is a BWR-6 and does not utilize this system.
A2.03	Turbine trip: BWR-4, 5	Clinton is a BWR-6 and does not utilize this system.
A3.01	Rod select switch light: BWR-4, 5	Clinton is a BWR-6 and does not utilize this system.
A3.02	Rod select bottom lamp dimmer logic: BWR-4, 5	Clinton is a BWR-6 and does not utilize this system.
A3.03	Back panel indicators: BWR-4, 5	Clinton is a BWR-6 and does not utilize this system.
A3.04	Annunciator and alarm signals: BWR-4, 5	Clinton is a BWR-6 and does not utilize this system.
A3.05	Verification of proper function/ operability: BWR-4, 5	Clinton is a BWR-6 and does not utilize this system.
A4.01	System bypass switches: BWR-4, 5	Clinton is a BWR-6 and does not utilize this system.
A4.02	RSCS console switches and indicators: BWR-4, 5	Clinton is a BWR-6 and does not utilize this system.
A4.03	RSCS back panel switches and indicators: BWR-4, 5	Clinton is a BWR-6 and does not utilize this system.
K1.01	Reactor manual control system: BWR-4, 5	Clinton is a BWR-6 and does not utilize this system.
K1.02	Turbine generator system: BWR-4, 5	Clinton is a BWR-6 and does not utilize this system.
K1.03	Rod position information system: BWR-4, 5	Clinton is a BWR-6 and does not utilize this system.
K1.04	Rod worth minimizer: BWR-4, 5	Clinton is a BWR-6 and does not utilize this system.
K3.01	Reactor manual control: BWR-4, 5	Clinton is a BWR-6 and does not utilize this system.
K4.01	Select blocks: BWR-4, 5	Clinton is a BWR-6 and does not utilize this system.
K4.02	Insert rod blocks: BWR-4, 5	Clinton is a BWR-6 and does not utilize this system.
K4.03	Withdraw rod blocks: BWR-4, 5	Clinton is a BWR-6 and does not utilize this system.
K4.04	RSCS bypass as reactor power increases: BWR-4, 5	Clinton is a BWR-6 and does not utilize this system.

System #	*System / Evolution Name*	
KA #	***KA Statement***	***Basis For Suppression***
K4.05	Rod movement, direction, and selection information: BWR-4, 5	Clinton is a BWR-6 and does not utilize this system.
K4.06	Group notch control: BWR-4, 5	Clinton is a BWR-6 and does not utilize this system.
K4.07	Minimizing rod worth: BWR-4, 5	Clinton is a BWR-6 and does not utilize this system.
K5.01	Prevention of clad damage if a control rod drop accident (CRDA) occurs: BWR-4, 5	Clinton is a BWR-6 and does not utilize this system.
K5.02	Sequences and groups: BWR-4, 5	Clinton is a BWR-6 and does not utilize this system.
K5.03	Group notch control limits and rod density: BWR-4, 5	Clinton is a BWR-6 and does not utilize this system.
K6.01	Rod position information: BWR-4, 5	Clinton is a BWR-6 and does not utilize this system.
K6.02	Rod direction information: BWR-4, 5	Clinton is a BWR-6 and does not utilize this system.
K6.03	Rod movement information: BWR-4, 5	Clinton is a BWR-6 and does not utilize this system.
K6.04	Turbine generator (1st stage shell pressure): BWR-4, 5	Clinton is a BWR-6 and does not utilize this system.
201006	***Rod Worth Minimizer System (RWM) (Plant Specific)***	
A1.01	Rod position: P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.
A1.02	Status of control rod movement blocks; P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.
A1.03	Latched group indication: P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.
A2.01	Power supply loss: P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.
A2.02	Loss of steam flow input: P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.
A2.03	Rod drift: P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.
A2.04	Stuck rod: P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.
A2.05	Out of sequence rod movement; P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.
A2.06	Loss of reactor water level control input: P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.
A2.07	RWM hardware/software failure: P-Spec(Not-BWR6)	Clinton is a BWR-6 and does not utilize this system.
A3.01	System window and light indication: P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.
A3.02	Verification of proper functioning/ operability: P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.
A3.03	Annunciator and alarm signals: P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.
A3.04	Control rod movement blocks: P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.
A3.05	Latched group indication: P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.
A4.01	System bypass switch: P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.
A4.02	Pushbutton indicating switches: P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.
A4.03	Latched group indication: P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.
A4.04	Rod withdrawal error indication: P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.
A4.05	Rod insert error indication: P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.
A4.06	Selected rod position indication: P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.
K1.01	Reactor manual control: P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.
K1.02	Rod position indication system: P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.
K1.03	Reactor water level control (feed flow): P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.

KA #	*KA Statement*	*Basis For Suppression*
K1.04	Steam flow/reactor power: P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.
K1.05	Control rod drop accident: P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.
K1.06	Rod sequence control system: P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.
K1.07	Process computer: P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.
K1.08	Reactor power (turbine first stage pressure): P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.
K2.01	Rod worth minimizer: P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.
K3.01	Reactor manual control system: P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.
K4.01	Insert blocks/errors: P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.
K4.02	Withdraw blocks/errors: P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.
K4.03	Select blocks/errors: P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.
K4.04	System bypass: P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.
K4.05	Substitute rod position data: P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.
K4.06	Correction of out of sequence rod positions: P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.
K4.07	Display of out of position control rods without rod blocks (transition zone): P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.
K4.08	System testing: P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.
K4.09	System initialization: P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.
K5.01	Minimize clad damage if a control rod drop accident (CRDA) occurs: P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.
K5.02	Low power set point: P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.
K5.03	Low power alarm point (LPAP): P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.
K5.04	Transition zone: P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.
K5.05	High power set point: P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.
K5.06	Rod groups and steps: P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.
K5.07	Latch groups: P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.
K5.08	Operating sequence: P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.
K5.09	Select error: P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.
K5.10	Withdraw error: P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.
K5.11	Insert error: P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.
K5.12	Withdraw block: P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.
K5.13	Insert block: P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.
K5.14	Alternate withdraw and insert limits: P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.
K6.01	RWM power supply: P-Spec(Not-BWR6)	Clinton is a BWR-6 and does not utilize this system.
K6.02	Reactor water level control input: P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.
K6.03	Rod position indication: P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.
K6.04	Process computer: P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.
K6.05	Steam flow input: P-Spec(Not-BWR6)	Clinton is a BWR 6 and does not utilize this system.

System #	System / Evolution Name	
KA #	**KA Statement**	**Basis For Suppression**
202001	**Recirculation System**	
A2.09	Recirculation scoop tube lockup: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
A2.23	Suppression pool level: BWR-2, 3, 4	Clinton is a BWR 6
K1.14	Rod block monitor: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K1.24	Isolation condenser: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K2.05	MG set oil pumps: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K3.02	Load following capabilities: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K3.12	Isolation condenser: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K4.08	Oil pump automatic starts: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
202002	**Recirculation Flow Control System**	
A2.05	Scoop tube lockup: BWR-2, 3, 4	Clinton is a BWR 6 and does not utilize this system.
A3.03	Scoop tube operation: BWR-2, 3, 4	Clinton is a BWR 6 and does not utilize this system.
A4.06	Scoop tube power: BWR-2, 3, 4	Clinton is a BWR 6 and does not utilize this system.
K4.01	Scoop tube break: Plant-Specific	Clinton is a BWR 6 and does utilize this system.
K4.04	Automatic load following: Plant-Specific	Clinton does not utilize this function.
K4.08	Automatic flow control valve positioning: BWR-5, 6	Clinton does not utilize this function.
K5.01	Fluid coupling: BWR-3, 4	Clinton is a BWR 6 and does not utilize this configuration.
203000	**RHR/LPCI: Injection Mode (Plant Specific)**	
A2.15	Loop selection logic failure: Plant-Specific	Clinton is a BWR 6 and does not utilize this configuration.
A3.07	Loop selection: Plant-Specific	Clinton is a BWR 6 and does not utilize this configuration.
A4.12	Condensate storage tank level: Plant-Specific	Clinton is a BWR 6 and does not utilize this function.
A4.14	Testable check valves	Clinton is a BWR 6 and does not utilize this configuration.
K1.05	Recirculation system: BWR-3, 4	Clinton is a BWR 6 and does not utilize this configuration.
K4.11	Loop selection logic: Plant-Specific	Clinton is a BWR 6 and does not utilize this configuration.
K5.01	Testable check valve operation	Clinton is a BWR 6 and does not utilize this configuration.
204000	**Reactor Water Cleanup System**	
A2.02	Pressure control valve failure: LP-RWCU	Clinton utilizes a HP RWCU system.
A3.01	System pressure downstream of the pressure regulating valve: LP-RWCU	Clinton utilizes a HP RWCU system.
K4.08	Reducing reactor pressure upstream of low pressure piping: LP-RWCU	Clinton utilizes a HP RWCU system.
205000	**Shutdown Cooling System (RHR Shutdown Cooling Mode)**	
A2.11	Recirculation pump trips: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.

System #	*System / Evolution Name*	
KA #	***KA Statement***	***Basis For Suppression***
K1.09	Auxiliary steam supply: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K1.11	Nitrogen: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K1.12	Isolation condenser: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K6.07	Nitrogen: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
206000	***High Pressure Coolant Injection System***	
A1.01	Reactor water level: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
A1.02	Reactor pressure: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
A1.03	Condensate storage tank level: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
A1.04	Suppression pool level: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
A1.05	Suppression pool temperature: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
A1.06	System flow: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
A1.07	System discharge pressure: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
A1.08	System lineup: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
A1.09	Turbine speed: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
A2.01	Turbine trips: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
A2.02	Valve closures: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
A2.03	Valve openings: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
A2.04	A.C. failures: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
A2.05	D.C. failures: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
A2.06	Inadequate system flow: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
A2.07	Low suppression pool level: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
A2.08	High suppression pool temperature: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
A2.09	Low condensate storage tank level: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
A2.10	System isolation: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
A2.11	Low reactor water level: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
A2.12	Loss of room cooling: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
A2.13	Loss of applicable plant air systems: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
A2.14	Flow controller failure: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
A2.15	Loss of control oil pressure: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
A2.16	High drywell pressure: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
A2.17	HPCI inadvertent initiation: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
A3.01	Turbine speed: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
A3.02	System Flow: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
A3.03	System lineup: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
A3.04	Reactor pressure: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
A3.05	Reactor water level: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
A3.06	System discharge pressure: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
A3.07	Lights and alarms: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.

KA #	*KA Statement*	*Basis For Suppression*
A3.08	Condensate storage tank level: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
A3.09	Response to system isolation: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
A4.01	Turbine speed controls: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
A4.02	Flow controller: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
A4.03	Turbine temperatures: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
A4.04	Major system valves: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
A4.05	Reactor water level: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
A4.06	Reactor pressure: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
A4.07	Condensate storage tank level: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
A4.08	Suppression pool temperature: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
A4.09	Suppression pool level: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
A4.10	System pumps: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
A4.11	Turning gear: BWR-2, 3, 4(P-Spec)	Clinton is a BWR-6 and does not utilize this system.
A4.12	Turbine trip controls: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
A4.13	Turbine reset control: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
A4.14	System auto start control: BWR-2, 3, 4(P-Spec)	Clinton is a BWR-6 and does not utilize this system.
K1.01	Reactor vessel: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
K1.02	Reactor water level: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
K1.03	Reactor pressure: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
K1.04	Reactor feedwater system: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
K1.05	Condensate storage system: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
K1.06	Suppression chamber: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
K1.07	D.C. power: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
K1.08	A.C. power: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
K1.09	ECCS keep fill system: BWR-2, 3, 4(P-Spec)	Clinton is a BWR-6 and does not utilize this system.
K1.10	Condensate storage and transfer system: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
K1.11	PCIS: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
K1.12	Nuclear boiler instrumentation: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
K1.13	Main condenser: BWR-2, 3, 4(P-Spec)	Clinton is a BWR-6 and does not utilize this system.
K1.14	SBGT: BWR-2, 3, 4(P-Spec)	Clinton is a BWR-6 and does not utilize this system.
K1.15	Plant air systems: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
K1.16	Containment/Torus pressure: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
K2.01	System valves: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
K2.02	System pumps: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
K2.03	Initiation logic: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
K2.04	Turbine control circuits: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
K3.01	Reactor water level control: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
K3.02	Reactor pressure control: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.

KA #	*KA Statement*	*Basis For Suppression*
K3.03	Suppression pool level control: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
K4.01	Turbine trips: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
K4.02	System isolation: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
K4.03	Resetting turbine trips: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
K4.04	Resetting system isolations: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
K4.05	Preventing water hammer in turbine exhaust line (procedural control): BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
K4.06	Preventing water hammer in pump discharge line (procedural control): BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
K4.07	Automatic system initiation: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
K4.08	Manual system initiation: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
K4.09	Automatic flow control: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
K4.10	Surveillance for all operable components: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
K4.11	Turbine speed control: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
K4.12	Condensation of shaft sealing steam: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
K4.13	Turbine and pump lubrication: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
K4.14	Control oil to turbine speed controls: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
K4.15	Low speed turning of the turbine rotor: BWR-2, 3, 4(P-Spec)	Clinton is a BWR-6 and does not utilize this system.
K4.16	Minimizing fission product concentration in the condensate storage tank (valve closures on system initiation): BWR-2, 3, 4(P-Spec)	Clinton is a BWR-6 and does not utilize this system.
K4.17	Protection against draining the condensate storage tank to the suppression pool: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
K4.18	Pump minimum flow: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
K4.19	Automatic transfer of HPCI pump suction: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
K5.01	Turbine operation: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
K5.02	Turbine shaft sealing: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
K5.03	GEMAC controllers: BWR-2, 3, 4(P-Spec)	Clinton is a BWR-6 and does not utilize this system.
K5.04	Indications of pump cavitation: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
K5.05	Turbine speed control: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
K5.06	Turbine speed measurement: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
K5.07	System venting: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
K5.08	Vacuum breaker operation: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
K5.09	Testable check valve operation: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
K5.10	Assist core cooling: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
K6.01	Plant air systems: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
K6.02	D.C. power: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
K6.03	A.C. power: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
K6.04	Condensate storage tank level: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
K6.05	Suppression pool level: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
K6.06	SBGTS: BWR-2, 3, 4(P-Spec)	Clinton is a BWR-6 and does not utilize this system.

System #	System / Evolution Name	
KA #	**KA Statement**	**Basis For Suppression**
K6.07	ECCS keep fill system: BWR-2, 3, 4(P-Spec)	Clinton is a BWR-6 and does not utilize this system.
K6.08	Reactor pressure: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
K6.09	Condensate storage and transfer system: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
K6.10	PCIS: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
K6.11	Nuclear boiler instrumentation: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
K6.12	Reactor water level: BWR-2, 3, 4	Clinton is a BWR-6 and does not utilize this system.
207000	**Isolation (Emergency) Condenser**	
A1.01	Isolation condenser level: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
A1.02	Shell side water temperature: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
A1.03	Steam flow: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
A1.04	Condensate flow: BWR-2, 3(P-Spec)	Clinton is a BWR-6 and does not utilize this system.
A1.05	Reactor pressure: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
A1.06	Reactor water level: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
A1.07	Vent radiation level: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
A1.08	Cooldown rate: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
A1.09	Valve operations: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
A1.10	Primary side temperature: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
A2.01	Tube bundle leak: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
A2.02	High vent radiation: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
A2.03	PCIS signal resulting in system isolation: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
A2.04	Inadequate system flow: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
A2.05	Insufficient shell side makeup flow: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
A2.06	Valve openings: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
A2.07	Valve closures: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
A2.08	System initiation: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
A3.01	Isolation condenser level: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
A3.02	Reactor pressure: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
A3.03	Reactor water level: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
A3.04	Vent radiation levels: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
A3.05	System lineup: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
A3.06	Lights and alarms: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
A3.07	Primary and shell side temperatures: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
A3.08	System flow: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
A4.01	Isolation condenser level: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
A4.02	Steam line pressure: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
A4.03	Primary and shell side temperatures: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
A4.04	Vent line radiation levels: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
A4.05	Major system valves: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.

KA #	*KA Statement*	*Basis For Suppression*
A4.06	Shell side makeup valves: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
A4.07	Manually initiate the isolation condenser: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
K1.01	Reactor vessel: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
K1.02	Reactor pressure: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
K1.03	Reactor water level: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
K1.04	Condensate transfer system: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
K1.05	Demineralized water system: BWR-2, 3(P-Spec)	Clinton is a BWR-6 and does not utilize this system.
K1.06	Fire protection/service water: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
K1.07	LPCI: BWR-2, 3(P-Spec)	Clinton is a BWR-6 and does not utilize this system.
K1.08	Recirculation system: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
K1.09	Main steam system: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
K1.10	Plant air systems: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
K1.11	Primary containment isolation system: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
K2.01	Motor operated valves: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
K2.02	Initiation logic: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
K3.01	Reactor pressure control during conditions in which the reactor vessel is isolated: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
K3.02	Reactor water level (EPG's address the isolation condenser as a water source): BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
K4.01	Isolation of the system in the event of a line break: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
K4.02	Automatic initiation: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
K4.03	Filling of the system: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
K4.04	Steam and condensate flow indication: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
K4.05	Detection of a tube bundle leak: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
K4.06	Throttling of system flow: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
K4.07	Manual operation of the system: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
K4.08	Protection against incomplete steam condensation (condensate outlet valve does not fully open): BWR-2,3,(P-Spec)	Clinton is a BWR-6 and does not utilize this system.
K5.01	Flow measurement across an elbow using differential pressure: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
K5.02	Heat exchanger operation: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
K5.03	Heat transfer: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
K5.04	Latent heat of vaporization: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
K5.05	Saturated steam: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
K5.06	Saturated liquid: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
K5.07	Temperature sensing: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
K5.08	Level indicator operation: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
K5.09	Cooldown rate: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
K5.10	System venting: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
K6.01	Demineralized water system: BWR-2, 3(P-Spec)	Clinton is a BWR-6 and does not utilize this system.

System #	System / Evolution Name	
KA #	**KA Statement**	**Basis For Suppression**
K6.02	Fire protection/service water system: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
K6.03	Condensate transfer system: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
K6.04	Plant air systems: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
K6.05	Primary containment isolation system: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
K6.06	Recirculation system: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
K6.07	A.C. power: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
K6.08	D.C. power: BWR-2, 3	Clinton is a BWR-6 and does not utilize this system.
209001	**Low Pressure Core Spray System**	
A2.11	Loss of fire protection: BWR-1	Clinton is a BWR-6 and does not utilize this feature.
A4.06	Testable check valves	Clinton does not utilize this function.
A4.14	Containment level: BWR-1	Clinton is a BWR-6 and does not utilize this feature.
K5.06	Recirculation operation: Plant-Specific(BWR-1)	Clinton is a BWR-6 and does not utilize this feature.
K6.09	Fire protection: BWR-1	Clinton is a BWR-6 and does not utilize this feature.
209002	**High Pressure Core Spray System (HPCS)**	
A4.06	Testable check valve: BWR-5, 6	Clinton removed this function.
K1.13	Instrument nitrogen: BWR-5, 6	Clinton is a BWR 6 and does not utilize this configuration.
211000	**Standby Liquid Control System**	
K1.10	HPCI: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K4.09	Dampening of positive displacement pump discharge oscillations (accumulators): Plant-Specific	Clinton is a BWR 6 and does not utilize this configuration.
K5.05	Accumulator operation: Plant-Specific	Clinton is a BWR 6 and does not utilize this configuration.
K6.05	HPCI system: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
212000	**Reactor Protection System**	
A1.01	RPS motor-generator output voltage	Clinton is a BWR 6 and does not utilize this system.
A1.02	RPS motor-generator output amps	Clinton is a BWR 6 and does not utilize this system.
A1.03	RPS motor-generator output frequency: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
A1.09	Individual relay status: Plant-Specific	Clinton is a BWR 6 and utilizes a solid state system.
A2.01	RPS motor-generator set failure	Clinton is a BWR 6 and does not utilize this system.
A2.19	Partial system activation (half-SCRAM)	Clinton is a BWR 6 and does not utilize this system.
A2.21	Failure of individual relays to reposition: Plant-Specific	Clinton is a BWR 6 and utilizes a solid state system.
A3.02	Individual system relay status: Plant-Specific	Clinton is a BWR 6 and utilizes a solid state system.
A4.03	Provide manual select rod insertion: Plant-Specific	Clinton is a BWR 6 and does not utilize this function.
A4.08	Individual system relay status: Plant-Specific	Clinton is a BWR 6 and utilizes a solid state system.
K2.01	RPS motor-generator sets	Clinton is a BWR 6 and does not utilize this system.
K4.06	Select rod insertion: Plant-Specific	Clinton is a BWR 6 and does not utilize this function.

System #	System / Evolution Name	
KA #	**KA Statement**	**Basis For Suppression**
214000	**Rod Position Information System**	
K1.01	RWM: Plant-Specific	Clinton is a BWR-6 and does not utilize this system.
K1.02	RSCS: Plant-Specific	Clinton is a BWR-6 and does not utilize this system.
K1.04	RMCS: Plant-Specific	Clinton is a BWR 6 and does not utilize this function.
K3.01	RWM: Plant-Specific	Clinton is a BWR-6 and does not utilize this system.
K3.02	RSCS: Plant-Specific	Clinton is a BWR-6 and does not utilize this system.
K3.03	RMCS: Plant-Specific	Clinton is a BWR 6 and does not utilize this function.
215001	**Traversing In-Core Probe**	
A1.03	Valve status: Mark-I&II(Not-BWR1)	Clinton is a BWR 6 and does not utilize this configuration.
A2.01	Low reactor water level: Mark-I&II(Not-BWR1)	Clinton is a BWR 6 and does not utilize this configuration.
A2.02	High primary containment pressure: Mark-I&II(Not-BWR1)	Clinton is a BWR 6 and does not utilize this configuration.
A2.06	Valve closures: Mark-I&II(Not-BWR1)	Clinton is a BWR 6 and does not utilize this configuration.
A2.07	Failure to retract during accident conditions: Mark-I&II(Not-BWR1)	Clinton is a BWR 6 and does not utilize this configuration.
A3.03	Valve operation: Not-BWR1	Clinton is a BWR 6 and does not utilize isolation valves.
A4.03	Isolation valves: Mark-I&II(Not-BWR1)	Clinton is a BWR 6 and does not utilize this configuration.
K1.03	Nitrogen purge system: P-Spec(Not-BWR1)	Clinton does not utilize nitrogen purge for TIPS.
K2.01	Shear valves: Mark-I&II(Not-BWR1)	Clinton is a BWR 6 and does not utilize this configuration.
K4.01	Primary containment isolation: Mark-I&II(Not-BWR1)	Clinton is a BWR 6 and does not utilize this configuration.
K6.04	Primary containment isolation system: Mark-I&II(Not-BWR1)	Clinton is a BWR 6 and does not utilize this configuration.
215002	**Rod Block Monitor System**	
A1.01	Trip reference: BWR-3, 4, 5	Clinton is a BWR 6 and does not utilize this system.
A2.01	Withdrawal of control rod in high power region of core: BWR-3, 4, 5	Clinton is a BWR 6 and does not utilize this system.
A2.02	Loss or reduction in recirculation system flow (flow comparator): BWR-3, 4, 5	Clinton is a BWR 6 and does not utilize this system.
A2.03	Loss of associated reference APRM channel: BWR-3, 4, 5	Clinton is a BWR 6 and does not utilize this system.
A2.04	Power supply losses: BWR-3, 4, 5	Clinton is a BWR 6 and does not utilize this system.
A2.05	RBM high or inoperable: BWR-3, 4, 5	Clinton is a BWR 6 and does not utilize this system.
A3.01	Four rod display: BWR-3, 4, 5	Clinton is a BWR 6 and does not utilize this system.
A3.02	Meters and recorders: BWR-3, 4, 5	Clinton is a BWR 6 and does not utilize this system.
A3.03	Alarm and indicating lights: BWR-3, 4, 5	Clinton is a BWR 6 and does not utilize this system.
A3.04	Verification or proper functioning/ operability: BWR-3, 4, 5	Clinton is a BWR 6 and does not utilize this system.
A3.05	Back panel meters and indicating lights: BWR-3, 4, 5	Clinton is a BWR 6 and does not utilize this system.

System #	System / Evolution Name	
KA #	**KA Statement**	**Basis For Suppression**
A3.06	Transfer to alternate APRM when referenced APRM bypassed: BWR-3, 4, 5	Clinton is a BWR 6 and does not utilize this system.
A4.01	IRM/RBM recorder/switch: BWR-3, 4, 5	Clinton is a BWR 6 and does not utilize this system.
A4.02	RBM back panel switches, meters and indicating lights: BWR-3, 4, 5	Clinton is a BWR 6 and does not utilize this system.
A4.03	Trip bypasses: BWR-3, 4, 5	Clinton is a BWR 6 and does not utilize this system.
A4.04	Push to Check pushbutton: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
A4.05	Setup pushbutton: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
A4.06	Surveillance testing: BWR-3, 4, 5	Clinton is a BWR 6 and does not utilize this system.
K1.01	APRM: BWR-3, 4, 5	Clinton is a BWR 6 and does not utilize this system.
K1.02	LPRM: BWR-3, 4, 5	Clinton is a BWR 6 and does not utilize this system.
K1.03	Reactor manual control: BWR-3, 4, 5	Clinton is a BWR 6 and does not utilize this system.
K1.04	Recirculation system: BWR-3, 4, 5	Clinton is a BWR 6 and does not utilize this system.
K1.05	Four rod display: BWR-3, 4, 5	Clinton is a BWR 6 and does not utilize this system.
K1.06	Control rod selection: BWR-3, 4, 5	Clinton is a BWR 6 and does not utilize this system.
K1.07	IRM: BWR-3, 4, 5	Clinton is a BWR 6 and does not utilize this system.
K2.01	RBM channels: BWR-3, 4, 5	Clinton is a BWR 6 and does not utilize this system.
K2.02	Recorders: BWR-3, 4, 5	Clinton is a BWR 6 and does not utilize this system.
K2.03	APRM channels: BWR-3, 4, 5	Clinton is a BWR 6 and does not utilize this system.
K3.01	Reactor manual control system: BWR-3, 4, 5	Clinton is a BWR 6 and does not utilize this system.
K3.02	Limiting control rod pattern: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K4.01	Prevent control rod withdrawal: BWR-3, 4, 5	Clinton is a BWR 6 and does not utilize this system.
K4.02	Allows stepping up of rod block setpoint: BWR-3, 4, 5	Clinton is a BWR 6 and does not utilize this system.
K4.03	Initiation point (30%): BWR-3, 4, 5	Clinton is a BWR 6 and does not utilize this system.
K5.01	Trip reference selection: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K5.02	Null sequence control: BWR-3, 4, 5	Clinton is a BWR 6 and does not utilize this system.
K6.01	RPS: BWR-3, 4, 5	Clinton is a BWR 6 and does not utilize this system.
K6.02	Instrument power: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K6.03	Essential power: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K6.04	APRM reference channel: BWR-3, 4, 5	Clinton is a BWR 6 and does not utilize this system.
K6.05	LPRM detectors: BWR-3, 4, 5	Clinton is a BWR 6 and does not utilize this system.
215003	**Intermediate Range Monitor (IRM) System**	
K1.02	Reactor manual control	Clinton is a BWR 6 and does not utilize this system.
K3.02	Reactor manual control	Clinton is a BWR 6 and does not utilize this system.
215004	**Source Range Monitor (SRM) System**	
K1.02	Reactor manual control	Clinton is a BWR 6 and does not utilize this system.
K3.02	Reactor manual control: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.

System #	System / Evolution Name	
KA #	**KA Statement**	**Basis For Suppression**
215005	**Average Power Range Monitor/Local Power Range Monitor System**	
K1.03	RBM: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K1.10	Reactor manual control system: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K3.03	Reactor manual control system: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
216000	**Nuclear Boiler Instrumentation**	
K1.14	High pressure coolant injection: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K1.15	Isolation condenser: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K3.14	High pressure coolant injection: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K3.15	Isolation condenser: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
219000	**RHR/LPCI: Torus/Suppression Pool Cooling Mode**	
A1.09	Suppression chamber air temperature: Plant-Specific	Clinton is a BWR 6 and does not have a suppression chamber.
K1.07	Condensate transfer	This system does not serve any purpose for suppression pool cooling.
K6.07	Condensate transfer	This system is not utilized for this function.
223001	**Primary Containment System and Auxiliaries**	
A1.11	Reactor building to suppression chamber differential pressure: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
A1.12	Moisture concentration	Clinton is a BWR 6 and does not utilize this system.
A3.06	Drywell/suppression chamber differential pressure: Mark-I,II	Clinton is a BWR 6 and does not utilize this system.
A4.02	ACAD compressors: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
A4.10	Drywell nitrogen makeup: Mark-I,II	Clinton is a BWR 6 and does not utilize this system.
K1.15	HPCI: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K1.17	Reactor building HVAC: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K1.18	Drywell pneumatic compressors: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K2.02	Drywell compressors	Clinton is a BWR 6 and does not utilize this system.
K2.03	Pumpback compressors: Plant-Specific	Clinton is a BWR 6 and does not utilize this component.
K3.10	Containment/drywell moisture content	Clinton is a BWR 6 and does not utilize this system.
K5.15	Moisture content measurement: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
223002	**Primary Containment Isolation System/Nuclear Steam Supply Shut-**	
K1.04	High pressure coolant injection: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K1.05	Isolation condenser: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K1.13	Traversing in-core probe system	Clinton utilizes a TIP system inside the primary containment.
K1.18	Reactor building drainage system: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K1.22	Containment nitrogen inerting system: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K3.04	Reactor building radiation level	Clinton is a BWR 6 and does not utilize this system.

System #	*System / Evolution Name*	
KA #	***KA Statement***	***Basis For Suppression***
K3.12	High pressure coolant injection: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K3.13	Isolation condenser: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K3.21	Traversing in-core probe system	Clinton utilizes a TIP system inside the primary containment.
K3.24	Reactor building drainage system	Clinton is a BWR 6 and does not utilize this system.
K3.28	Containment nitrogen inerting system	Clinton is a BWR 6 and does not utilize this system.
226001	***RHR/LPCI: Containment Spray System Mode***	
A1.03	Suppression chamber pressure: Mark-I-II	Clinton is a BWR 6 and does not utilize this system.
A1.04	Suppression pool temperature: Mark-I-II	Clinton is a BWR 6 and does not utilize this system.
A2.19	Low (or negative) suppression chamber pressure during system operation: Mark-I-II	Clinton is a BWR 6 and does not utilize this system.
A4.15	Suppression chamber pressure: Mark-I-II	Clinton is a BWR 6 and does not utilize this system.
K1.06	Condensate transfer	Clinton is a BWR 6 and does not utilize this system.
K1.09	Drywell (spray penetration): Mark-I-II	Clinton is a BWR 6 and does not utilize this system.
K1.12	Suppression pool (spray penetration): Plant-Specific	Clinton is a BWR 6 and does not utilize this suppression pool spray.
K6.06	Condensate transfer	Clinton is a BWR 6 and does not utilize this system.
K6.09	Reactor building to suppression chamber vacuum breakers: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K6.10	Suppression chamber to drywell vacuum breakers: Mark-1-II	Clinton is a BWR 6 and does not utilize this system.
230000	***RHR/LPCI: Torus/Suppression Pool Spray Mode***	
A1.01	Suppression chamber pressure	Clinton is a BWR 6 and does not utilize this system.
A1.02	Suppression pool temperature	Clinton is a BWR 6 and does not utilize this system.
A1.03	Drywell pressure	Clinton is a BWR 6 and does not utilize this system.
A1.04	System flow	Clinton is a BWR 6 and does not utilize this system.
A1.05	System pressure	Clinton is a BWR 6 and does not utilize this system.
A1.06	Suppression pool level	Clinton is a BWR 6 and does not utilize this system.
A1.07	Condensate storage tank level	Clinton is a BWR 6 and does not utilize this system.
A1.08	Motor amps	Clinton is a BWR 6 and does not utilize this system.
A1.09	Emergency generator loading	Clinton is a BWR 6 and does not utilize this system.
A1.10	System lineup	Clinton is a BWR 6 and does not utilize this system.
A1.11	Suppression chamber air temperature	Clinton is a BWR 6 and does not utilize this system.
A2.01	Inadequate net positive suction head	Clinton is a BWR 6 and does not utilize this system.
A2.02	Pump trips	Clinton is a BWR 6 and does not utilize this system.
A2.03	Valve closures	Clinton is a BWR 6 and does not utilize this system.
A2.04	Valve openings	Clinton is a BWR 6 and does not utilize this system.
A2.05	A.C. electrical failures	Clinton is a BWR 6 and does not utilize this system.
A2.06	D.C. electrical failures	Clinton is a BWR 6 and does not utilize this system.
A2.07	Emergency generator failure	Clinton is a BWR 6 and does not utilize this system.

KA #	*KA Statement*	*Basis For Suppression*
A2.08	Pump seal failure	Clinton is a BWR 6 and does not utilize this system.
A2.09	Inadequate room cooling	Clinton is a BWR 6 and does not utilize this system.
A2.10	Nuclear boiler instrument failures	Clinton is a BWR 6 and does not utilize this system.
A2.11	Motor operated valve failures	Clinton is a BWR 6 and does not utilize this system.
A2.12	Valve logic failure	Clinton is a BWR 6 and does not utilize this system.
A2.13	High suppression pool level	Clinton is a BWR 6 and does not utilize this system.
A2.14	Low (or negative) suppression pool pressure during system operation	Clinton is a BWR 6 and does not utilize this system.
A2.15	Loss of coolant accident	Clinton is a BWR 6 and does not utilize this system.
A2.16	Loss of, or inadequate, heat exchanger cooling flow	Clinton is a BWR 6 and does not utilize this system.
A3.01	Valve operation	Clinton is a BWR 6 and does not utilize this system.
A4.01	Pumps	Clinton is a BWR 6 and does not utilize this system.
A4.02	Spray valves	Clinton is a BWR 6 and does not utilize this system.
A4.03	Keep fill system	Clinton is a BWR 6 and does not utilize this system.
A4.04	Minimum flow valves	Clinton is a BWR 6 and does not utilize this system.
A4.05	Heat exchanger cooling flow	Clinton is a BWR 6 and does not utilize this system.
A4.06	Valve logic reset following automatic initiation of LPCI/RHR in injection mode	Clinton is a BWR 6 and does not utilize this system.
A4.07	System flow	Clinton is a BWR 6 and does not utilize this system.
A4.08	Pump/system discharge pressure	Clinton is a BWR 6 and does not utilize this system.
A4.09	Indicating lights and alarms	Clinton is a BWR 6 and does not utilize this system.
A4.10	Condensate storage tank level	Clinton is a BWR 6 and does not utilize this system.
A4.11	System venting	Clinton is a BWR 6 and does not utilize this system.
A4.12	Suppression pool level	Clinton is a BWR 6 and does not utilize this system.
A4.13	Suppression chamber pressure	Clinton is a BWR 6 and does not utilize this system.
A4.14	Suppression pool temperature	Clinton is a BWR 6 and does not utilize this system.
A4.15	Drywell pressure	Clinton is a BWR 6 and does not utilize this system.
A4.16	The override for suppression pool spray valve logic	Clinton is a BWR 6 and does not utilize this system.
K1.01	Suppression pool	Clinton is a BWR 6 and does not utilize this system.
K1.02	Condensate storage and transfer system	Clinton is a BWR 6 and does not utilize this system.
K1.03	LPCI/RHR piping	Clinton is a BWR 6 and does not utilize this system.
K1.04	LPCI/RHR pumps	Clinton is a BWR 6 and does not utilize this system.
K1.05	A.C. electrical	Clinton is a BWR 6 and does not utilize this system.
K1.06	Keep fill system	Clinton is a BWR 6 and does not utilize this system.
K1.07	D.C. electrical	Clinton is a BWR 6 and does not utilize this system.
K1.08	Nuclear boiler instrumentation	Clinton is a BWR 6 and does not utilize this system.
K1.09	Reactor building drain system	Clinton is a BWR 6 and does not utilize this system.
K1.10	Component cooling water systems	Clinton is a BWR 6 and does not utilize this system.
K2.01	Valves	Clinton is a BWR 6 and does not utilize this system.
K2.02	Pumps	Clinton is a BWR 6 and does not utilize this system.

System #	*System / Evolution Name*	
KA #	***KA Statement***	***Basis For Suppression***
K3.01	Suppression chamber pressure	Clinton is a BWR 6 and does not utilize this system.
K3.02	Suppression pool temperature	Clinton is a BWR 6 and does not utilize this system.
K3.03	Drywell pressure	Clinton is a BWR 6 and does not utilize this system.
K3.04	Suppression chamber air temperature	Clinton is a BWR 6 and does not utilize this system.
K4.01	Surveillance for all operable components	Clinton is a BWR 6 and does not utilize this system.
K4.02	Redundancy	Clinton is a BWR 6 and does not utilize this system.
K4.03	Unintentional reduction in vessel injection flow during accident conditions	Clinton is a BWR 6 and does not utilize this system.
K4.04	Prevention of piping overpressurization	Clinton is a BWR 6 and does not utilize this system.
K4.05	Pump minimum flow protection	Clinton is a BWR 6 and does not utilize this system.
K4.06	Pump motor cooling	Clinton is a BWR 6 and does not utilize this system.
K4.07	Prevention of water hammer	Clinton is a BWR 6 and does not utilize this system.
K4.08	Adequate pump net positive suction head	Clinton is a BWR 6 and does not utilize this system.
K4.09	Spray flow cooling	Clinton is a BWR 6 and does not utilize this system.
K4.10	Prevention of leakage to the environment through system heat exchanger	Clinton is a BWR 6 and does not utilize this system.
K5.01	System venting	Clinton is a BWR 6 and does not utilize this system.
K5.02	Pump cavitation	Clinton is a BWR 6 and does not utilize this system.
K5.03	Pressure measurement	Clinton is a BWR 6 and does not utilize this system.
K5.04	Evaporative cooling	Clinton is a BWR 6 and does not utilize this system.
K5.05	Convective cooling	Clinton is a BWR 6 and does not utilize this system.
K5.06	Heat exchanger operation	Clinton is a BWR 6 and does not utilize this system.
K5.07	Vacuum breaker operation	Clinton is a BWR 6 and does not utilize this system.
K6.01	A.C. electrical	Clinton is a BWR 6 and does not utilize this system.
K6.02	D.C. electrical	Clinton is a BWR 6 and does not utilize this system.
K6.03	Emergency generator	Clinton is a BWR 6 and does not utilize this system.
K6.04	Keep fill system	Clinton is a BWR 6 and does not utilize this system.
K6.05	Suppression pool	Clinton is a BWR 6 and does not utilize this system.
K6.06	Condensate storage and transfer system	Clinton is a BWR 6 and does not utilize this system.
K6.07	ECCS room cooling	Clinton is a BWR 6 and does not utilize this system.
K6.08	Nuclear boiler instrumentation	Clinton is a BWR 6 and does not utilize this system.
K6.09	Reactor building to suppression pool vacuum breakers	Clinton is a BWR 6 and does not utilize this system.
K6.10	Component cooling water systems	Clinton is a BWR 6 and does not utilize this system.
233000	***Fuel Pool Cooling and Clean-up***	
K1.07	Condensate system: Plant-Specific	Clinton is a BWR 6 and does utilize this configuration.
K1.11	Reactor building drainage system: Plant-Specific	Clinton is a BWR 6 and does utilize this configuration.
K6.05	Condensate system	Clinton is a BWR 6 and does utilize this configuration.

System #	System / Evolution Name	
KA #	**KA Statement**	**Basis For Suppression**
234000	**Fuel Handling Equipment**	
K1.04	Reactor manual control system: Plant-Specific	Clinton is a BWR 6 and does utilize this system.
K3.01	Reactor manual control system: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K6.02	Reactor manual control system: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
239001	**Main and Reheat Steam System**	
K1.18	High pressure coolant injection: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K1.21	Isolation condenser system: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K3.10	High pressure coolant injection system: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K3.12	Isolation condenser: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K3.14	Residual heat removal system: Plant-Specific	Clinton does not utilize this function.
K5.07	Hydraulic operated MSIV's	Clinton is a BWR 6 and does not utilize this system.
239002	**Relief/Safety Valves**	
K1.06	Drywell instrument air/ drywell pneumatics: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K1.09	Drywell pressure (for safety valves which discharge to the drywell airspace): Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
241000	**Reactor/Turbine Pressure Regulating System**	
A3.15	Recirculation pump flow control: Plant-Specific	Clinton is a BWR 6 and there is no tie to this system.
K1.15	D.C. electrical power	DC does not supply power to this system.
K1.23	Recirculation flow control system: Plant-Specific	Clinton is a BWR 6 and there is no tie to this system.
K1.37	Turbine stress evaluator: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K3.21	Recirculation flow control system: Plant-Specific	Clinton is a BWR 6 and there is no tie to this system.
K4.11	Load following: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K4.12	Recirculation flow control: Plant-Specific	Clinton is a BWR 6 and there is no tie to this system.
K5.01	Accumulator operation: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K5.07	Unitized actuator operation: Fermi-Only	Clinton is a BWR 6 and does not utilize this system.
K6.04	Recirculation flow control system: Plant-Specific	Clinton is a BWR 6 and there is no tie to this system.
245000	**Main Turbine Generator and Auxiliary Systems**	
K2.03	Amplidyne: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K2.05	Air seal oil pumps: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
256000	**Reactor Condensate System**	
K1.03	HPCI: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K1.12	Isolation condenser: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K1.14	RHR (LPCI): Plant-Specific	Clinton does not utilize this function.
K1.17	ECCS keep fill system: Plant-Specific	Clinton does not utilize this function from reactor condensate.

System #	System / Evolution Name	
KA #	**KA Statement**	**Basis For Suppression**
K3.05	HPCI: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K3.07	Isolation condenser: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K4.01	Condensate and/or booster pump auto start: Plant-Specific	Clinton does not have an auto start on the CD/CB pumps.
K4.08	Dedicated ECCS water supply: Plant-Specific	Clinton does not utilize this function from reactor condensate.
259001	**Reactor Feedwater System**	
A3.11	Reactor feedpump runbacks: Plant-Specific	Clinton does not utilize this function.
K1.02	HPCI: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K1.18	Fire protection system (emergency cooling): Plant-Specific	Clinton does not utilize this function through reactor feedwater.
K1.19	Redundant reactivity control system: Plant-Specific	Clinton does not utilize this function.
K3.03	HPCI: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K4.10	Feedpump runbacks: Plant-Specific	Clinton does not utilize this function.
259002	**Reactor Water Level Control System**	
A1.06	Feedwater string(s) selected for FWCI: FWCI	Clinton is a BWR 6 and does not utilize this system.
A2.08	Receipt of an ECCS initiation signal: FWCI	Clinton is a BWR 6 and does not utilize this system.
A2.09	FWCI system failure alarm: FWCI	Clinton is a BWR 6 and does not utilize this system.
A3.08	FWCI system initiation: FWCI	Clinton is a BWR 6 and does not utilize this system.
A4.08	Manually initiate FWCI: FWCI	Clinton is a BWR 6 and does not utilize this system.
K1.07	Rod worth minimizer: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K1.10	Emergency generator(s): FWCI/HPCI	Clinton is a BWR 6 and does not utilize this system.
K1.11	Drywell pressure: FWCI/HPCI	Clinton is a BWR 6 and does not utilize this system.
K1.12	Emergency condensate transfer pump: FWCI/HPCI	Clinton is a BWR 6 and does not utilize this system.
K1.16	HPCI: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K2.02	Feedwater coolant injection (FWCI) initiation logic: FWCI/HPCI	Clinton is a BWR 6 and does not utilize this system.
K3.03	Rod worth minimizer: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K4.02	Bypassing of the RWM: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K4.07	TDRFP 20% power interlock: TDRFP	Clinton does not utilize this function.
K4.15	Automatic initiation of the feedwater system upon receipt of an ECCS initiation signal: FWCI/HPCI	Clinton is a BWR 6 and does not utilize this system.
K4.16	Dedication of feedwater string(s) to ECCS: FWCI/HPCI	Clinton is a BWR 6 and does not utilize this system.
K5.08	Heat removal mechanisms: FWCI	Clinton is a BWR 6 and does not utilize this system.
K5.09	Adequate core cooling: FWCI	Clinton is a BWR 6 and does not utilize this system.
K6.07	Drywell pressure input: FWCI	Clinton is a BWR 6 and does not utilize this system.
261000	**Standby Gas Treatment System**	
A1.05	Primary containment oxygen level: Mark-I&II	Clinton is a BWR 6 and does not utilize this configuration.

System #	System / Evolution Name	
KA #	**KA Statement**	**Basis For Suppression**
A1.06	Drywell and suppression chamber differential pressure: Mark-I	Clinton is a BWR 6 and does not utilize this configuration.
A4.05	Drywell to suppression chamber/torus differential pressure: Mark-I,II	Clinton is a BWR 6 and does not utilize this configuration.
K1.06	High pressure coolant injection system: Plant-Specific	Clinton is a BWR 6 and does not utilize this configuration.
K3.03	Primary containment pressure: Mark-I&II	Clinton is a BWR 6 and does not utilize this configuration.
K3.04	High pressure coolant injection system: Plant-Specific	Clinton is a BWR 6 and does not utilize this configuration.
K3.06	Primary containment oxygen content: Mark-I&II	Clinton is a BWR 6 and does not utilize this configuration.
262002	**Uninterruptable Power Supply (A.C./D.C.)**	
A1.02	Motor generator outputs	Clinton is a BWR 6 and does utilize this configuration.
A2.04	Abnormal battery operation: BWR-1	Clinton is a BWR-6 and does not utilize this feature.
K1.04	Reactor manual control: Plant-Specific	Clinton is a BWR 6 and does utilize this configuration.
K1.07	Rod worth minimizer: Plant-Specific	Clinton is a BWR 6 and does utilize this configuration.
K1.09	Drywell ventilation control: Plant-Specific	Clinton is a BWR 6 and does utilize this configuration.
K1.10	Fire protection system: Plant-Specific	Clinton is a BWR 6 and does utilize this configuration.
K1.13	Recirculation pump speed control: Plant-Specific	Clinton is a BWR 6 and does utilize this configuration.
K1.15	Stack gas monitors: Plant-Specific	Clinton is a BWR 6 and does utilize this configuration.
K1.20	Plant communications equipment: Plant-Specific	Clinton is a BWR 6 and does utilize this configuration.
K3.02	Recirculation pump speed: Plant-Specific	Clinton is a BWR 6 and does utilize this configuration.
K3.04	Fire protection system: Plant-Specific	Clinton is a BWR 6 and does utilize this configuration.
K3.05	Rod worth minimizer: Plant-Specific	Clinton is a BWR 6 and does utilize this configuration.
K3.09	Drywell ventilation control: Plant-Specific	Clinton is a BWR 6 and does utilize this configuration.
K5.02	General principles of motor generator operation: Plant-Specific	Clinton is a BWR 6 and does utilize this configuration.
K5.03	General principles of inertia fly wheel operation: Plant-Specific	Clinton is a BWR 6 and does utilize this configuration.
264000	**Emergency Generators (Diesel/Jet)**	
A1.07	Gas generator temperature: Plant-Specific	Clinton does not use jet engines to power emergency generators.
A1.08	Gas generator speed: Plant-Specific	Clinton does not use jet engines to power emergency generators.
K2.03	Turning gear (jet engine): Plant-Specific	Clinton does not use jet engines to power emergency generators.
K2.04	Ignition system (jet engine): Plant-Specific	Clinton does not use jet engines to power emergency generators.
K6.04	Turning gear (jet engine): Plant-Specific	Clinton does not use jet engines to power emergency generators.
K6.05	Ignition system (jet engine): Plant-Specific	Clinton does not use jet engines to power emergency generators.

System #	System / Evolution Name	
KA #	**KA Statement**	**Basis For Suppression**
271000	**Offgas System**	
A2.07	Low oxygen injection flow: Plant-Specific	Clinton does not utilize this function.
K1.08	Oxygen injection system: Plant-Specific	Clinton does not utilize this function.
K5.05	Oxygen concentration measurement	Clinton does not utilize this function.
K6.06	Oxygen injection system: Plant-Specific	Clinton does not utilize this function.
K6.13	Plant exhaust: BWR-1	Clinton is a BWR-6 and does not utilize this feature.
272000	**Radiation Monitoring System**	
A3.11	Circulating water system blowdown isolations: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K1.06	Reactor building ventilation system: Plant-Specific	Clinton is a BWR 6 and does not utilize this configuration.
K1.07	Isolation condenser: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K1.12	Reactor building	Clinton is a BWR 6 and does not utilize this system.
K1.15	Filter building: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
286000	**Fire Protection System**	
A2.04	Applicable component cooling water system failure: Plant-Specific	The only component cooled is the Fire Pumps which are self cooled.
A4.02	Applicable component cooling water system: Plant-Specific	The only component cooled is the Fire Pumps which are self cooled.
A4.03	Applicable component cooling water pressure	The only component cooled is the Fire Pumps which are self cooled.
K1.01	Component cooling water systems	The only component cooled is the Fire Pumps which are self cooled.
K1.02	Isolation condenser: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K1.06	Auxiliary (boiler) steam system: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K1.08	Intake canals: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K5.08	Gas refrigeration: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K6.03	Applicable component cooling water system: Plant-Specific	The only component cooled is the Fire Pumps which are self cooled.
288000	**Plant Ventilation Systems**	
K3.02	Reactor building temperature: Plant-Specific	Clinton is a BWR 6 and does utilize this configuration.
K3.05	Reactor building pressure: Plant-Specific	Clinton is a BWR 6 and does utilize this configuration.
290001	**Secondary Containment**	
K1.01	Reactor building ventilation: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K1.08	Exhaust stack: BWR-2, 3, 4	Clinton is a BWR 6 and does not utilize this system.
K1.10	Auxiliary boiler system: BWR-2, 3, 4	Clinton is a BWR 6 and does not utilize this system.
K5.01	Vacuum breaker operation: BWR-4	Clinton is a BWR 6 and does not utilize this configuration.
K5.02	Flow measurement: BWR-3	Clinton is a BWR 6 and does not utilize this configuration.

System #	System / Evolution Name	
KA #	**KA Statement**	**Basis For Suppression**
K6.01	Reactor building ventilation: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K6.07	Auxiliary boiler system: BWR-3, 4	Clinton is a BWR 6 and does not have this configuration
290002	**Reactor Vessel Internals**	
K1.04	HPCI: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K1.07	Isolation condenser: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K6.10	HPCI: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
K6.12	Isolation condenser: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
290003	**Control Room HVAC**	
K1.02	Chlorine amonia detectors: Plant-Specific	Clinton does not utilize this component.
294001		
2.2.3	(multi-unit) Knowledge of the design, procedural, and operational differences between units.	Clinton is a single-unit facility.
2.2.4	(multi-unit) Ability to explain the variations in control board layouts, systems, instrumentation and procedural actions between units at a facility.	Clinton is a single-unit facility.
295001	**Partial or Complete Loss of Forced Core Flow Circulation**	
AA1.03	RMCS: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
AA1.08	Standby liquid control: BWR-1	Clinton is a BWR-6 and does not utilize this feature.
AK2.05	LPCI loop select logic: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
AK2.08	Standby liquid control: BWR-1	Clinton is a BWR-6 and does not utilize this feature.
295002	**Loss of Main Condenser Vacuum**	
AK3.08	Recirculation system run-backs: Plant-Specific	Clinton does not utilize this function.
295003	**Partial or Complete Loss of A.C. Power**	
AK2.05	Isolation condenser: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
AK3.07	Initiation of isolation condenser: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
295004	**Partial or Complete Loss of D.C. Power**	
AK1.01	Automatic load shedding: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
295005	**Main Turbine Generator Trip**	
AK2.09	Feedwater-HPCI: BWR-2	Clinton is a BWR 6 and does not utilize this system.
AK3.08	Feedwater-HPCI actuation: BWR-2	Clinton is a BWR 6 and does not utilize this system.
295007	**High Reactor Pressure**	
AA1.01	Isolation condenser: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
AA1.02	HPCI: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
AK3.01	Isolation condenser operation: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.

System #	System / Evolution Name	
KA #	**KA Statement**	**Basis For Suppression**
AK3.02	HPCI operation: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
295008	**High Reactor Water Level**	
AA1.04	HPCI: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
AK1.04	Containment integrity: Alis-Chalmers	Clinton is a BWR 6 and does not utilize this system.
AK2.05	HPCI: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
AK3.05	HPCI turbine trip: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
295010	**High Drywell Pressure**	
AA1.03	Nitrogen makeup: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
AA2.04	Drywell humidity: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
AK1.01	Downcomer submergence: Mark-I&II	Clinton is a BWR 6 and does not utilize this system.
AK2.02	Drywell/suppression chamber differential pressure: Mark-I&II	Clinton is a BWR 6 and does not utilize this system.
AK2.04	Nitrogen makeup system: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
AK3.06	Termination of drywell inerting: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
295011	**High Containment Temperature (Mark III Containment Only)**	
AA2.03	Containment humidity: Mark-III	Clinton does not utilize humidity monitoring instrumentation for the containment.
295012	**High Drywell Temperature**	
AA2.03	Drywell humidity: Plant-Specific	Clinton does not utilize humidity monitoring instrumentation for the containment.
295014	**Inadvertent Reactivity Addition**	
AA1.03	RMCS: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
AK1.01	Prompt critical	Prompt criticality is addressed during fundamental training only.
AK2.08	RMCS: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
295015	**Incomplete SCRAM**	
AA1.03	RMCS: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
AA1.05	Rod worth minimizer: Plant-Specific	Clinton is a BWR 6 and does not utilize this component.
AA1.06	RSCS: Plant-Specific	Clinton is a BWR-6 and does not utilize this system.
AK2.02	RMCS: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
AK2.05	Rod worth minimizer: Plant-Specific	Clinton is a BWR 6 and does not utilize this component.
AK2.06	RSCS: Plant-Specific	Clinton is a BWR-6 and does not utilize this system.
AK2.09	RPIS	Clinton is a BWR 6 and does not utilize this system.
295016	**Control Room Abandonment**	
AA1.09	Isolation/emergency condenser(s): Plant-Specific	Clinton is a BWR 6 and does not utilize this system.

System #	System / Evolution Name	
KA #	**KA Statement**	**Basis For Suppression**
AA2.07	Suppression chamber pressure	Clinton is a BWR 6 and does not utilize this system.
295019	**Partial or Complete Loss of Instrument Air**	
AK2.13	Isolation condenser: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
AK2.17	High pressure coolant injection: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
295020	**Inadvertent Containment Isolation**	
AK2.05	Isolation condenser: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
AK2.06	HPCI: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
AK2.08	Traversing in-core probes: Plant-Specific	Clinton is a BWR 6 and Traversing In-Core Probes are inside Primary Containment.
AK3.08	Suppression chamber pressure response	Clinton is a BWR 6 and does not utilize this system.
295022	**Loss of CRD Pumps**	
AK2.06	Shared components with other units: Plant-Specific	Clinton is a single unit plant.
295023	**Refueling Accidents**	
AK3.05	Initiation of SLC/shut-down cooling: Plant-Specific(BWR-1)	Clinton is a BWR-6 and does not utilize this feature.
295024	**High Drywell Pressure**	
EA1.01	HPCI (FWCI): Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
EA1.11	Drywell spray: Mark-I&II	Clinton is a BWR 6 and does not utilize this system.
EA1.12	Suppression pool spray: Mark-I&II	Clinton is a BWR 6 and does not utilize this system.
EA1.21	Recirculation system (LPCI loop select logic): Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
EA2.04	Suppression chamber pressure: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
EA2.05	Suppression chamber air-space temperature: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
EK2.01	HPCI (FWCI): Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
EK2.11	Drywell spray (RHR) logic: Mark-I&II	Clinton is a BWR 6 and does not utilize this system.
EK2.13	Suppression pool spray: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
EK2.17	Auxiliary building isolation logic: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
EK3.01	Drywell spray operation: Mark-I&II	Clinton is a BWR 6 and does not utilize this system.
EK3.02	Suppression pool spray operation: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
EK3.09	Auxiliary building isolation: Plant-Specific.	Clinton is a BWR 6 and does not utilize this system.
295025	**High Reactor Pressure**	
EA1.04	HPCI: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
EA1.06	Isolation condenser: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
EA1.08	RRCS: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
EK2.02	Isolation condenser: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
EK2.03	RRCS: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.

System #	*System / Evolution Name*	
KA #	***KA Statement***	***Basis For Suppression***
EK2.06	HPCI: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
EK3.03	HPCI operation: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
EK3.04	Isolation condenser initiation: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
EK3.07	RRCs initiation: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
295026	***Suppression Pool High Water Temperature***	
EA1.02	Suppression pool spray: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
EK2.02	Suppression pool spray: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
EK2.03	Suppression chamber pressure: Mark-I&II	Clinton is a BWR 6 and does not utilize this system.
EK3.03	Suppression pool spray: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
295028	***High Drywell Temperature***	
EA1.01	Drywell spray: Mark-I&II	Clinton is a BWR 6 and does not utilize this system.
EA2.05	Torus/suppression chamber pressure: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
EA2.06	Torus/suppression chamber air space temperature: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
EK2.01	Drywell spray: Mark-I&II	Clinton is a BWR 6 and does not utilize this system.
EK3.03	Drywell spray operation: Mark-I&II	Clinton is a BWR 6 and does not utilize this system.
295029	***High Suppression Pool Water Level***	
EA1.01	HPCI: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
EK2.02	HPCI: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
295030	***Low Suppression Pool Water Level***	
EA1.05	HPCI	Clinton is a BWR 6 and does not utilize this system.
EA2.04	Drywell/ suppression chamber differential pressure: Mark-I&II	Clinton is a BWR 6 and does not utilize this system.
EK2.01	HPCI: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
EK3.02	HPCI operation: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
295031	***Reactor Low Water Level***	
EA1.02	High pressure (feedwater) coolant injection: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
EA1.09	Isolation condenser: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
EK2.06	High pressure (feedwater) coolant injection (FWCI/HPCI): Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
295035	***Secondary Containment High Differential Pressure***	
EK2.04	Blow-out panels: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
EK3.01	Blow-out panel operation: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
295037	***SCRAM Condition Present and Reactor Power Above APRM Downsc***	
EA1.02	RRCS: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.

System #	*System / Evolution Name*	
KA #	***KA Statement***	***Basis For Suppression***
EA1.07	RMCS: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
EK2.02	RRCS: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
EK2.11	RMCS: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
EK2.14	RPIS: Plant-Specific	Clinton is a BWR 6 and does not utilize this system.
295038	***High Off-Site Release Rate***	
EA1.05	Post accident sample system (PASS): Plant-Specific	The PASS system is not operated nor monitored by licensed operators at Clinton.
300000	***Instrument Air System (IAS)***	
K1.01	Sensor air	Clinton is a single unit plant which does use this configuration.
K2.02	Emergency air compressor	Clinton does not utilize this component.
K3.03	Cross-tied units	Clinton is a single unit plant which does use this configuration.
K5.04	Service air refusal valve	Clinton does not utilize this component.
K6.04	Service air refusal valve	Clinton is a single unit plant which does use this configuration.
500000	***High Containment Hydrogen Concentration***	
EA1.05	Wetwell sprays	Clinton is a BWR 6 and does not utilize this system.
EA1.06	Drywell sprays	Clinton is a BWR 6 and does not utilize this system.
EA1.07	Nitrogen purge system	Clinton is a BWR 6 and does not utilize this system.
EA2.04	Combustible limits for wetwell	Clinton is a BWR 6 and does not utilize this system.
EK2.06	Wetwell Spray system	Clinton is a BWR 6 and does not utilize this system.
EK2.08	Wet Well vent system	Clinton is a BWR 6 and does not utilize this system.
EK2.09	Drywell nitrogen purge system	Clinton is a BWR 6 and does not utilize this system.
EK3.05	Operation of wet well (suppression pool) sprays	Clinton is a BWR 6 and does not utilize this system.
EK3.06	Operation of wet well vent	Clinton is a BWR 6 and does not utilize this system.
EK3.08	Operation of drywell nitrogen purge system	Clinton is a BWR 6 and does not utilize this system.

	Printed Name	Signature	Date
Exam Developer	TOM PICKLEY		4/7/03
Facility Representative	PK RYAN		4/8/03

Facility: Clinton	Date of Examination: 1/5/2004
Examination Level (circle one): RO	Operating Test Number: 1
Administrative (see Note)	Describe activity to be performed
Conduct of Operations Mode Change	Verify conditions are met to enter Mode 2 from Mode 1 (New) KA 2.1.22 (2.8)
Conduct of Operations Plant Parameter Verification	Determine if Power, Flow, or Core Thermal limits have been exceeded. (Faulted) KA 2.1.19 (3.0)
Equipment Control	Perform the Restoration Section of a Control Rod/Position Indication Operability Surveillance (Faulted) KA 2.2.12 (3.0)
Radiation Control	Determine the dress out requirements for a specified task. (new) KA 2.3.1 (2.6)
Emergency Plan	N/A
NOTE: All items (5 total) are required for SROs. RO applicants require only 4 items unless they are retaking only the administrative topics, when 5 are required.	

ES-301 Administrative Topics Outline Form ES-301-1

Facility: Clinton	Date of Examination: 1/5/2004
Examination Level (circle one): SRO Operating Test Number: 1	
Administrative (see Note)	Describe activity to be performed
Conduct of Operations Security	Review and approve a Safeguards Event Notification Worksheet for a security threat. (New) KA 2.1.18 (3.0)
Conduct of Operations Plant Parameter Verification	Determine if Power, Flow, or Core Thermal Limits have been exceeded. (Faulted) KA 2.1.19 (3.0)
Equipment Control	Review a Completed Control Rod/Position Indication Operability Surveillance and Identify Discrepancies (Faulted) KA 2.2.12 (3.4)
Radiation Control	Determine an emergency dose for a job and select a worker to perform the job. (new) KA 2.3.4 (3.1)
Emergency Plan Protective Action Recommendation	Determine an EP Protective Action Recommendation with a subsequent wind direction change. KA 2.4.44 (4.0)
NOTE: All items (5 total) are required for SROs. RO applicants require only 4 items unless they are retaking only the administrative topics, when 5 are required.	

Facility: Clinton	Date of Examination: 01/05/04
Exam Level (circle one): **RO** / SRO(I) / SRO(U)	Operating Test Number: 1

Control Room Systems (~~8 for RO~~; 7 for SRO-I; 2 or 3 for SRO-U)		
System / JPM Title	Type Code*	Safety Function
a. 202002 Recirculation Flow Control System Reset a Recirc Flow Control Valve Lockout.	N, S	1
b. 209001 Low Pressure Core Spray Manually Initiate LPCS, Logic Not Available	D, A, S	2
c. 241000 Reactor/Turbine Pressure Regulating System Turbine On-Line Tests	N, A, S	3
d. 239001 Main and Reheat Steam Equalize Around and Open Main Steam Isolation Valves	D, S, L	4
e. 223001 Primary Containment System and Auxiliaries Perform Containment Hydrogen Purge per 4411.06	N, A, S, L	5
f. 264000 Emergency Generators (Diesel/Jet) Transfer to Diesel Generator 1C due to High Voltage on 4.16 KV Line	N, S	6
g. 272000 Radiation Monitoring Shifting Off-Gas Post Treatment Radiation Monitors	D, S	7
h. 290003 Control Room HVAC Startup the Control Room Ventilation System (VC) in the High Radiation Mode per 3402.01	D, A, S	9
In-Plant System (3 for RO; 3 for SRO-I; 3 or 2 for SRO-U)		
i. 201001 Control Rod Drive Hydraulic System Venting CRD Withdrawal Lines	D, R	1
j. 209002 High Pressure Core Spray Throttling ECCS Injection Flow - HPCS	D, R, L	2
k. 263000 D.C. Electrical Distribution DC Load Shedding during a Station Blackout	D, R, L	6
* Type Codes: (D)irect from bank, (M)odified from bank, (N)ew, (A)lternate path, (C)ontrol room, (S)imulator, (L)ow Power, (R)CA		

Facility: Clinton Date of Examination: 01/05/04

Exam Level (circle one): RO / **SRO(I)** / SRO(U) Operating Test Number: 1

Control Room Systems (8 for RO; 7 for SRO-I; 2 or 3 for SRO-U)

System / JPM Title	Type Code*	Safety Function
a. 202002 Recirculation Flow Control System Reset a Recirc Flow Control Valve Lockout.	N, S	1
b. 209001 Low Pressure Core Spray Manually Initiate LPCS, Logic Not Available	D, A, S	2
c. 241000 Reactor/Turbine Pressure Regulating System Turbine On-Line Tests	N, A, S	3
d. 239001 Main and Reheat Steam Equalize Around and Open Main Steam Isolation Valves	D, S, L	4
e. 223001 Primary Containment System and Auxiliaries Perform Containment Hydrogen Purge per 4411.06	N, A, S, L	5
g. 272000 Radiation Monitoring Shifting Off-Gas Post Treatment Radiation Monitors	D, S	7
h. 290003 Control Room HVAC Startup the Control Room Ventilation System (VC) in the High Radiation Mode per 3402.01	D, A, S	9

In-Plant System (3 for RO; 3 for SRO-I; 3 or 2 for SRO-U)

i. 201001 Control Rod Drive Hydraulic System Venting CRD Withdrawal Lines	D, R	1
j. 209002 High Pressure Core Spray Throttling ECCS Injection Flow - HPCS	D, R, L	2
k. 263000 D.C. Electrical Distribution DC Load Shedding during a Station Blackout	D, R, L	6

* Type Codes: (D)irect from bank, (M)odified from bank, (N)ew, (A)lternate path, (C)ontrol room, (S)imulator, (L)ow Power, (R)CA

Facility: Clinton Date of Examination: 01/05/04

Exam Level (circle one): RO / SRO(I) / SRO(U) Operating Test Number: 1

Control Room Systems (8 for RO; 7 for SRO-I; 2 or 3 for SRO-U)

System / JPM Title	Type Code*	Safety Function
a. 202002 Recirculation Flow Control System Reset a Recirc Flow Control Valve Lockout.	N, S	1
c. 241000 Reactor/Turbine Pressure Regulating System Turbine On-Line Tests	N, A, S	3
h. 290003 Control Room HVAC Startup the Control Room Ventilation System (VC) in the High Radiation Mode per 3402.01	D, A, S	9

In-Plant System (3 for RO; 3 for SRO-I; 3 or 2 for SRO-U)

j. 209002 High Pressure Core Spray Throttling ECCS Injection Flow - HPCS	D, R, L	2
k. 263000 D.C. Electrical Distribution DC Load Shedding during a Station Blackout	D, R, L	6

* Type Codes: (D)irect from bank, (M)odified from bank, (N)ew, (A)lternate path, (C)ontrol room, (S)imulator, (L)ow Power, (R)CA

Scenario Outline

Facility: *Clinton Power Station* **Scenario No.:** *NRC 1.1* **Op Test No.:** *1*

Examiners: _____ **Operators:** _____

_____ _____

_____ _____

Initial Conditions:

- **A startup is in progress with power at 55%**
- **Withdrawing rods to the 100% rod line**

Turnover:

- **Continue with power ascension IAW GP.**

Event No.	Malf. No.	Event Type*		Event Description
1		*R*	*RO SRO*	*Withdraw rods to the 100% rod line*
2	YP_XMFTB	*C*	*RO SRO*	*Uncoupled Control Rod*
3	LC08	*C*	*BOP SRO*	*Loss of a CRD Pump*
4	RR15AA	*I*	*RO*	*Feedwater Level Control Signal Failure*
5	YP_XMFTB(4007)	*C*	*BOP SRO*	*Loss of Bus 1J (restore Cycled Condensate)*
6	*I/O*	*I*	*BOP*	*OG Recombiner Level Controller Failure*
7	*RR03*	*M*	*BOP RO SRO*	*LOCA due to small Reactor Recirc leak*
8	*I/O*	*C*	*RO*	*Fail Mode Switch in RUN*
9	RP04	*C*	*RO SRO*	*Auto scram failure, ARI successful*
10	ED04C1	*C*	*BOP*	*Loss of Division 3 bus*
11	YARIMVFP(2)	*C*	*BOP*	*RCIC injection valve fails to open*

* **(N)ormal, (R)eactivity, (I)nstrument, (C)omponent, (M)ajor Transient**

Narrative Summary

Event(s)	Description
1	Withdrawal control rods to the 100% rod line
2	While withdrawing control rods a rod becomes uncoupled. The RO should refer to the Abnormal operating procedures and upon taking corrective action the rod will become coupled on the first attempt.
3	The running CRD pump will trip on over current. Diagnostics will be done and the standby pump started per CPS 3304.01
4	A Feedwater Level Control Signal failure will occur causing the RO to shift to the other division.
5	A loss of Bus 1J will occur causing the loss of "A" CY Pump. The only indication of this is CY pressure decreasing. If 'C' CY Pump is started it will appear to be running but pressure will continue to decrease. 'A' and 'C' pumps are powered from Bus 1J. After diagnosing the problem the 'B' CY Pump should be started, and pressure will return to normal.
6	AN OG Recombiner Level Controller Failure. A Condenser Stage Water Level High Annunciator requires taking manual control of the level controller
7	A small Recirc Loop break will cause a high Drywell Pressure requiring entry into EOP-1 and EOP-6. This will also shunt trip TBMCC 1M causing a loss of the MDRFP. An emergency depressurization will be required when Containment pressure cannot be maintained within Figure N.
8	When the mode switch is placed in Shutdown an ATWS will occur. Power should remain high initially. The plant will remain stable because Main Turbine is still online. Manual Initiation of ARI will cause all control rods to insert
9	Due to the Mode Switch in Run, a Group 1 Isolation will occur on low Steam Line pressure causing a loss of the Main Turbine and Turbine Driven Reactor Feed Pumps. SRVs will need to be used initially to control reactor pressure.
10	A loss of the DIV 3 Emergency Bus will cause a loss of HPCS
11	The RCIC injection valve failure will then cause a loss of all high capacity high pressure injection

Critical Tasks
Performing Alternate Rod Insertion
Performing Emergency Depressurization if cannot stay inside Figure N.

EOPs Entered
EOP-1, RPV Control
EOP-6, Primary Containment Control

EOP Contingencies Entered
EOP-3 Emergency RPV Depressurization

Scenario Outline

Facility: *Clinton Power Station* **Scenario No.:** *NRC 1.2* **Op Test No.:** *1*

Examiners: _____ **Operators:** _____

_____ _____

_____ _____

Initial Conditions:

- *The Unit is operating at 80% reactor power following valve testing.*
- *SLC Pump A is out of service.*
- *Emergency Reserve Transformer out of service for bushing replacement.*

Turnover:

- *Raise reactor power to 90%.*
- *Shift WT pumps to allow routine maintenance on pump.*

Event No.	Malf. No.	Event Type*		Event Description
1	*N/A*	*R*	*RO SRO*	*Raise reactor power to 90%.*
2	*N/A*	*N*	*BOP SRO*	*Swap WT Pumps*
3	*PC01A*	*C*	*SRO BOP*	*A Drywell Chiller trips*
4	*YP_XMFTB (4127)*	*C*	*RO SRO*	*A Control Rod drifts out.*
5	*YP_XREMT (782)*	*I*	*BOP SRO*	*Standby air compressors fail to start on low air pressure and must be manually started.*
6	*IA01D*	*C*	*RO SRO*	*Instrument air header leak eventually causes multiple control rod drifts requiring a manual scram be inserted.*
7	*RP03A*	*M*	*ALL*	*ATWS, hydraulic lock.*
8	*SL01B*	*C*	*RO SRO*	*SLC Pump B trips shortly after starting requiring alternate boron injection.*

* **(N)ormal, (R)eactivity, (I)nstrument, (C)omponent, (M)ajor Transient**

Narrative Summary

Event(s)	Description
1	Once the turnover is completed, The SRO should direct the RO to raise power to 90% using recirculation flow.
2	The SRO should also direct the BOP to swap WT pumps to facilitate maintenance activities.
3	The running Drywell chiller trips requiring the shifting of the drywell fans, chilled water pumps, CCP chilled water supply and starting the standby drywell chiller.
4	Once Drywell cooling has been restored a control rod will begin drifting out of the core. The RO will respond per the abnormal procedure and fully insert the control rod. The SRO will refer to technical specification and declare the control rod inoperable and determine appropriate tech spec and administrative actions for the failure.
5	The instrument air header leak will require entry into the abnormal operating procedure and the standby air compressors will fail to start automatically requiring the BOP operator to start them to attempt to maintain air header pressure.
6	An instrument air header leak will occur and eventually will cause multiple control rod drift alarms. The RO will manually scram the reactor based on this condition.
7	When the RO inserts a manual scram an ATWS hydraulic lock will occur. This will require the RO to perform alternate control rod insertions that will be complicated by the loss of control air pressure. Once actions have been taken to reduce reactor water level to control power and alternate boron injection has been directed the instrument air header leak will be reported as isolated allowing the crew to reset the scram and insert control rods.
8	The MSIVs will close due to loss of air pressure resulting in the BIT being approached. The crew will start SLC, 15 seconds after SLC is started the pump will trip requiring Alternate Boron injection.

Critical Tasks

Crew maintains reactor water level to suppress reactor power.
Inserting control rods to reduce power.

EOPs Entered
EOP-6, Primary Containment Control

EOP Contingencies Entered
EOP-1A, ATWS RPV Control

Scenario Outline

Facility: *Clinton Power Station* **Scenario No.:** *NRC 1.3* **Op Test No.:** *1*

Examiners: _____ **Operators:** _____

_____ _____

_____ _____

Initial Conditions:

- *A startup is in progress with power currently at 8% reactor power.*
- *Mode switch has just been placed in RUN.*
- *CRD A is out of service for motor replacement.*

Turnover:

- *Continue with power ascension IAW GP.*

Event No.	Malf. No.	Event Type*		Event Description
1	*N/A*	*R*	*RO SRO*	*Raise reactor power with control rods.*
2	*LS02*	*I*	*RO SRO*	*Control rod reed switch failure.*
3	*I/O*	*C*	*BOP SRO*	*Auto start of SX Pump with failure of SX isolation valve to close.*
4	HP13H	*C*	*BOP SRO*	*Inadvertent opening of an ADS SRV*
5	*PCI1B*	*I*	*BOP SRO*	*Inadvertent dump of the Upper Containment Pool*
6	RR02A	*C*	*RO SRO*	*Reactor Recirculation Pump Trip*
7	*YPXMALSE(665)*	*M*	*All*	*Seismic event causing LPCS suction line break (Unisolable)*
8	*YP_XMFTB(4094)*	*C*	*RO*	*Loss of MDRFP*

* **(N)ormal, (R)eactivity, (I)nstrument, (C)omponent, (M)ajor Transient**

Narrative Summary

Event(s)	Description
1	The SRO should direct the RO to continue the power increase with control rods.
2	While pulling control rods a reed switch fails requiring the use of substitute position.
3	A shutdown service water pump auto starts and the isolation valve fails to close. This requires closing the valve with the hand switch. SRO must evaluate Tech Specs.
4	Inadvertent opening of an SRV requires entry in CPS 4009.01 Inadvertent opening safety/relief valve and CPS 4005.01 Loss of feedwater heating. The SRV closes on the first attempt. The ADS SRV should be declared inop and the Tech Spec LCO entered
5	An inadvertent dump of the upper containment pool requires entry into EOP-6 on high suppression pool level.
6	A reactor recirculation pump trip requires actions for single loop.
7	A seismic event causes a LPCS suction line break that requires a scram and blowdown due to low suppression pool level.
8	A trip of the MDRFP requires transferring to another feedwater source.

Critical Tasks

Manually Scram prior to Emergency Depressurization.
Emergency Depressurize prior to Suppression Pool level reaching 15' 1".

EOPs Entered

EOP-8, Secondary Containment Control
EOP-6, Primary Containment Control
EOP-1, RPV Control

EOP Contingencies Entered

EOP-3, Emergency RPV Depressurization