Revision	16		
Date	10/11/93		

APPENDIX III

RELIEF REQUEST LISTING

Revision 16 revises the Relief Request Index due to approval of Relief Requests 2014 Revision 3, 2035, and 2036.

Submitted By: B.J. Puchett Approved By: Sterver R. Ell



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WP: APP3TITL

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ILLINGIS POWER COMPANY CLINTON POWER STATION GENERAL RELIEF REQUEST INDEX

Relief Request Number	Description	Date Submitted	Date Approved	Remarks
1001	Maximum allowable extension for test frequency of valves and pumps.	6-15-92	6-15-92	(Revision 2) Revised per SER

1002 Deleted

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ILLINOIS POWER COMPANY CLINTON POWER STATIOM VALVE RELIEF REQUEST INDEX

Relief Request Number	Description	Date Submitted	jate Approved	Remarks
2001	Deleted			
2002	Test frequency for valve 1011-F122	3-09-88	9-30-91	(Revision 1)
2003	Deleted			
2004	Test frequency for valves 15X016 A/B	6-30-87	9-30-91	
2005	Deleted			
2006	Deleted			
2007	Deleted			
2008	Test method for water leg keep fill check valves.	4-23-92	9-25-92	(Revision 3)
2009	Test frequency for the Manual Deluge Valves listed in Table 2009-1.	6-15-92	6-15-92	(Revision 2) Revised per SER
2010	Deleted			
2011	Leak rate testing, differential test pressure, analysis of leakage rate and corrective action for containment isolation valves.	12-13-88	9-30-91	(Revision 1)
2012	Test frequency for ADS Valves 1821-F041 B/C/D/F, F047 A/C and F0510. Stroke time evaluation.	3-15-92	Note 1	(Revision 2)
2013	Stroke time trending of the solenoid operated valves listed in Table 2013-1.	6-15-92	Note 1	(Revision 3)
2014	Full-stroke exercising of check valves 1E12-F041 A/B/C, 1E21-F006 and 1E22-F005.	12-23-92	9-19-93	(Revision 3)
2015	Deleted			
2016	Deleted			
2017	Deleted			
2018	Test frequency for valve 1E12-F475.	3-09-88	9-30-91	(Revision 1)
2019	Deleted			
2020	Deleted			
2021	Deleted			

Note 1: Acceptable per Generic Letter 89-04, Attachment 1, Position 6

WP:APP3TAB

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ILLINOIS POWER COMPANY CLINTON POWER STATION VALVE RELIEF REQUEST INDEX

Relief Request Number	Description	Date Submitted	Date Approved	Remarks
2022	Exercise test for valve 11A175.	3-09-88	9-30-91	
2023	CRD valve 112.	2-10-88	9-30-91	
2024	CRD valves 126, 127, 139 and 114.	3-15-92	Note 2	(Revision 1)
2025	CRD valve 138.	2-10-88	9-30-91	
2026	DG valves 1DG008A-K.	3-15-92	Note 2	(Revision 1)
2027	Deleted			
2028	1C41-F336 Exercise	12-13-88	9-30-91	(Revision 1)
2029	Alt. Leak Rate Testing to allow pressure drop tests.	5-27-88	9-30-91	
2030	Deleted			
2031	Deleted			
2032	Stroke time trending of the air operated valves listed in Table 2032-1,	6-15-92	Note 3	(Revision 2)
2033	Test frequency and testing method for valves 1633-F051 and 1633-F052A,B.	11-30-92	Note 5	(Revision 1)
2034	Leak rate testing in groups.	6-15-92	9-25-92	
2035	Relief valve test supervisor requirements.	12-23-92	9-13-93	
2036	SRV set pressure tolerance used to determine increased test sample.	7-16-93	9-13-93	

Note 2: Augmented testing requirements which are beyond the scope of 10CFR50.55a as these components are not ASME Class 1, 2 or 3. No NRC approval required.

Note 3: Acceptable per Generic Letter 89-04, Attachment 1, Positions 5 and 6.

Note 5: Previously approved by 9-30-91 NRC SER.

WP: APP3TAB

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ILLINOIS POWER COMPANY CLINTON POWER STATION PUMP RELIEF REQUEST INDF

Relief Request Number	Description	Date Submitted	Date Approved	Remarks
3001	Annual measurement of pump bearing temperatures.	8-20-87	9-30-91	(Revision 1)
3002	Flow rate measurement of pumps 10001PA, 10001PB and 10001PC.	11-30-92	Note 5	(Revision 3)
3003	Flow rate measurement of pumps 1C41-C001A and C0018.	3-09-88	9-30-91	(Revision 1)
3004	Deleted			
3005	Time for pumps 1C41-C001A and C001B to run prior to measuring/observing pump parameters.	6-30-87	9-30-91	
3006	Ranges for pump flow rates and differential pressure.	4-23-92	9-25-92	(Revision 1)



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WP: APP3TA8

ILLINDIS POWER COMPANY CLINTON POWER STATION NDE RELIEF REQUEST INDEX

	Relief Request Number	Description	Date Submitted	Date Approved	Remarks	
	4001	Weld examination of Class 2 lines which are open-ended.	2-08-93	Note 6	(Revision 2)	
	4002	Deleted				
	4003	Perform VI-3 examinations per 83W84 Code in lieu of all VI-3 and VI-4 examinations.	7-29-88	7-9-92	(Revision 1)	
	4004	Hydraulic and Mechanical Snubbers; Frequency of Inspection, Testing, and Corrective Action	12-28-88	7-9-92	(Revision 1)	



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Note 6: Previously approved by 7-9-92 NRC SER.

WP:APP3TAB

ILLINOIS POWER COMPANY CLINTON POWER STATION REPAIR/REPLACEMENT RELIEF REQUEST INCEX

Relief Request Number	Description	Date Submitted	Date Approved	Remarks
5001	Replacement bolting material	10-20-87		Disapproved
5002	Replacement parts for components	10-20-87	10 C	Disapproved
5003	Deleted			
5004	Deleted			



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ASME Section XI Relief Request

RELIEF REQUEST 1001 (Revision 2)

COMPONENT INFORMATION

All pumps and valves that are required to perform a specific function in shutting down the reactor or in mitigating the

consequences of an accident and are listed in Table I and Table II of the IST Program except safety and relief valves and valves not tested at three (3) month or shorter intervals.

CODE REQUIREMENTS .

The ASME Code Section XI, Subsection IWP-3400 requires performing an inservice test on each pump nominally every three

(3) months. Subsection IWV-3411 requires that valves be exercised and stroke timed at least once every three (3) months. Subsection IWV-3521 requires that check valves be exercised at least once every three (3) months.

RELIEF REQUEST/JUSTIFICATION

ASME Code Section XI, The various subsections mentioned specify the test above, frequency interval but do not Often there are operational

specify any allowable extension. constraints or other valid concerns that make it impractical to perform testing within the Code specified interval. It would be impractical and burdensome for CPS to strictly follow the Code testing intervals without extensions to cover necessary deviations. Clinton Power Station Technical Specification 4.0.2 specifies a maximum allowable extension not to exceed 25% of the surveillance interval. CPS proposes to have a 25% extension which is reasonable for most Code specified testing and provides an acceptable level of This is consistent with Technical quality and safety. Specification 4.0.5.c.

ALTERNATE TESTING PROPOSED

and valves not tested at three (3) month or shorter intervals.

Company will Illinois Power utilize CPS Technical Specification 4.0.2 allowable extension with the specified interval for all pumps and valves except safety and relief valves ILLINOIS POWER COMPANY CLINTON POWER STATION-SECTION XI RELIEF REQUEST Par.

RELIEF REQUEST NO. 2002 (Revision 1)

COMPONENT INFORMATION

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This Control Rod Drive (CRD) Water Header Check Valve (1C11-F122) is a containment isolation valve and prevents the back flow of reactor water when the CRD Pumps are secured. It is an ASME Section III Code Class 2. Section XI Category A/C valve. It is a 2 inch check valve and is highlighted on the attached drawing.

CODE REQUIREMENT

The ASME Code Section XI, Subarticle IWV-3521 requires that this valve be exercised every three (3) monchs.

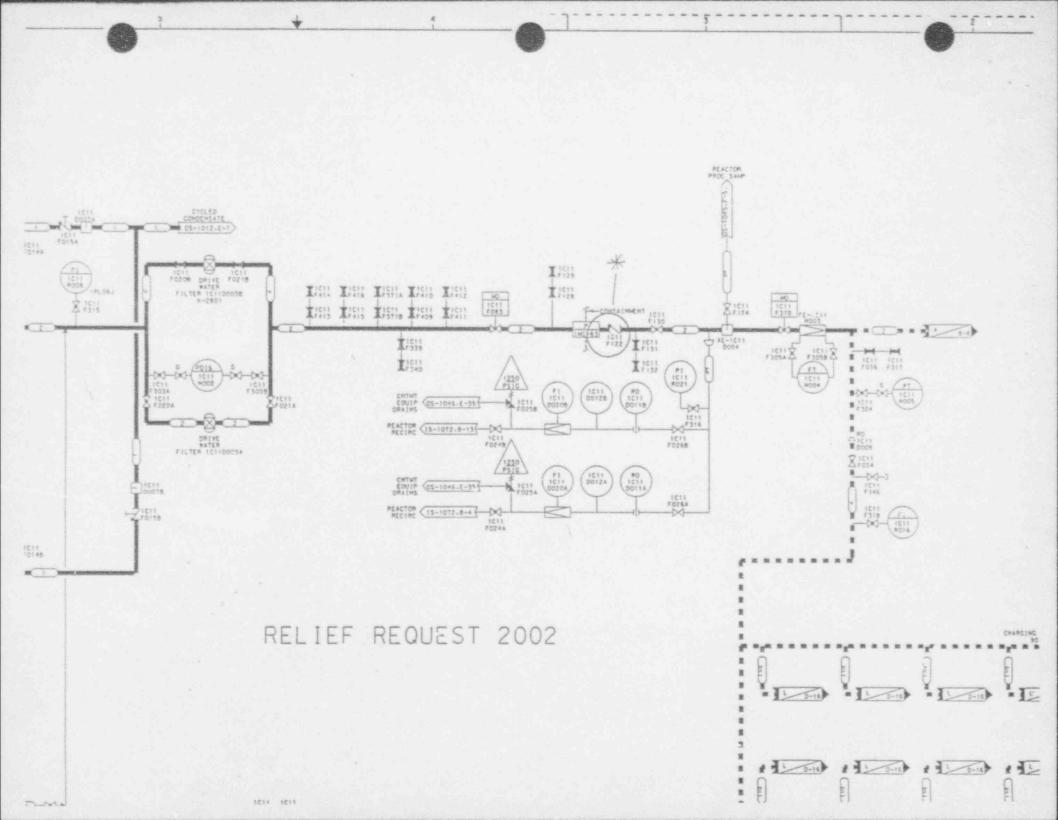
RELIEF REQUEST/JUSTIFICATION

Illinois Power Company requests relief from the Code requirements for the following reasons:

This check value is a containment isolation value which provides drive water to the hydraulic control units and seal flow to the reactor recirculation pumps. This is a normally open value and cannot be tested during normal plant operation or cold shutdowns since testing this value requires that the CRD system be shutdown causing the control rods' motion to be prevented and stopping seal flow to the reactor recirculation pumps. Although the reactor recirculation pumps are not required for safe shutdown of the plant, these pumps are used 'o assure uniform temperatures are maintained in the vessel du 1g cold shutdowns. Exercising this value would also allow air co enter the CRDs which would require substantial venting of the system to remove.

ALTERNATE TESTING PROPOSED

Illinois Power Company will exercise this valve during refueling outages.



ILLINOIS POWER COMPANY CLINTON POWER STATION SECTION XI RFLIEF REQUEST

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KELIEF REQUEST NO. 2004 ...

COMPONENT INFORMATION

The Fuel Pool Emergency Makeup Valves (1SX016A/B) provide emergency makeup water to the Fuel Pools from the lake. They are ASME Section III Code Class 3, Section XI Category B valves. They are 2% inch motor operated gate valves and are highlighted on the attached drawings.

CODE REQUIREMENT

The ASME Code Section XI, Subsection IWV-3411 requires that these valves be exercised and stroke timed every three (3) months.

RELIEF REQUEST/JUSTIFICATION

Illinois Power Company requests relief from the Code requirements for the following reasons:

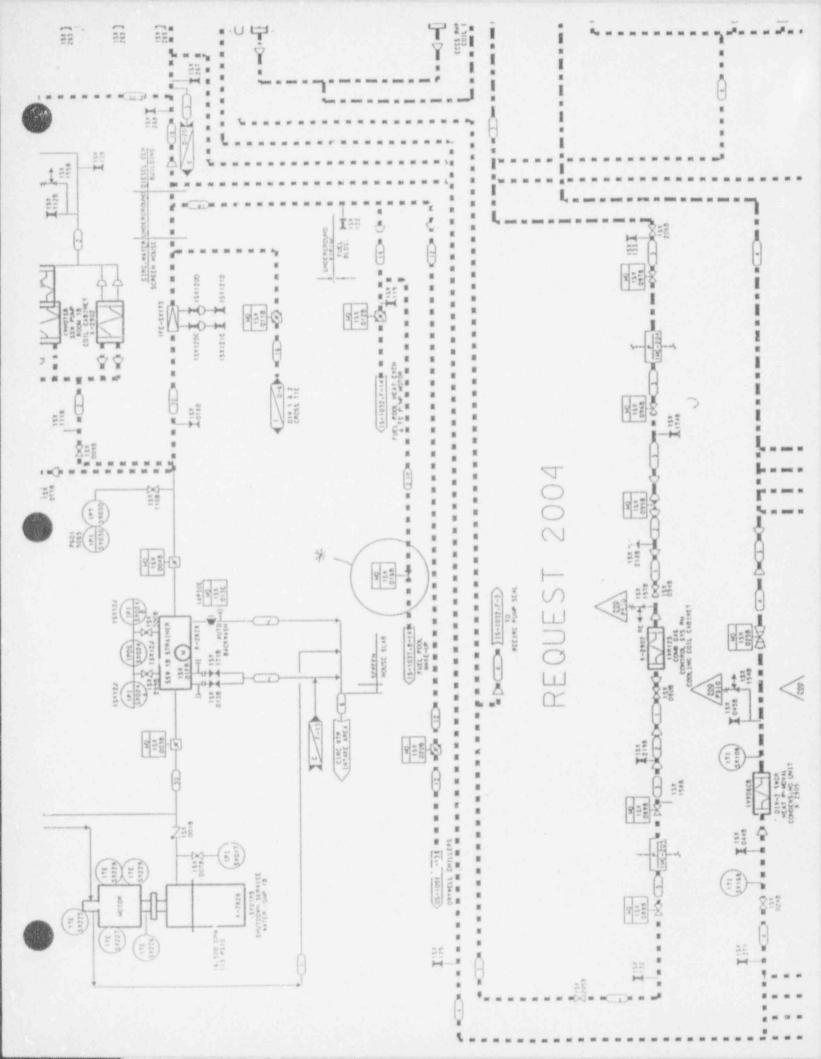
Testing these values will allow lake water into the fuel pools thereby affecting the chemistry of a large quantity of water in the pools. Cleanup of the fuel pool water will generate additional solid radwaste and delay the plant startup. Testing these values during refueling outages will ensure that there is sufficient time to accomplish these activities.

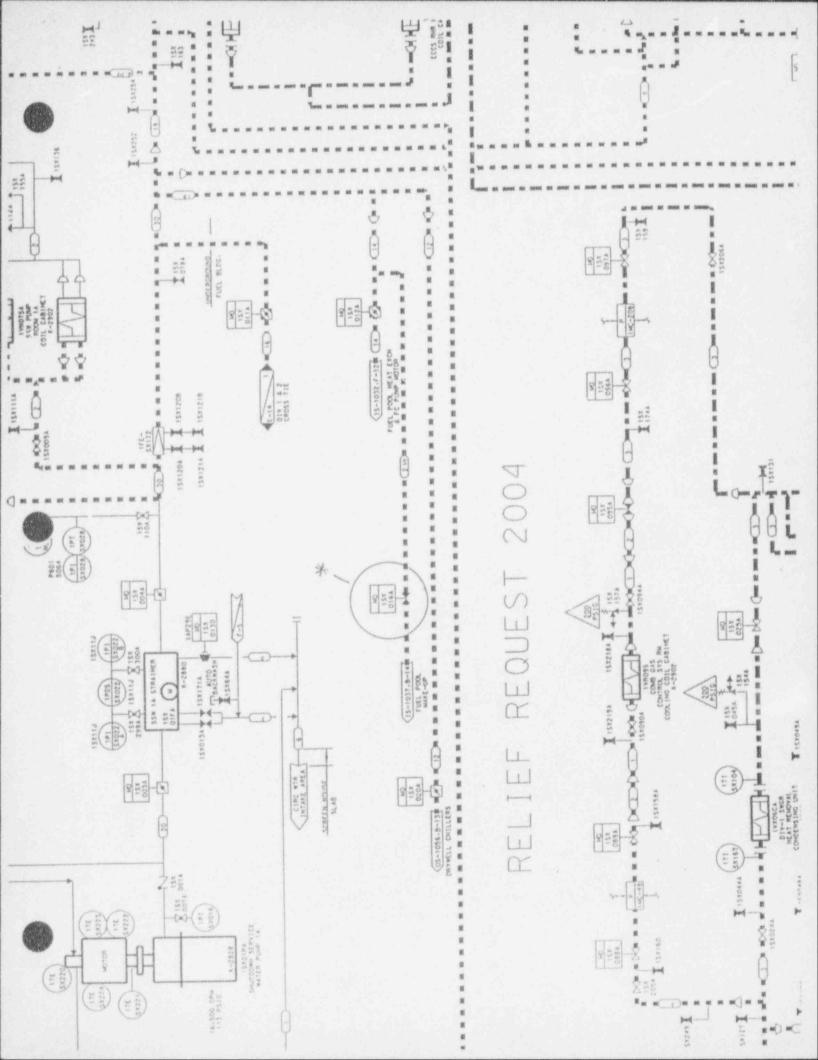
ALTERNATE TESTING PROPOSED

Illinois Power Company will exercise and stroke time these valves during refueling outages.



Section XI/ISI/6





ASME Section XI Relief Request

RELIEF REQUEST 2008 (Revision 3)

COMPONENT INFORMATION

Valve 1E22-F006 is located between High Pressure Core Spray (HP) water-leg pump and the main HP injection line. It is a 2-

inch stop-check valve, ASME Section III Class 2, Section XI Category C. It is circled on the attached drawing "A".

Valves 1E12-F085A, B, C and 1E21-F034 are located between the waterleg pumps and their respective injection lines (Residual Heat Removal (RHR) and Low Pressure Core Spray (LP)). They are ASME Section III Class 2, Section XI Category C valves. They are 2-inch stop-check valves of identical design. As their piping configuration is similar, only 1E21-F034 is circled on the attached drawing "B".

CODE REQUIREMENTS

three (3) months.

RELIFF REQUEST/JUSTIFICATION

The ASME Code, Section XI, Subarticle IWV-3520 requires that these valves be full-stroke exercised individually every

Illinois Power Company requests relief from the Code requirements for the following reasons:

The above groups of valves; although located in separate systems, have similar configurations; they are check valves located in series with other check valves and no test connections provided between them to permit individual valve testing.

Each of these values has a separate check value in series. The two check values in series, although not required by design or safety analysis, provide an added assurance that the high pressure Emergency Core Cooling System (ECCS) line will not damage the lower pressure water-leg piping. Illinois Power Company considers these two check values in series as a single entity and will test them as such.

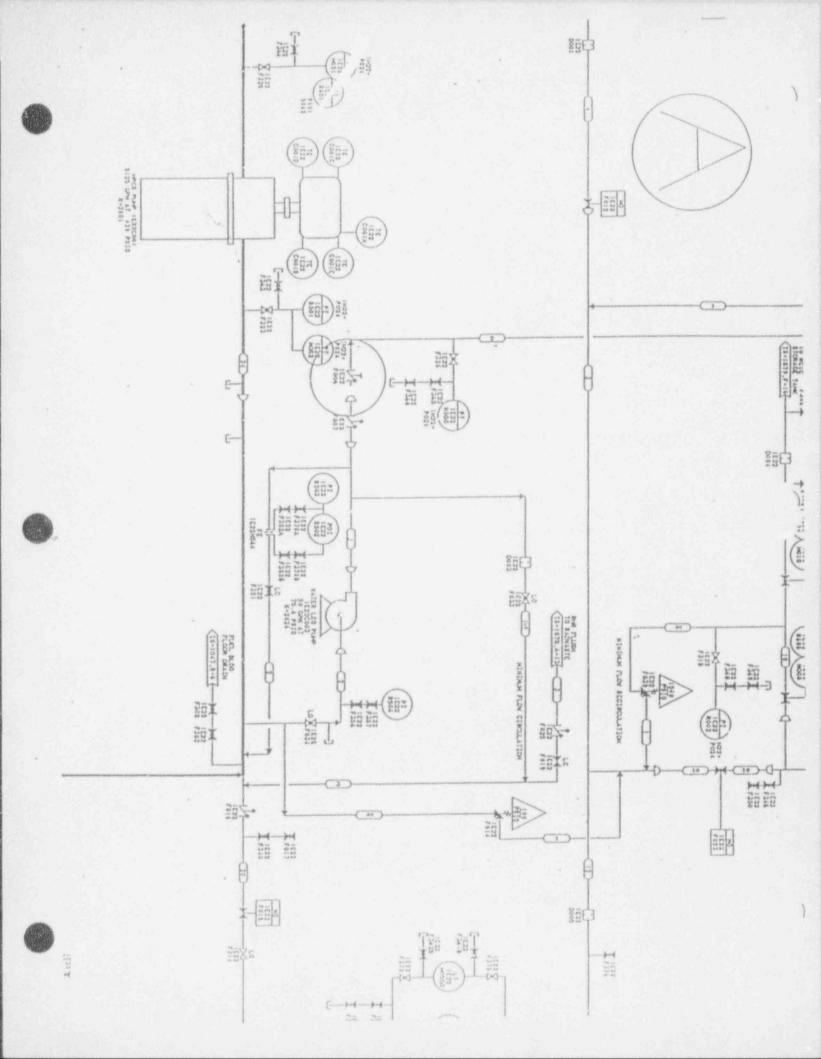


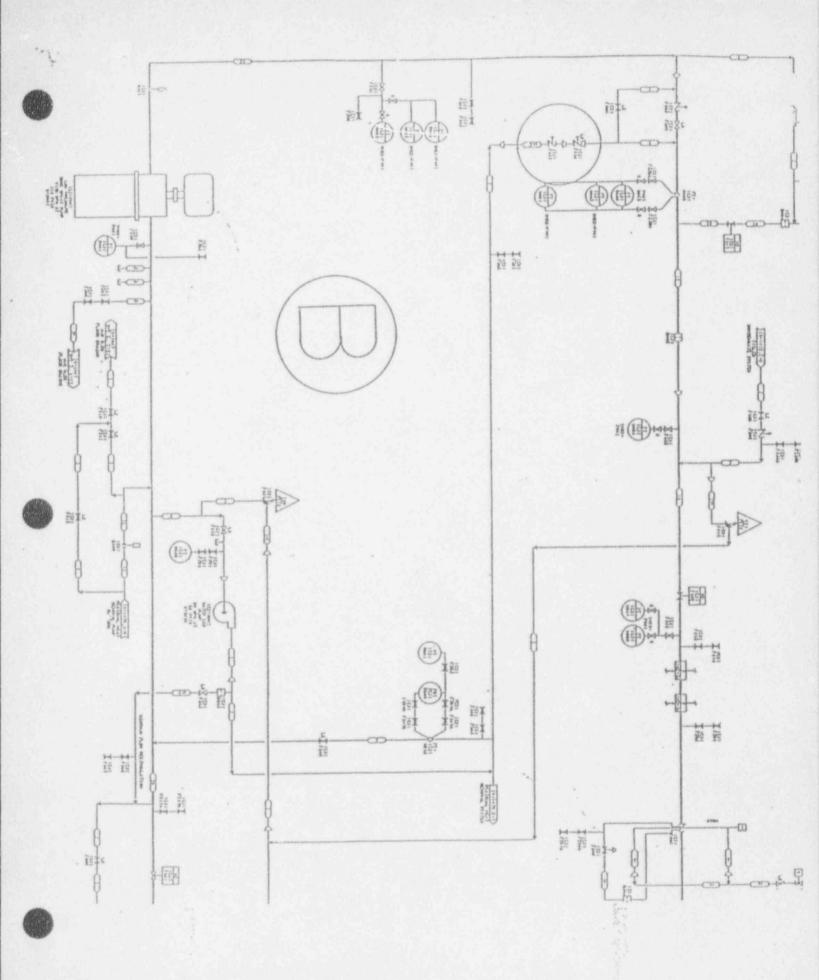
ALTERNATE TESTING PROPOSED

Illinois Power Company considers these two check valves in series a single entity and will perform the closure test every three (3)

months as a single unit. Acceptance criteria will be established and in the event of not meeting this criteria, appropriate action will be initiated for the entity and the deficiency will be corrected.

The open exercise of these valves will also be performed every three (3) months.





ASME Section XI Relief Request RELIEF REQUEST 2009 (Revision 2)

COMPONENT INFORMATION

These Manual Deluge Valves (see Table 2009-1) provide shutdown service water to the Standby Gas Treatment Charcoal Beds, the

Makeup Air Filter Package, and the Supply Air Filter Package. They are all ASME Section III Code Class 3 valves. Valves 1SX071A/B, 073A/B, 074A/B, 076A/B, 105A/B, and 107A/B are ASME Section XI Category B, 3 inch motor operated gate valves. These valves are highlighted on the attached drawing.

CODE REQUIREMENTS

The ASME Code Section XI, Subarticle IWV-3411 and IWV-3521 require that these valves be exercised and stroke timed every

three (3) months.

RELIEF REQUEST/JUSTIFICATION

Illinois Power Company requests relief from the Code requirements for the following reasons:

Testing these values will flood the charcoal beds of the Control Room HVAC System. This would cause these trains to become inoperable and would require replacement of the charcoal.

In order to avoid flooding the charcoal beds or removal of the charcoal, the Shutdown Service Water System main header would be required to be drained and declared inoperable. The Shutdown Service Water System provides cooling water to ECCS systems and various other systems required to be operable in all modes of operation.

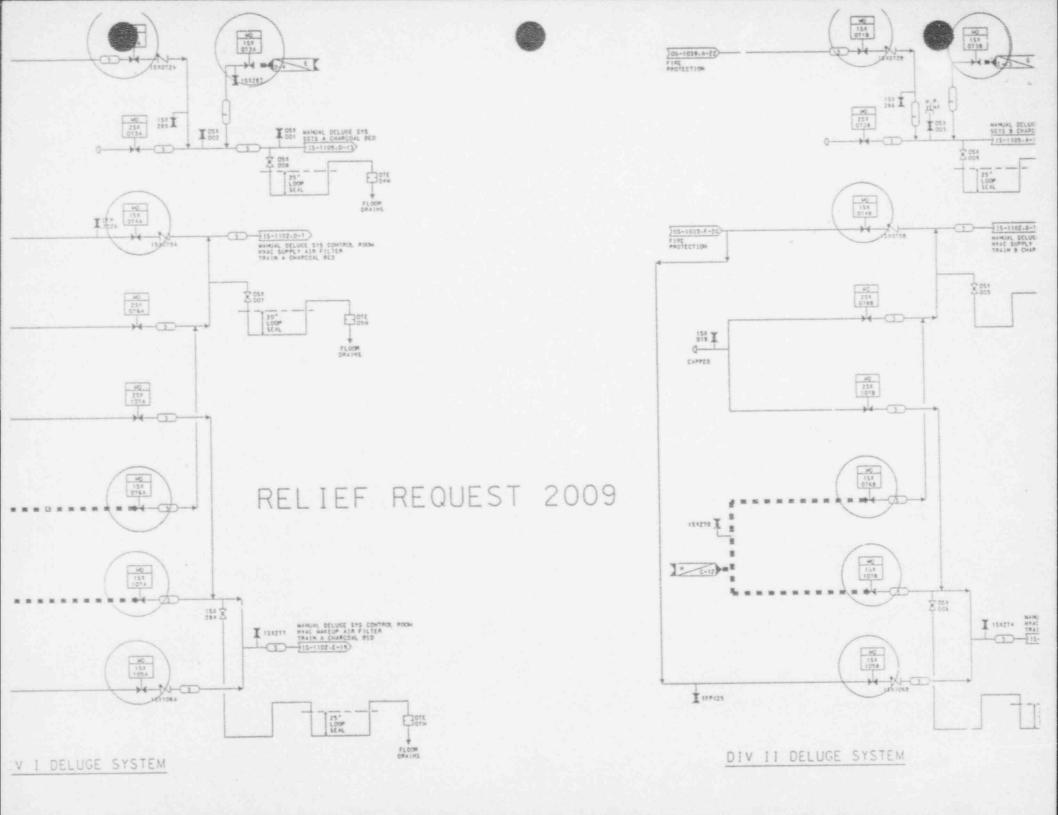
Both of the above options are not possible during cold shutdown testing. The first option would damage the charcoal beds which would require the charcoal to be removed and replaced. This testing would require the Control Room HVAC system to be declared inoperable. The second option is not possible because the plant must be shut down if the Shutdown Service Water header is drained.

ALTERNATE TESTING PROPOSED

Illinois Power Company will perform the required tests during refueling outages.

Table 2009-1

Valve Number	<u>size</u>
1SX071A	3
1SX071B	3
1SX073A	3
1SX073B	3
1SX074A	3
1SX074B	3
1SX076A	3
1SX076B	3
1SX105A	3
1SX105B	3 -
1SX107A	3
1SX107B	3



ILLINOIS POWER COMPANY CLINTON POWER STATION SECTION XI RELIEF REQUEST

KELIEF REQUEST NO. 2011 (Revision 1)

COMPONENT INFORMATION

All Section XI, Category A and A/C valves which require a leakage test per IWV-3420 as identified in Illinois Power's Pump & Valve Testing Program Plan.

CODE REQUIREMENT

The ASME Code Section XI, Subsection IWV-3420, Valve Leak Rate Testing, requires leak rate testing for valves where leakage is limited to a specific amount in fulfillment of their safety function. Subsection IWV-3423, Differential Test Pressure, requires leak rate testing be performed with the system pressure differential in the same direction as it is when the valve is performing its function. Subsections IWV-3426, Analysis of Leakage Rate, and IWV-3427, Corrective Action, require establishing the maximum permissible leakage rate and evaluating the test results for individual valves.

RELIEF REQUEST/JUSTIFICATION

Illinois Power Company requests relief from the Code requirements for the following reasons:

For all valves except Excess Flow Check Valves:

The Nuclear Regulatory Commission has concluded that the applicable leak rate test procedures and requirements for containment isolation valves are determined by 10CFR50, Appendix J. The ASME Code requires individual valve leak rate tests, while 10CFR50, Appendix J allows testing of valves in groups. In many cases, there are no provisions to leak rate test inboard and outboard containment isolation valves individually. Therefore, the maximum permissible leakage rate for individual valves cannot be specified. As the purpose of these valves is to isolate the containment, testing in groups, i.e., by containment penetration, would verify the integrity of the containment boundary.

Also, Section XI, IWV-3427(b), specifies additional requirements for valve sizes of six inches and larger, beyond the requirements of IWV-3427(a). These requirements involve the use of leak rate trending in determining subsequent test intervals. However, industry data has shown that the trending of leak rates is not a meaningful way to predict failure.

For Exc ss Flow Check Valves

Excess flow Check Valves are not required to be individually leak rate tested (Type B or Type C) per Clinton Power Station (CPS) Technical Specification or 10CFR50, Appendix J. However, excess flow check valves are included within the Integrated Leak Rate Test (ILRT) boundaries. Although the ILRT does not measure individual valve leakage rates, the satisfactory completion of the ILRT verifies the overall function of these valves.

Section XI/ISI/18

ILLINOIS POWER COMPANY CLINTON POWER STATION SECTION XI RELIEF REQUEST

RELIEF REQUEST NO. 2011 (Continued)

ALTERNATE TESTING PROPOSED

For all valves except Excess Flow Check Valves

Illinois Power Company will utilize 10CFR50, Appendix J and CPS Technical Specifications to determine the differential test pressure for these containment isolation valves. The maximum permissible leakage rate for a specific containment penetration (inboard and outboard isolation valves combined) will be specified instead of a leakage rate for individual valves as required by IWV-3426, Analysis of Leakage Rates. The evaluation of test results will be based on the penetration leakage rate (inboard and outboard isolation valves combined) instead of on the individual valve leakage rate as required by IWV-3427, Corrective Action.

The trending requirements of IWV-3427(b) will not be implemented since meaningful trends cannot be established.

For Excess Flow Check Valves

No separate test or evaluation either by individual valve or by penetration will be performed on excess flow check valves. These valves are included within the Integrated Leak Rate Test (ILRT) boundaries.

ASME Section XI Relief Request RELIEF REQUEST 2012 (Revision 2)

COMPONENT INFORMATION

These Automatic Depressurization System valves (1B21-F041B/C/D/F, 1B21-F047A/C, 1B21-F051G) depressurize the Reactor

Pressure Vessel to allow Low Pressure Core Spray and Low Pressure Coolant Injection Systems to inject water into the reactor. They are ASME Section III Code Class 1, Section XI Category B/C valves. They are 8 in. x 10 in. safety/relief valves.



The ASME Code Section XI, Subsection IWV-3411 requires that these valves be exercised and stroke timed every three (3)

months. Section XI, Subsection IWV-3417(a) requires trending the stroke time test results and taking appropriate corrective action.



RELIEF REQUEST/JUSTIFICATION

Illinois Power Company requests relief from the Code requirements for the following reasons:

These valves cannot be exercised quarterly during power operations because failure of a valve in the open position would place the plant in a LOCA condition. These valves should not be exercised during cold shutdowns in order to reduce the number of challenges to safety/relief valves as recommended by NUREG-0737 and a recent study on the subject (BWR Owner's Group Evaluation of NUREG-0737 Item II.K.3.16, Reduction of Challenges and Failures of Relief Valves).

The reactor pressure is not utilized when testing these valves. A handswitch is utilized with a special tool which reduces the valve speed to avoid damaging the seating surfaces and the disk. Based upon CPS operating experience, Illinois Power Company will consider these valves as rapid acting valves. As these valves stroke rapidly, measurement of the stroke time of these valves to the nearest second per IWV-3413(b) means that a very small increase in stroke time could result in an extremely large percentage of change. The verification that these valves meet a specified maximum stroke time of a relatively short duration provides adequate assurance of operability of these valves.



ALTERNATE TESTING PROPOSED

Illinois Power Company Will exercise and stroke time these valves during refueling outages.

Illinois Power Company will assign a maximum stroke time of two (2) seconds for these valves. If this limiting stroke time is exceeded, the valve will be declared inoperable and corrective action will be taken. This is in conformance with NRC Generic Letter 89-04, Attachment 1 Position 6.

ASME Section XI Relief Request RELIEF REQUEST 2013 (Revision 3)

COMPONENT INFORMATION

These valves are various rapid acting valves (see Table 2013-1) with various functions. They are ASME Section III Code Class

2 and 3, Section XI Category A and B valves. It should be noted that changes to plant design may result in revisions to Table 2013-These changes may be implemented prior to submittal of the 1. revised table to the NRC.

CODE REQUIREMENTS

appropriate corrective action.

RELIEF REQUEST/JUSTIFICATION

The ASME Code, Section XI, Subarticle IWV-3417(a) requires trending the stroke time results for these valves and taking

Per Generic Letter 89-04, these valves are defined as rapid acting, where measurement of the stroke time of these valves to the nearest second per IWV-3413(b) means that a very small increase ...

in stroke time would result in an extremely large percentage of change. The verification that these valves meet a specified maximum stroke time of a relatively short duration provides adequate assurance of operability of these valves.

ALTERNATE TESTING PROPOSED

Illinois Power Company will assign a maximum stroke time of two (2) seconds for these valves. If this limiting stroke

time is exceeded, the valve will be declared inoperable and corrective action will be taken.

ILLINOIS POWER COMPANY CLINTON POWER STATION SECTION XI RELIEF REQUEST

Valve No.	Size	Valve No.	<u>Size</u>
1CM011	3/4	1PS022	1/2
1CM012	3/4	1PS023	1/2
1CM022	3/4	1PS031	3/4
1CM023	3/4	1PS932	3/4
1CM025	3/4	1PS034	3/4
1CM026	3/4	1PS035	3/4
1CM047	3/4	1PS037	3/4
1.CM048	3/4	1PS038	3/4
1E12-F060A	3/4	1PS043A	3/4
1E12-F060B	3/4	1PS043B	.3/4
1E12-F075A	3/4	1PS044A	3/4
1E12-F075B	3/4	1PS044B	3/4
1E31-F014	1	1PS047	3/4
1E31-F015	1	1PS048	3/4
1E31-F017	1	1PS055	1/2
1E31-F018	1	1PS056	1/2
1PS004	3/4	1PS069	1/2
1PS005	3/4	1PSC70	1/2
1PS009	3/4	1VR035	3/4
1PS010	3/4	IVR036	3/4
1PS016	1/2	IVR040	3/4
1PS010	1/2	1VR041	3/4
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		1WX020	2

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ASME Section XI Relief Request RELIEF REQUEST 2014 (Revision 3)

COMPONENT INFORMATION

These testable check valves (1E12-F041 A/B/C, 1E21-F006, and 1E22-F005) provide isolation from the reactor coolant system

and the emergency core cooling systems (Residual Heat Removal, Low Pressure Core Spray, High Pressure Core Spray). These valves are ASME Section III Code Class 1, Section XI Category A/C valves. Valves 1E12-F041 A,B, and C are 12" diameter and valves 1E21-F006 and 1E22-F005 are 10" diameter. All of these valves are non-slam check valves. One of these valves (1E12-F041A), which is typical of the group, is circled on the attached drawing.



The ASME Code, Section XI, Subsection IWV-3520 requires that these valves be exercised every three (3) months unless

such operation is not practical during plant operation. In this situation, the valves may be part-stroke exercised during plant operation and full-stroke exercised during cold shutdown.

RELIEF REQUEST/JUSTIFICATION

Exercising these values on a three month frequency using the emergency core cooling system pumps to inject water into the

reactor is not in the interest of plant safety, because this cooler water would create an undesirable power transient. In addition, neither the Low Pressure Core Spray nor Residual Heat Removal pumps are capable of opening their injection valves against full reactor pressure. Mechanically exercising these valves during reactor operation is not practical because they are located inside the drywell and access is restricted due to radiation conditions.

Mechanically exercising these valves on a cold shutdown frequency as allowed by the ASME Code is not practical because the air operator is not designed to perform a full stroke test. Although the air operator can be removed to perform the full stroke test, this is a significant maintenance activity and could interfere with work which is necessary to restore the plant to service. This would create an unreasonable hardship for Illinois Power Company. Using pump pressure to exercise these valves during cold shutdown is also not in the interest of plant safety. Although temperature could be matched fairly closely between the injection source (emergency core cooling systems) and the reactor, a minor thermal mismatch between these temperatures creates an undesirable effect on the fatigue life of the reactor nozzles.

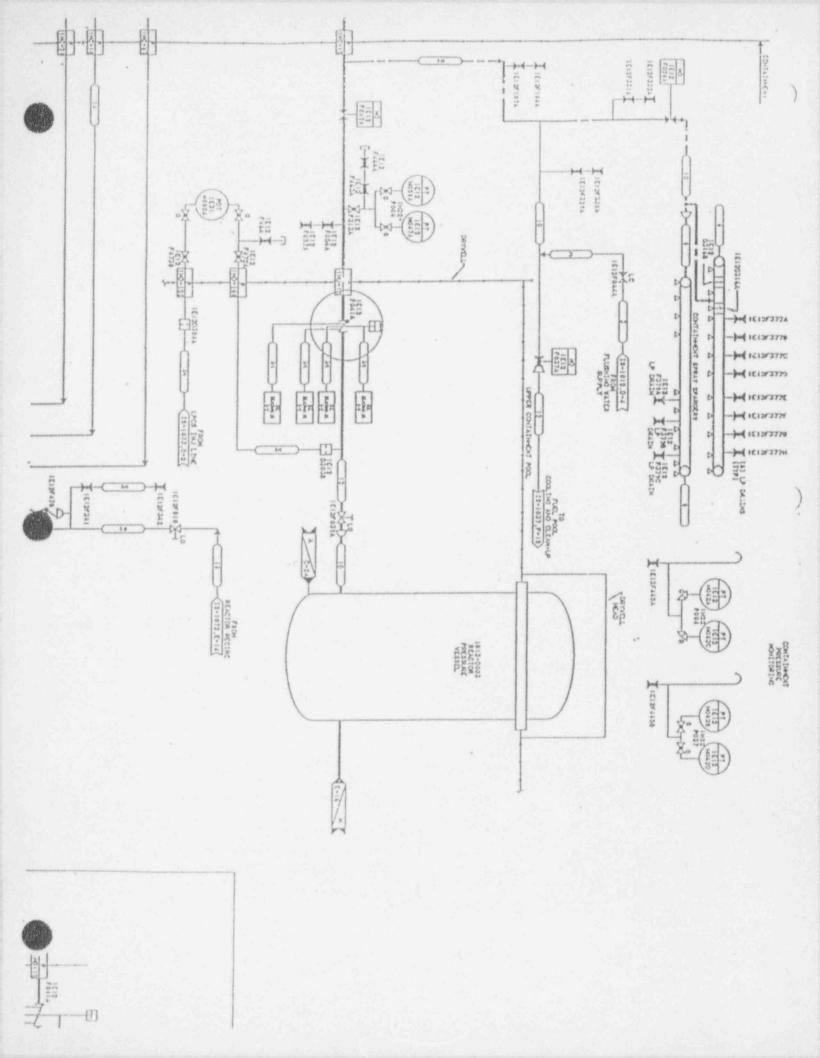
In addition, the injection lines associated with the residual heat removal system nozzles are not equipped with internal spargers. General Electric Service Information Letter 401 identifies problems in injecting water through this flow path and the potential damage to nuclear instrumentation or fuel assemblies which could occur if this flow path were used for other than emergency conditions.

ALTERNATE TESTING PROPOSED

Illinois Power Company will full stroke exercise the valves during refueling by measuring the torque required to lift the

disc and then move the disc through a full stroke.





ILLINOIS POWER COMPANY CLINTON POWER STATION SECTION XI RELIEF REQUEST

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RELIEF REQUEST NO. 2018 (Revision 1)

COMPONENT INFORMATION

Reverse flow check valve 1E12-F475 is a containment isolation valve and provides necessary thermal relief for the Residual Heat Removal System piping between valves 1E12-F008 and 1E12-F009. It is an ASME Section III Code Class 2, Section XI Category A/C valve. It is a one inch check valve and is highlighted on the attached drawing.

CODE REQUIREMENT

The ASME Code Section XI, Subarticle IWV-3521 requires that this valve be exercised every three (3) months.

RELIEF REQUEST/JUSTIFICATION

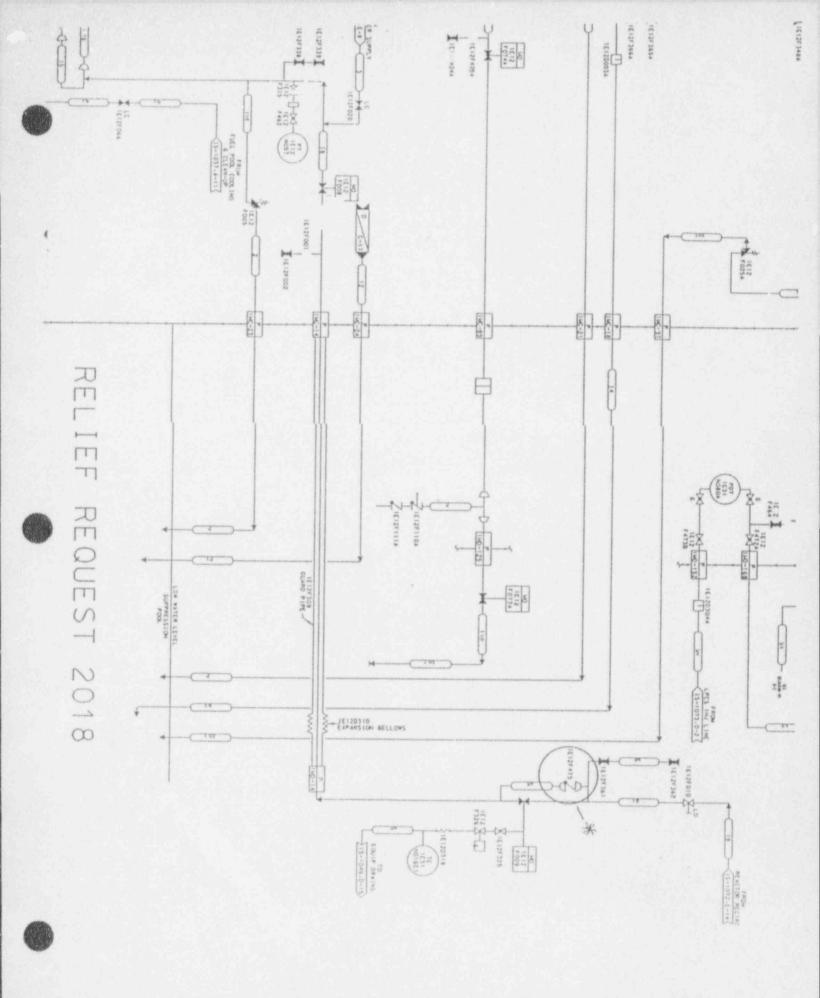
Illinois Power Company requests relief from the Code requirements for the following reasons:

This value is installed in the piping of the shutdown cooling mode of operation of the Residual Heat Removal System and is located inside the drywell. During normal operation, this line is pressurized by the reactor recirculation system. The value is not designed to open against this pressure. Therefore, this value cannot be exercised quarterly.

This valve cannot be exercised during cold shutdowns since the shutdown cooling mode of the Residual Heat Removal System will be inservice. As this line is pressurized at all times during the cold shutdowns, an exercise test is not feasible. In refueling outages, the shutdown cooling and reactor recirculation can be isolated prior to reactor startup to facilitate the operating of this valve.

ALTERNATE TESTING PROPOSED

Illinois Power Company will exercise this valve during refueling outages.



RELIEF REQUEST NO. 2022

COMPONENT INFORMATION

Valve 1IA175 is a ½ inch check valve which functions as a containment isolation valve. The attached P&ID depicts the configuration of this valve in the system.

CODE REQUIREMENT

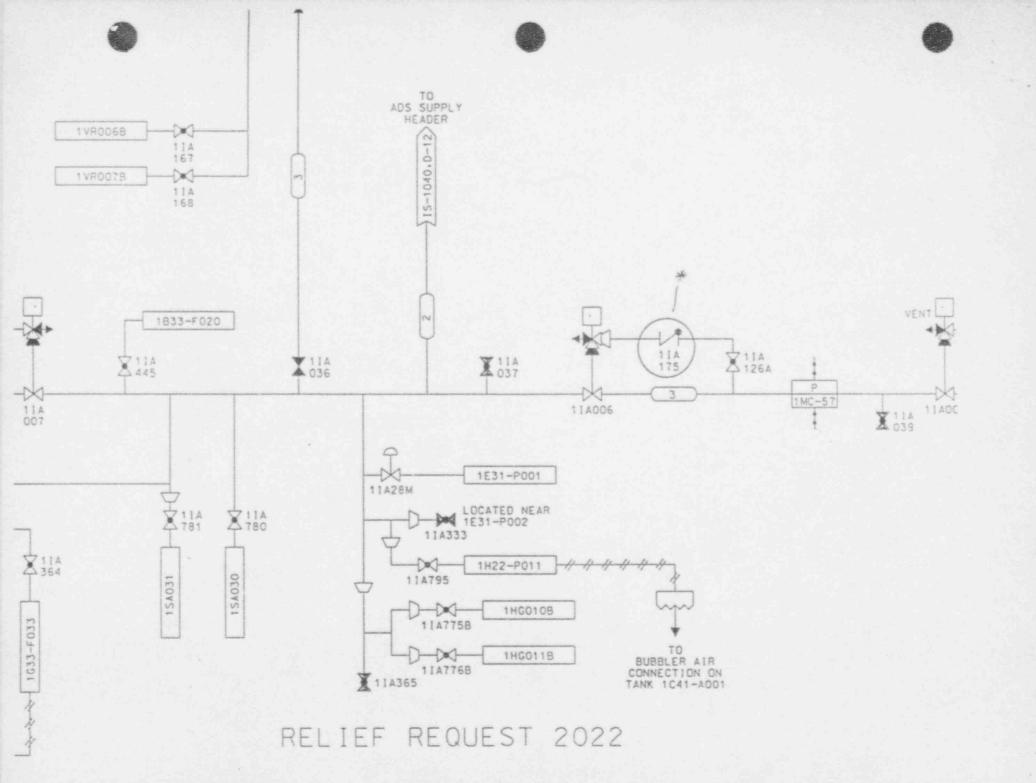
The ASME Code Section XI, Subarticle IWV-3521 requires check valves to be exercised to their safety position every three (3) months.

RELIEF REQUEST/JUSTIFICATION

Illinois Power Company requests relief from the Code requirements because there is no way to functionally test this valve without performing a leak rate test. No direct containment leakage path is available through this valve. The leakage path through this valve is limited by the pipe cap and the piping connections to the actuator. As the probability for leakage through these connections is small, it appears to be excessive to leak test this penetration on a quarterly or cold shutdown basis.

ALTERNATE TESTING PROPOSED

Illinois Power Company will satisfy the exercise requirement for this ½ inch check valve upon performance of the leak rate test. The frequency of the exercise test will be revised to coincide with the leak rate frequency, i.e., 2 years.



ILLINOIS POWER COMPANY CLINTON POWER STATION SECTION XI.RELIEF REQUEST

RELIEF REQUEST NO. 2023

COMPONENT INFORMATION

Valve, 115 (typical of 145 each) is the control rod drive accumulator supply check valve; refer to attached drawing. These are Category A/C 2-inch check valves. These valves allow the individual accumulators to be charged with sufficient pressure to scram the appropriate control rod drive upon loss of CRD header pressure. With a loss of header pressure, these valves must close to maintain enough pressure in the accumulator to insert the CRDs.

CODE REQUIREMENT

Section XI, Subarticle IWV-3521 requires check valves to be exercised to their safety position every three (3) months. IWV-3420 requires Category A valves to be leak tested every 2 years to verify the component's ability to perform its safety function.

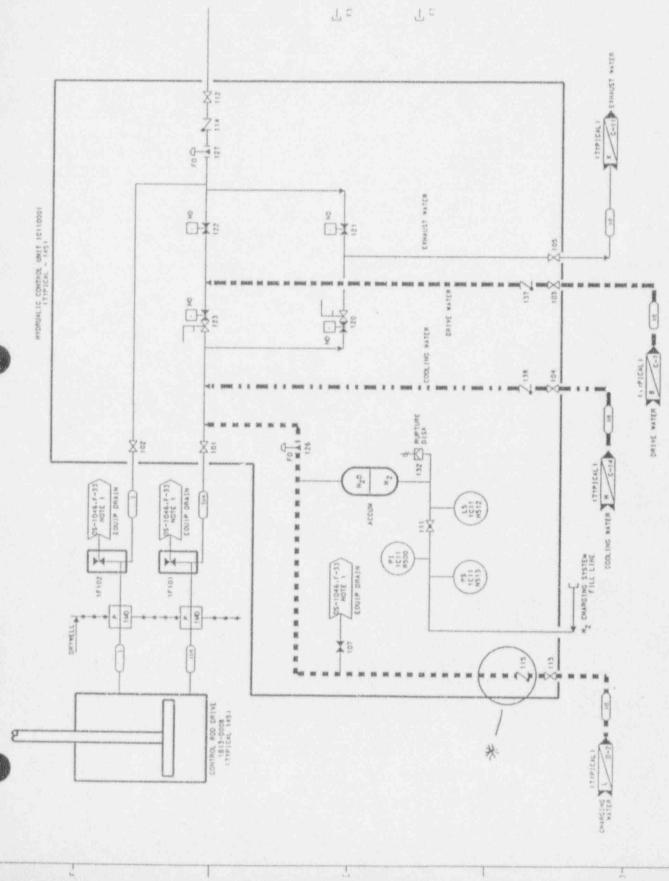
RELIEF REQUEST/JUSTIFICATION

Illinois Power Company requests relief from the above Code requirements because it is not feasible to individually exercise these valves without securing the CRD pumps. The reverse flow exercising and leakage tests of these check valves will be satisfied by the performance of an accumulator pressure drop test, with the pumps secured, during refueling outages. This test will verify the valve is closed by monitoring the accumulator pressure which would indicate any leakage past the check valve.

ALTERNATE TESTING PROPOSED

Illinois Power Company will satisfy the leakage and exercise tests for these valves upon performance of the accumulator pressure drop test on a refueling outage frequency.





13-107B

ASME Section XI Relief Request

RELIEF FEQUEST 2024 (Revision 1)

COMPONENT INFORMATION

Valves 1C11-126, 127 and 139 (typical of 145 each) are power operated valves which actuate (open) to scram the control rod

Valve 1C11-114 (typical of 145 each) is the scram drives. discharge check valve. Refer to the attached schematic drawing for the system.

Valve 126 is a power operated, Category B, 1" diaphragm operated control valve. This valve opens to allow flow to scram the control rod drive. Valve 127 is a power operated, Category B, 3/4" diaphragm operated control valve. This valve opens to allow flow to exhaust from the control rod drive to the scram discharge volume. Valve 139 is a power operated, Category B, pilot air valve. This valve opens to relieve pressure to valves 126 and 127 which causes them to open. Valve 114 is a 3/4" check valve, Category C. This valve opens to allow flow to the scram discharge volume.

CODE REQUIREMENTS

ASME Section XI, Subarticles IWV-3411 and IWV-3413 require power operated valves to be exercised and stroke time tested every 3 months. IWV-3521

requires check valves to be exercised on a 3 month frequency; as well. These valves are not ASME Class 1, 2, or 3, but are included in the CPS Inservice Testing Program since the system performs a safety function. This relief request does not require NRC approval.

RELEEF REQUEST/JUSTIFICATION and the second second

These valves operate simultaneously when a scram signal is present. As these valves are skid mounted with no provisions for testing, it is

not practical to individually test each valve without extensive modifications, which would create a financial hardship to Illinois Power Company. The current testing, per Technical Specification 4.1.3.2, monitors individual rod scram time. This testing does not measure stroke time for the power operated valves or provide specific exercising verification for either the power operated or check valves. However, it does assure that each valve functions properly to allow the rod to move to its safety position in the required time.



ALTERNATE TESTING PROPOSED

Testing of the control rod drive per Technical Specification 4.1.3.2 will be performed in lieu of the Code requirements. The Technical Specifications

require all rods to be tested following any core alterations and any prolonged outages (120 days). Ten percent of the rods are tested on a rotating basis every 120 days and any rod requiring maintenance is tested upon completion of the work. This is in accordance with NRC Generic Letter 89-04, Attachment 1, Item 7.

ILLINOIS POWER COMPANY CLINTON POWER STATION SECTION XI RELIEF REQUESI

RELIEF REQUEST NO. 2025

COMPONENT INFORMATION

Valve 138 (typical of 145 each) is a ½" Category C check valve on the CRD hydraulic control units. Valve 138 is the CRD cooling water check valve which must close upon reverse flow to allow the CRD to insert. Reverse flow through this check valve could impair the function of the CRD. See attached drawing.

CODE REQUIREMENT

Section XI. Subarticle IWV-3521 requires check valves to be exercised to their safety position every three (3) months.

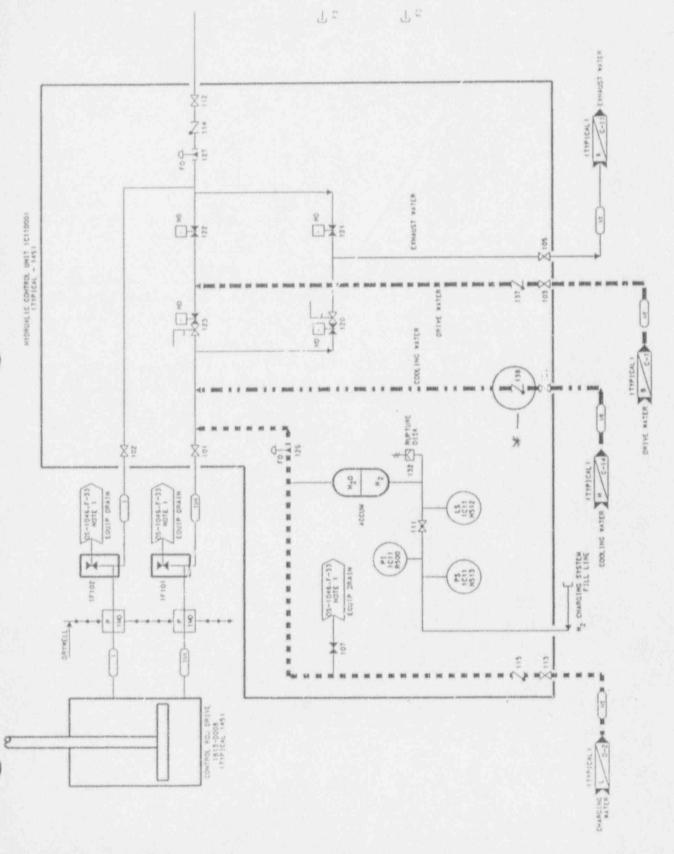
RELIEF REQUEST/JUSTIFICATION

Failure of these values to reverse flow exercise would be identified by performing a "notch" test. The notch test is required per Technical Specification 4.1.3.1.2 which moves each withdrawn CRD one notch every 7 days and every 24 hours if one CRD is immovable as a result of friction. The failure of value 138 would be determined by the inability to meet the acceptance criteria of this surveillance. The CRD would "double-notch" if value 138 did not properly exercise: A "double-notch" is where the CRD would not be able to move one notch at a time.

ALTERNATE TESTING

Exercise valves by performing a "notch" test as described above (i.e., complying with Technical Specification 4.1.3.1.2).





12-1078

ASME Section XI Relief Request

RELIEF REQUEST 2026 (Revision 1)

COMPONENT INFORMATION

Diesel generator (DG) air start valves, 1DG008A-K are 1.5" power operated, Category B valves required to open to allow air to

flow to the air motors which start the emergency Diesel Generators to supply back-up power for the plant.

CODE REQUIREMENTS

ASME Section XI, Subarticles IWV-3411 and IWV-3413 require power operated values to be exercised and have their stroke

time measured every three (3) months. These valves, however, are not ASME Class 1, 2, or 3, but are included in the CPS Inservice Testing Program since the system performs a safety function. This relief request does not require NRC approval.

RELITEF REQUEST/JUSTIFICATION

These values are totally enclosed solenoid values with no positive means of determining value position. It is not

practical to record individual stroke time for these valves without extensive modifications, which would create a financial hardship to Illinois Power Company. Technical Specification 4.8.1.1.2 requires each diesel generator to be tested at least every 31 days. These tests are designed to test the diesel generator as a unit, but do not specifically verify actuation of each individual valve.

ALTERNATE TESTING PROPOSED

No stroke time testing of these air start valves will be performed. The air gauge upstream of each valve will be

monitored to verify that a pressure drop has occurred which indicates that the valves have opened. In addition, diesel generator start times are monitored closely. This test will be performed on a monthly frequency.

ILLINOIS POWER COMPANY CLINTON POWER STATION SECTION XI RELIEF REQUEST RELIEF REQUEST NO. 2028 (REVISION 1)

COMPONENT INFORMATION

Valve 1C41-F336 is a check valve downstream of the Standby Liquid Control (SC) pump and is physically located inside the drywell. This is an ASME Section III Class 1, Section XI Category A/C, 4-inch check valve. The valve is circled on the attached drawing.

CODE REQUIREMENT

The ASME Code, Section XI, Subarticle IWV-3521 requires that this check valve be full stroke exercised every three (3) months.

RELIEF REQUEST/JUSTIFICATION

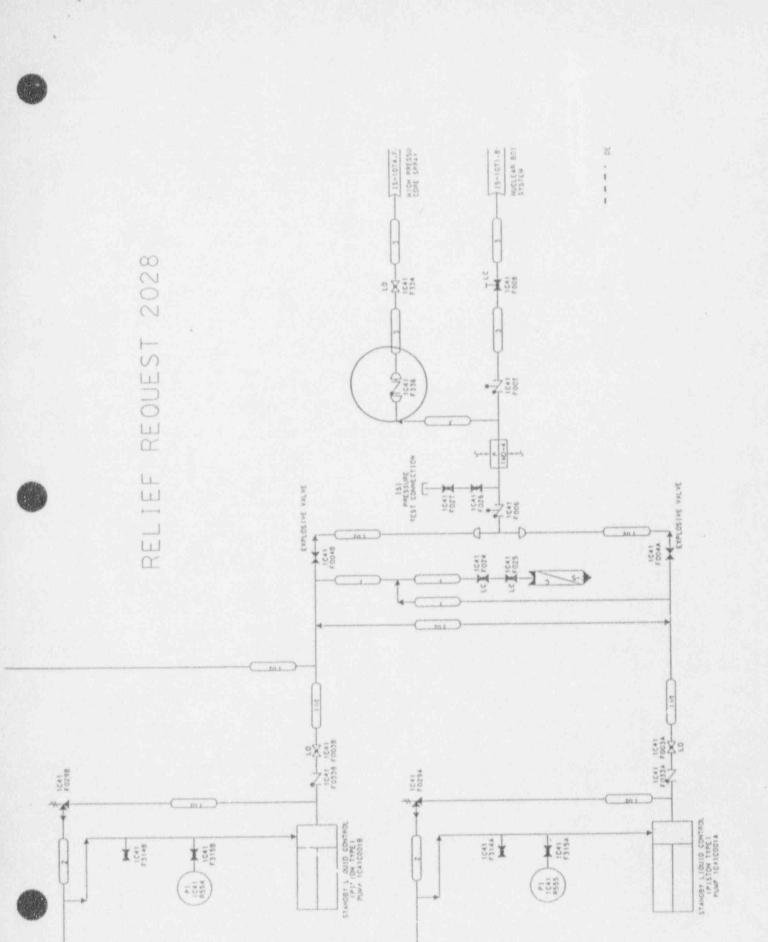
Illinois Power Company requests relief from the Code requirement for the following reasons:

This check valve is downstream of the explosive injection valves which are only required to be opened during refueling outages.

The check valve is totally enclosed without any provisions for exercising the valve externally.

ALTERNATE TESTING PROPOSED

Illinois Power Company will full stroke exercise this check valve every refueling outage. The open direction exercise will be verified with system flow and the closed direction exercise will be verified with a leakage test.



ILLINOIS POWER COMPANY CLINTON POWER STATION SECTION XI RELIEF REQUEST

RELIEF PEQUEST NO.2029

COMPONENT INFORMATION

Various Category A/C check valves whose function is to hold pressure for a specified time in an air accumulator/receiver. See attached list.

CODE REQUIREMENT

The ASME Code Section XI, Subarticle IWV-3424, specifies the methodology to be used for leakage testing.

PELIEF REQUEST/JUSTIFICATION

Illinois Power Company requests relief from the Code requirements for the following reasons:

The design of these piping systems does not facilitate the measuring of actual leak rate through these check valves.

ALTERNATE TESTING PROPOSED

Illinois Power Company will leak test these check valves as follows:

In lieu of monitoring actual leakage rates through each check valve, a pressure drop test over a specified time will be performed. This pressure drop test will not only verify the check valve has seated but will also verify the integrity of the piping system.

ILLINOIS POWER COMPANY CLINTON POWER STATION SECTION XI RELIEF REQUEST

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RELIEF REQUEST NO. 2029 Actechment 1

1821-F039C 1821-F039C 1821-F039D 1821-F039E 1821-F039E 1821-F039K 1821-F039S 1DG168 1DG168 1DG169 1DG170 1DG171 1DG172 1DG173

gains a series of the

ASME Section XI Relief Request RELIEF REQUEST 2032 (Revision 2)

COMPONENT INFORMATION

This Relief Request refers to Power (Air) Operated valves with a stroke time of 10 seconds or less (see Table 2032-1). It

should be noted that changes to plant design may result in revisions to Table 2032-1. These changes may be implemented prior to submittal of the revised table to the NRC.



The ASME Code Section XI, Subarticle IWV-3417(a) requires increasing the testing frequency to monthly for a 50% increase

from the previous stroke time test.

REDIEF REQUEST/JUSTIFICATION

Per Generic Letter 89-04 these valves are defined as rapid acting (with a normal stroke time of less than 10 seconds),

where a 2 second increase can cause the testing frequency for the valves to be increased from quarterly to monthly. CPS's operating experience has shown that when placed on increased frequency for minor increases in stroke time (1 - 2 seconds), none of these valves were found to have a physical problem and all were subsequently returned to normal frequency.

ALTERNATE TESTING PROPOSED

Illinois Power Company proposes to evaluate the test results for the air-operated valves on Table 2032-1 in accordance with

Generic Letter 89-04, Positions 5 and 6, and the Minutes of the Public Meetings on Generic Letter 89-04, page 26, Response to Question 40. Specifically, CPS has established a reference value for each valve in Table 2032-1 based upon each valve's performance history and average stroke time when it is in good condition and operating properly. Should any valve's stroke time increase by more than 50% from the valve's reference value, CPS will consider this to be an indication of potential valve degradation and increase the valve's testing frequency. Should any valve's stroke time increase beyond the valve's limiting stroke time value, the valve will be declared inoperable.

(

As this position is in accordance with the positions stated in NRC -Generic Letter 89-04, no further NRC approval is required.

Table 2032-1

EIN: **ORA026** 0RA027 -0RA028 0RA029 OVC010A 0VC010B 0VC022A 0VC022B 1B33-F019 1B33-F020 1C11-F010 1C11-F011 1E51-F004 1E51-F005 1E51-F025 1E51-F026 1FC023 1RE019 1RE020 1RE021 1RE022 1RF019 1RF020 1RF021 1RF022 1SA030 1SA031 1SX010A 1SX010B 1SX010C 1SX023A 1SX023B 1SX027A 1SX027B 1SX027C 1SX029A

. Table 2032-1 (cont.)

EIN:

1SX029B 1SX029C 1 1SX033 1SX037 1SX041A 1SX041B 1SX181A 1SX181B 1SX185A 1SX185B 1SX189 1SX193A 1SX193B 1SX197 1SX209 1VQ002 1VQ003 1VQ004A 1VQ004B 1VQ005 1VR001A 1VR001B

1VR006A 1VR006B 1VR007A 1VR007B

1

ASME Section XI Relief Request

RELIEF REQUEST 2033 (Revision 1)



Valves 1G33-F051 and 1G33-F052A/B are the injection check valves which complete the flow path between the Reactor Water

Cleanup (RT) System and the Reactor Pressure Vessel. These valves are ASME Section III Code Class 2, Section XI Category B valves. They are 4-inch check valves of identical design and are circled on the attached drawing.

CODE REQUIREMENTS

three (3) months.



The ASME Code, Section XI, Subarticle IWV-3520 requires that these valves be full-stroke exercised individually every

1G33-F052A/B are parallel valves in the piping system and both of these valves are in series with 1G33-F051. These valves are

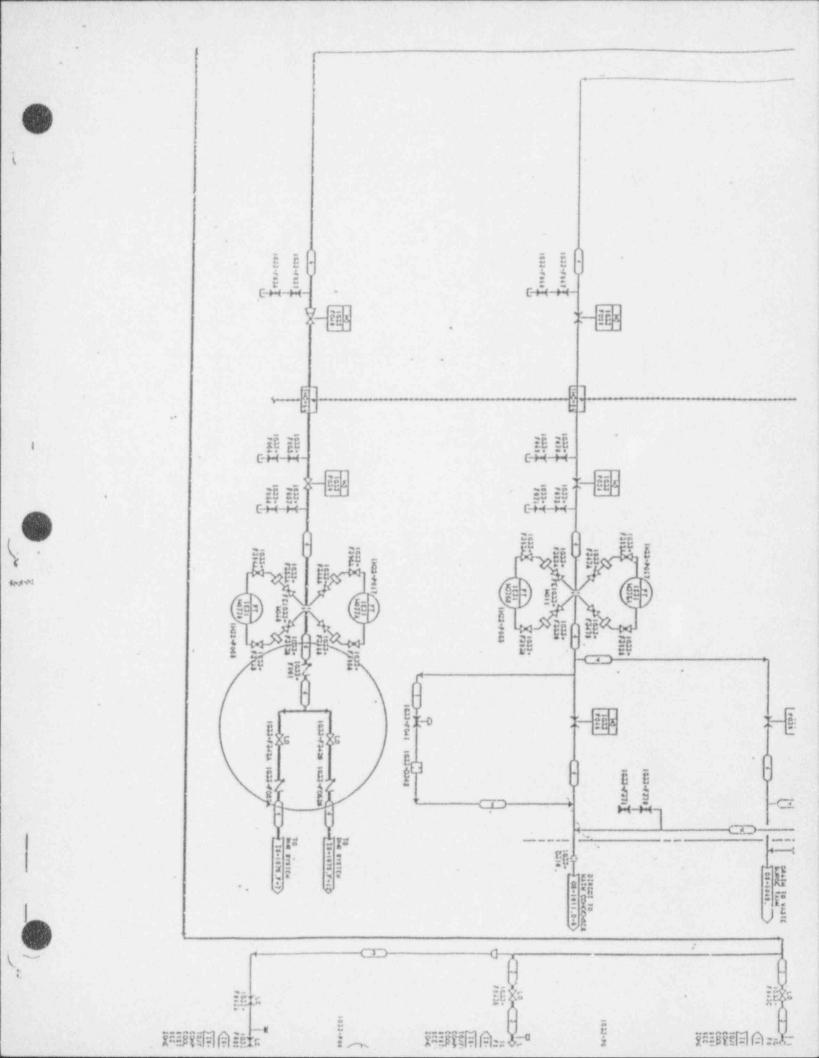
located in series with no test connections provided between them to permit individual valve testing.

These valves cannot be individually exercised every three (3) months since they are located in the Steam Tunnel and physical access is restricted during normal plant operation due to the high radiation field in this area. Testing these valves during cold shutdown will either require the Reactor Water Cleanup (RT) System to be out of service or will require flow to be bypassed to the condenser. Testing these valves with RT system flow bypassed to the condenser may create spurious differential flow signals and may cause containment isolation valves in this system to isolate and subsequently trip the RT pumps, which will likely require filing a Licensee Event Report (LER). Either method will cause the RT system to be out of service and create potential delay for plant startup. This will cause unnecessary hardship for Illinois Power Company without any significant gain in safety.



Illinois Power will test these valves on a refueling frequency using either a sample

disassembly and inspection program or a non-intrusive method.



ASME Section XI Relief Request

RELIEF REQUEST 2034



All Section XI, Category A containment isolation valves which require a leakage test per IWV-3420 as identified in

Illinois Power's Pump & Valve Testing Program Plan.

CODE REQUIREMENTS

The ASME Code Section XI, Subsection IWV-3420, Valve Leak Rate Testing, requires leak rate testing for valves where leakage

is limited to a specific amount in fulfillment of their safety function. Subsection IWV-3423, Differential Test Pressure, requires leak rate testing be performed with the system pressure differential in the same direction as it is when the valve is performing its function.

RELIEF REQUEST/JUSTIFICATION

Illinois Power Company requests relief from the Code requirements for the following reasons:

The Nuclear Regulatory Commission has concluded that the applicable leak rate test procedures and requirements for containment isolation valves are determined by 10CFR50, Appendix J. The ASME Code requires individual valve leak rate tests, while 10CFR50, Appendix J allows testing of valves in groups. By establishing conservative acceptance criteria for a valve group (containment penetration) such that none of the valves can be significantly degraded, considerable savings in personnel radiation exposure and scheduling flexibility can be achieved. This approach is of benefit to Illinois Power and provides equivalent levels of quality and safety to those achieved through individual testing. As the purpose of these valves is to isolate the containment, testing in groups, i.e., by containment penetration, would verify the By establishing integrity of the containment boundary. conservative acceptance criteria, the condition of the valves within reasonable limits can also be established by this method.

ALTERNATE TESTING PROPOSED

The maximum permissible leakage rate for a specific containment penetration (inboard and outboard isolation valves

combined) will be specified utilizing conservative acceptance criteria which allows for detection of valve degradation within

reasonable limits instead of a leakage rate for individual valves as required by IWV-3426, Analysis of Leakage Rates. Attachment 1 to this relief request provides a technical basis for the acceptance criteria. The evaluation of test results will be based on the penetration leakage rate (inboard and outboard isolation valves combined) instead of on the individual valve leakage rate as required by IWV-3427, Corrective Action.

Relief Request 2034 - Attachment 1

The following is an idealized model of valve leakage as diagramed in Figure 1. The purpose of this model is to demonstrate that leakage, typical of the type of leakage which would be created by abrasive particles being ground across the valve seat, can be measured prior to component degradation using an acceptance criteria of 20,000 standard cubic centimeters per minute (sccm). Using this acceptance criteria, leakage path size is calculated using a given differential pressure. This is typical of a problem encountered in the field when performing local leak rate testing (LLRT).

For the purpose of this calculation, the leakage path is assumed to be a square edged orifice. This assumption is representative of a scratch across a valve seat made by a abrasive particle or the type of leakage path which an LLRT is designed to measure. Using the Reactor Coolant System as an example, the normal or average particle size is 18 microns $_1$, or 7.1 x 10⁻⁴ inches. As the calculation will demonstrate, 20,000 sccm is a conservative acceptance criteria which will allow adequate monitoring of component degradation prior to failure. Further, a valve which fails to fully seat will produce leakage rates which are several orders of magnitude greater than the acceptance criteria used for valve testing.

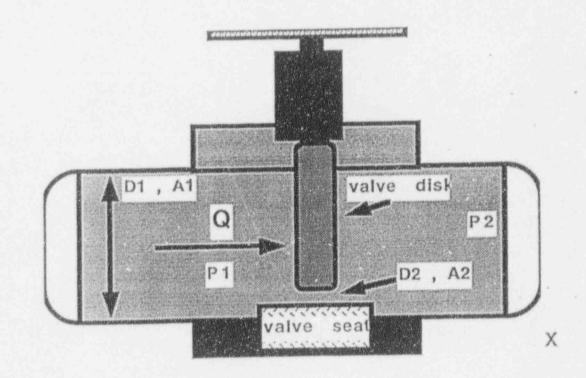
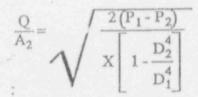


FIGURE 1

Where:

- Q = flowrate in standard cubic centimeters per minute (sccm) (for this calculation the flowrate is 20000 sccm)
- $(P_1 P_2) =$ pressure differential in pounds per square inch (psid)
 - (for this calculation the differential pressure is 9 psid)
- X = the density of the medium in pounds mass per cubic foot (lbs_m/ft^3) (for this calculation the test medium is air with an assumed density of 0.076 lbs_m/ft^3)₂
- D_1 = the full diameter of the test or component body
- D_2 = the orifice or corrosive particle diameter
- A1 = the cross-sectional area of the test or component body
- A_2 = the cross-sectional area of the orifice
- pi = the numerical constant 3.1415927.....

Using the Bernoulli obstruction theory₃ for a generalized flow obstruction, which can be written as follows:



This theory is based on the assumptions of incompressible, steady, frictionless, flow. The validity of these simplifying assumptions for the range of test parameters of concern for valve testing (small differential pressures and low flow rates) was verified via experimentation using an LLRT machine and precisely machined orifices of various sizes. The results of this experimentation are tabulated in Table 1 of this discussion and are compared with calculated values using the same flowrates and differential pressures.

Solving for D_2^2 one obtains the following expression:

$$D_{2}^{2} = \frac{4}{pi} A_{2} = \frac{4}{pi} \left[\frac{Q}{\sqrt{\frac{2(P_{1} - P_{2})}{X \left[1 - \frac{D_{1}^{4}}{D_{1}^{4}}\right]}}} \right]$$

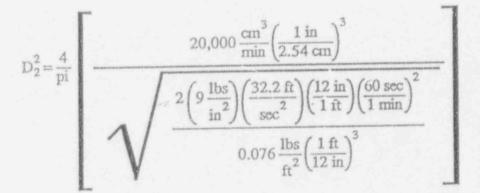
Because the orifice diameter D_2 is very small in relation to the component diameter D_1 the term

 $\begin{bmatrix} 1 - D_2^4 \\ D_1^4 \end{bmatrix}$ can be considered approximately equal to 1.

This further simplifies the expression for D_2^2 to the following:

$$D_2^2 = \frac{4}{pi} \frac{Q}{\sqrt{\frac{2(P_1 - P_2)}{X}}}$$

Inserting numerical values and the appropriate conversion factors yields:



$$D_2^2 = 2.06 \times 10^{-3} \text{ in}^2$$

 $D_2 = 0.045$ in. or slightly under 3/64 "

An orifice of this size is approximately equal to the size of the maximum leakage path allowed using an acceptance criteria of 20,000 sccm. This is equivalent to 100 scratches of "normal" 18 micron size, which would represent valve wear over many cycles, or a significant leakage path 100 times the size of a path created by one 18 micron abrasive particle. Thus, a 20,000 sccm criteria can be utilized to monitor for degradation of several valves in the penetration group and is sensitive enough to identify significant problems.



		Table I	The second s	11.5.1.1.2.1.1.1
flow(sccm) ±3%	diff.press.(psid) ± 3 %	test dia.(in)	calc.dia.(in)	zdiff.
1950	9.48	0.0156	0.0139	11.4
7000	9.45	0.0313	0.0263	16.0
94000	5.00×	0.125	0.113	9.76
94000				

Table 1

* this was the highest differential pressure the LLRT stand could maintain at this large of an orifice size.

** nitrogen testing medium - density = $0.07307 \text{ lb}_{m}/\text{ft}^{3}$ 2

As Table 1 shows, the error between the calculated data and the experimentally measured data is acceptable. The Bernoulli model used in this calculation may be considered ideal and is not necessarily identical to what is encountered in the field, However, for the range of values required, the additional effects of non-ideal conditions, friction and compressibility, etc. are negligible when compared to field.

Reference 1: CPS Plant Modification RT-029 FECN 24600 Reference 2: CRC Handbook of Tables for Applied Engineering Science Reference 3: Fluid Mechanics Second Ed.; White F. M.; McGraw Hill

ASME Section XI Relief Request

RELIEF REQUEST 2035

DISCUSSION

This Relief Request pertains to the qualification of personnel performing supervision of safety valve and relief valve testing.

CODE REQUIREMENTS

The ASME Code, Section XI, Subarticle IWV-3512, requires safety valve and relief valves to be tested in accordance with

ASME PTC 25.3-1976. ASME PTC 25.3-1976, Subsection 3.02, Qualification of Person Supervising the Test, states that a person who has obtained a degree in a branch of Engineering from a recognized school of Engineering and in addition, has had at least two years practical experience in fluid flow measurement, may be considered qualified to supervise the test.



RELIEF REQUEST/JUSTIFICATION

Illinois Power Company requests using OM-1 for qualification of relief valve test supervisor in lieu of ASME PTC 25.3-1976.

The 1989 Edition of ASME Section XI has been incorporated by rulemaking into 10CFR50.55a. IWV specifies that, for inservice testing of valves, OM-10 provides the requirements. OM-10, Subsection 4.3.1, states that safety and relief valves shall meet test requirements of OM-1. OM-1 places the responsibility on the Owner for qualification of personnel who perform maintenance and testing and requires that testing activities be conducted in accordance with the Owner's Quality Assurance Manual.

PROPOSED ALTERNATE REQUIREMENTS Illinois Power will qualify safety/relief valve test supervisors in accordance with the Illinois Power Quality Assurance Manual.



ASME Section XI Relief Request

RELIEF REQUEST 2036

COMPONENT INFORMATION

The Main Steam Safety Relief Valves listed on Attachment 1 are ASME Section III Code Class 1, Section XI Category C valves.

They are 8" x 10" Dikkers Model G471-6/125.04 valves.

CODE REQUIREMENTS

RELIEF PEQUEST/JUSTIFICATION

The ASME Code Section XI, Subarticle IWV-3513, states that when any valve in a system fails to function properly during a regular test additional valves in the system shall be tested.

> Illinois Power requests the use of paragraph 1.3.3.1 of Part 1 of ASME/ANSI OM-1987 (OM-1) for determination of when additional

tests are required. A plant specific analysis will be performed as required by the GE/BWROG Topical Report NEDC-31753P and the NRC Safet; Evaluation. When the analysis is complete, it is expected to conclude that a tolerance of ±3% of the nameplate set pressure is acceptable for overpressure protection. This analysis will be used to ultimately make a change to the plant Techn. cal Specification. It will also be used as the basis for test sample expansion when the initial sample test results are found lower than the stamped set pressure since OM-1 only addresses tests that exceed the stamped set pressure by 3%.

The intent for additional testing is to ensure that no generic problems exist which could affect other valves not scheduled for testing. We believe the use of a ±3% tolerance for the setpoint is acceptable for determining the need for additional testing based on the analysis described above. Even though the Technical Specifications will continue to require a tolerance of ±1% for operability, the increase in the tolerance for determination of sample expansion will still allow for identification of potential generic problems. These valves have previously experienced setpoint drift between 1% and 3% which was not representative of generic problems with other valves. This phenomenon of setpoint drift between 1% and 3% is typical for these valves throughout the Additional testing is not warranted for valves not industry. scheduled for testing unless the ±3% tolerance used for the overpressure analysis is exceeded.

Illinois Power does not intend to adopt all requirements related to testing of ASME Class 1 Pressure Relief Valves with Auxiliary Actuating Devices contained in OM-1. Doing so would require additional tests (seat leakage, electrical characteristics and pressure integrity of solenoid valves, pressure integrity and stroke capability of air actuator) and inspections that are not currently required by the 1980W81 Code. Therefore, these requirements are not in the IST Program and identified as IST requirements in the implementing procedures. The additional tests required by OM-1 would result in major procedure changes and/or development which would create a burden between now and the beginning of the fourth refueling outage (RF-4) scheduled to begin September 26, 1993.

While implementing the additional tests at the current time could be beneficial from a testing standpoint, the tests do not sufficiently increase the safety aspects of the setpoint testing for the difference between a 1% and a 3% tolerance for testing additional valves. The basis for this conclusion is that the overpressure protection analysis will indicate that the system can withstand the resulting overpressure even if the valves drift to 3% above the setpoint. Therefore, it would be an undue hardship to require implementation of all of the requirements of OM-1 in order to use a $\pm 3\%$ tolerance for determining the need for additional testing. Upon completion of the TS change, the operability of the valves will also be based on a $\pm 3\%$ tolerance and this relief request will no longer be necessary.

ALTERNATE TESTING PROPOSED

For Main Steam Safety Relief Valve setpoint testing (asfound), additional valves will be tested if the as-found

setpoint is outside $\pm 3\%$ of nameplate set pressure. Sample expansion will be consistent with IWV-3513. Our current Technical Specification limit of $\pm 1\%$ will continue $\pm 2\%$ determine operability and the valves will be within $\pm 1\%$ of nameplate set pressure prior to installation.



ATTACHMENT 1

1B21-F041A 1B21-F041B 1B21-F041C 1B21-F041D 1B21-F041F 1B21-F041G 1B21-F041L 1B21-F047A 1B21-F047B 1B21-F047C 1B21-F047F 1B21-F047F 1B21-F051B 1B21-F051C 1B21-F051D

1B21-F051G



ILLINOIS POWER COMPANY CLINTON POWER STATION SECTION XI RELIEF REQUEST

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RELIEF REQUEST NO. -3001 (Revision 1)

COMPONENT INFORMATION

These pumps (see Table 3001-1) are to safely shutdown the reactor or to mitigate the consequences of an accident. They include all of the pumps in the IST Program except the RCIC Pump. These pumps are identified in Table 3001-1 by their Equipment Identification Number, Name, and ASME Section III Code Class.

CODE REQUIREMENT

The ASME Code Section XI, Subsection IWP-4310 requires the measurement of these pumps' bearing temperature annually.

RELIEF REQUEST/JUSTIFICATION

Illinois Power Company requests relief from the Code requirements for the following reasons:

The measurement of these pumps' bearing temperature annually does not increase any confidence in the reliability of the pumps because bearing temperature rises just minutes prior to failure of the pump bearing. In order to measure this parameter, bearing temperature is required to be stabilized per IWP-3500(b), which requires the pump to be running at least an hour. Since this bearing temperature measurement does not increase any confidence in the pumps' reliability and will reduce the pumps' life due to the time required to run the pump, this measurement does not provide meaningful data. Therefore, measurement of these pumps' bearing temperatures annually as required by the Code will not be performed.

ALTERNATE TESTING PROPOSED

None.

Table 3001-1 (Revision 1)

in adalate into a substitution where managements and and and and matching and a state of

Identification Number	Pump Name		Sect ode C		
1C41-C001A	Standby Liquid Control (SLC) Pump A.		2		
1C41-C001B 1D001PA 1D001PB 1D001PC 1E12-C002A	Standby Liquid Control Pump B Diesel Oil Transfer Pump A Diesel Oil Transfer Pump B Diesel Oil Transfer Pump C Residual Heat Removal (RHR) Pump A		2333		
1E12-C002B 1E12-C002C 1E12-C003 1E21-C001	Residual Heat Removal Pump B Residual Heat Removal Pump C Waterleg Pump Low Pressure Core Spray (LPCS)		2222		
1E21-C002 1E22-C001	Pump Waterleg Pump High Pressure Core Spray (HPCS)			2	
1E22-C003 1E51-C003 1FC02PA 1FC02PB 1SX01PA 1SX01PB 1SX01PC OVC08PA	Pump Waterleg Pump Fuel Pool Cooling and Clean-Up Fuel Pool Cooling and Clean-Up Shutdown Service Water Pump A Shutdown Service Water Pump B Shutdown Service Water Pump C Control Room HVAC Chilled Water	r amb.		223333333333333333333333333333333333333	
OVC08PB	Pump A Control Room HVAC Chilled Water Pump B	•		3	

1

ASME Section XI Relief Request RELIEF REQUEST 3002 (Revision 3)

COMPONENT INFORMATION

This relief request refe s to three (3) Diesel Fuel Oil (DO) transfer pumps (1D001PA, 1D001PB, and 1D001PC). These

pumps are used to transfer diesel fuel from the diesel storage tanks to the diesel fuel day tanks. The pumps are ASME Section III, Code Class 3. All of the pumps are Delaval IMO type N3DBS-137. CPS tests the pumps at a fixed differential pressure (DP) of 13 psid, with baseline flow rates ranging from 16.424 to 18.13 gpm.

CODE REQUIREMENTS

The ASME Code, Section XI, Subsection IWP-3210 tabulates the allowable ranges of inservice test quantities (flow

rate) in relation to the reference or baseline values. Table IWP-3100-2 requires an acceptable flow rate range of 0.94 to 1.02 of baseline flow rate, and an Alert range of 0.9 to 1.03 of baseline flow rate.

RELIEF REQUEST/JUSTIFICATION

These pumps do not have flow rate instrumentation installed. A calculation is used to determine a flow rate.

Because the DO pumps operate at a low flow and the Code specified acceptable ranges are based upon a percentage of the baseline, an increase in flow of less than 0.5 gpm (1.02 x baseline flow rate) is sufficient to force any of the pumps into the Required Action range. (SEE GRAPH 1)

The design-required fuel delivery rates for each of the diesel generators (supplied by the day tanks which the DO pumps maintain) is considerably less than the rated fuel delivery of any of the three DO pumps. The diesel engines are equipped with skid mounted pumps which supply fuel oil at a rate of 4 gpm per engine. The engines consume less than 3 gpm per engine with the excess routed back to the day tank. Pumps 1D001PA and 1D001PB supply 2 engines each and therefore 8 gpm has been determined to be the limiting flow rate required for these pumps to ensure adequate fuel delivery. Pump 1D001PC upplies only 1 engine and therefore has a limiting flow rate of 4 gpm.

CPS believes that due to the low flow characteristics of the DO pumps and the significant margin of safety between the flow

requirements of the diesel generator and the baseline flow rate provided by the DO pumps, compliance with the Code requirements constitute a hardship with no appreciable gain in safety.

ALTERNATE TESTING PROPOSED

Illinois Power will calculate the flow rate (Q) of the Diesel Fuel Oil Transfer Pumps by dividing the change in level of

the diesel fuel day tank by the time the Diesel Fuel Oil Transfer Pump is in operation.

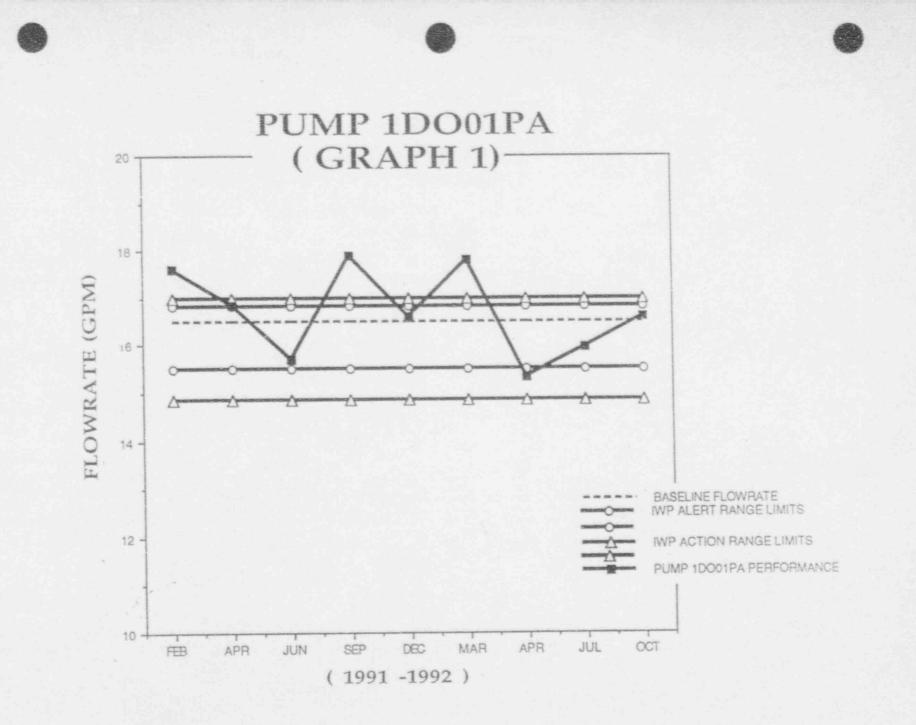
Illinois Power will utilize the following Allowable, Alert, and Action ranges for Diesel Oil pump flowrates.

Acceptable Range	\geq .94 and \leq 1.10 of baseline flow
Alert Range	\geq .90 and < .94 of baseline flow
Action Range	< .90 of baseline flow > 1.10 of baseline flow

Based upon CPS's operating experience, Illinois Power believes that the revised upper ranges will provide good indication of pump degradation without the unnecessary burden of requiring the pumps to be tested on an increased frequency or declared inoperable for minor (< 0.5 gpm) variations in flowrates. (SEE GRAPH 2)

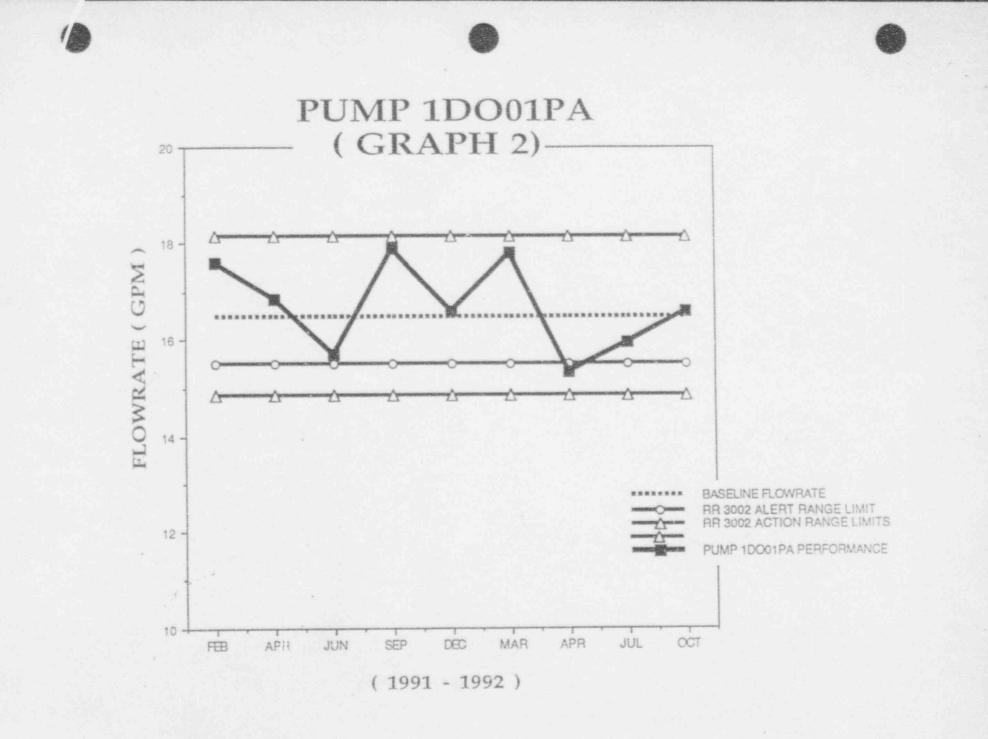






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and

ILLINOIS POWER COMPANY CLINTON POWER STATION SECTION XI RELIEF REQUEST

RELIEF REQUEST NO. 3003 (Revision 1)

COMPONENT INFORMATION

The Standby Liquid Control (SLC) Pumps (1C41-C001A and C001B) supply a neutron absorbing solution into the reactor in sufficient concentration and quantity to overcome the maximum positive reactivity. They are ASME Section III Code Class 2 pumps. These are positive displacement pumps which are highlighted on the attached drawing.

CODE REQUIREMENT

The ASME Code Section XI, Subarticle IWP-4600 requires measuring the pump's flow rate. Subarticle IWP-4100 specifies the requirements for instrument accuracies, ranges, etc.

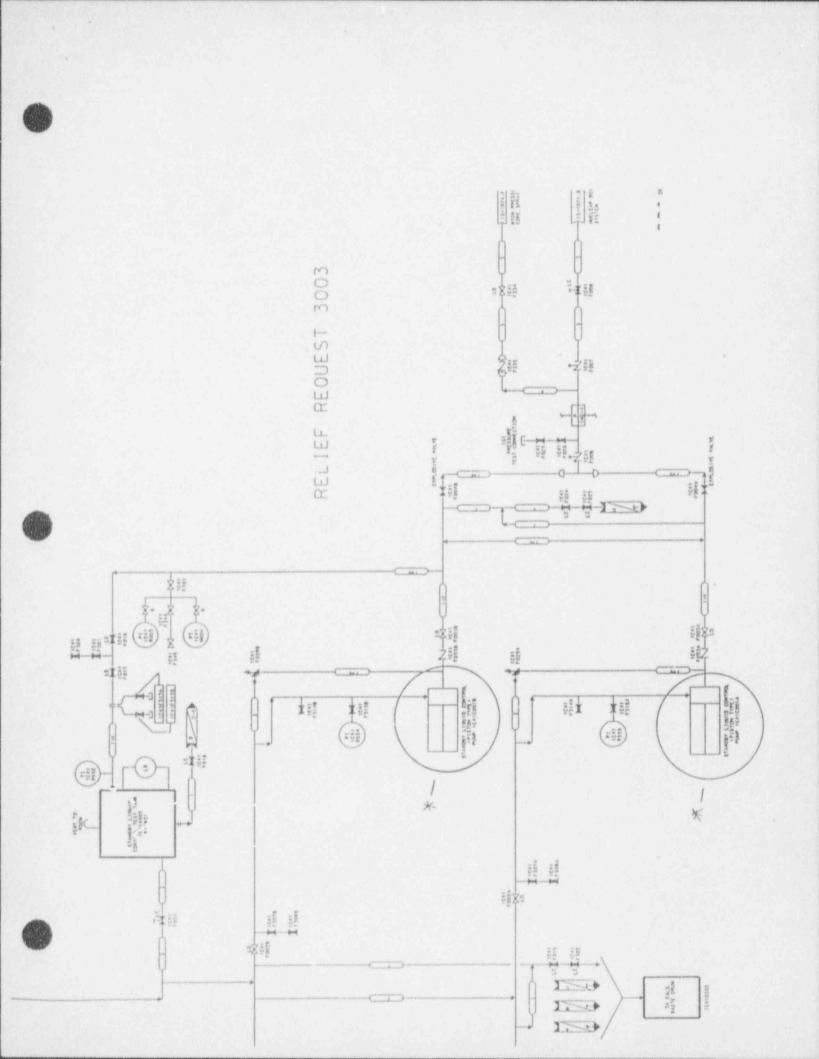
RELIEF REQUEST/JUSTIFICATION

Illinois Power Company requests relief from the Code requirements for the following reason:

These purps do not have a flow rate measuring instrument installed which meets the above Code requirements.

ALTERNATE TESTING PROPOSED

Illinois Power Company will calculate the flow rate (Q) of the SLC pump by dividing the change in level of the SLC test tank by . the time the SLC pump is in operation.



ILLINOIS POWER COMPANY CLINTON POWER STATION SECTION XI RELIEF REQUEST

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RELIEF REQUEST NO. 3005

COMPONENT INFORMATION

The Standby Liquid Control Pumps (1C41-C001A and C001B) supply a neutron absorbing solution into the reactor in sufficient concentration and quantity to overcome the maximum positive reactivity. These pumps are ASME Section III Code Class 2 and are highlighted on the attached drawing.

CODE REQUIREMENT

The ASME Code Section XI, Subsection IWP-3500(a) requires that when measurement of the bearing temperature is not required, these pumps shall be run at least five (5) minutes under conditions as stable as the system permits. At the end of this time, at least one measurement or observation of each of the quantities specified shall be made and recorded.

RELIEF REQUEST/JUSTIFICATION

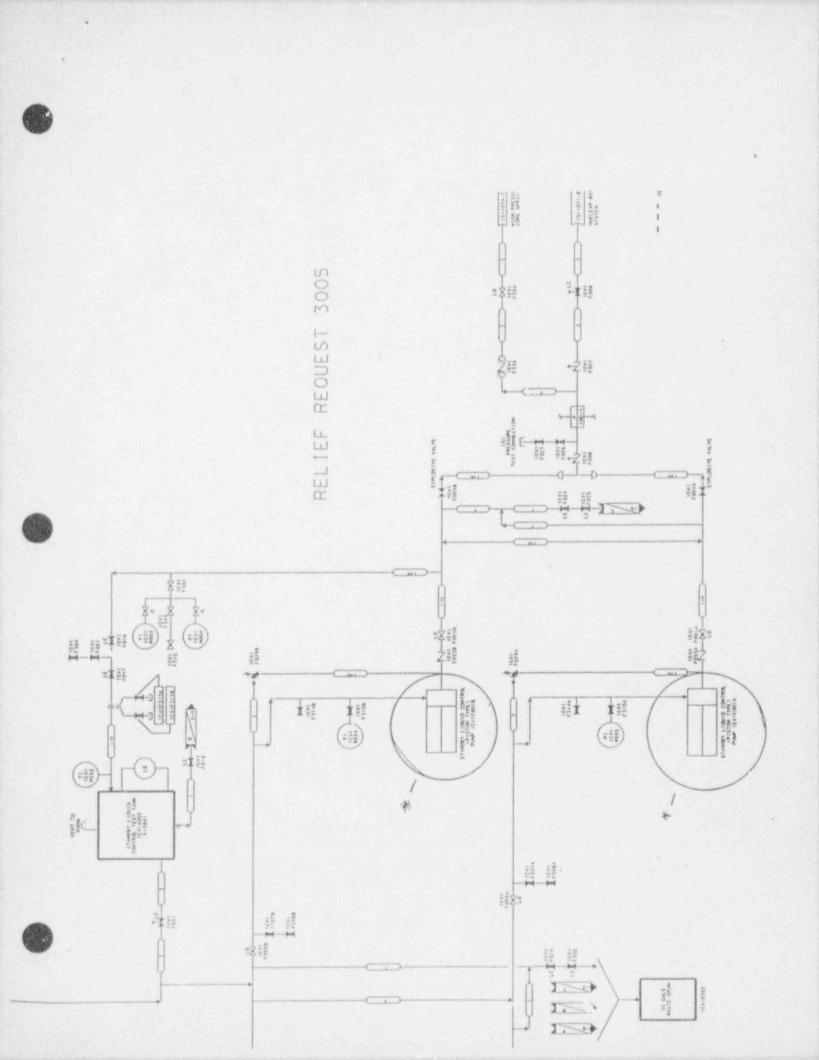
Illinois Power Company requests relief from the Code requirements for the following reasons:

Plant demineralized water is utilized to perform the quarterly tests for these pumps. The discharge of these pumps is collected in the Test Tank. The capacity of the Test Tank does not permit running these pumps for five (5) minutes.

Since these pumps are positive displacement type pumps and the inlet water is at a constant temperature, the flow conditions will be stabilized within a few seconds of starting the pumps. Letting the pumps run one (1) minute before measuring/observing the required parameters will ensure the flow conditions are stabilized.

ALTERNATE TESTING PROPOSED

Illinois Power Company will perform the required testing quarterly and all of the required parameters will be observed/measured and recorded after the pumps have been running. at least one minute but prior to running for five minutes.



ASME Section XI Relief Request RELIEF REQUEST 3006 (Revision 1)

COMPONENT INFORMATION

This relief request pertains to the four (4) water-leg pumps (1E12-C003, 1E21-C002, 1E22-C003, and 1E51-C003) in the CPS

IST program. These pumps are required to maintain the water level in the associated ECCS systems to ensure the prevention of a waterhammer transient in the event of an ECCS initiation. In addition, these pumps have similar characteristics. All four are Gould model 3196 ST, with the primary difference being impeller diameter. They are tested at flows ranging from 50 to 64.5 gpm with baseline differential pressures (DP) ranging from 44.4 to 48.3 psid for the 1E12-C003, 1E21-C002, and 1E22-C003 pumps and 29.4 psid for 1E51-C003. All pumps are ASME Code Class 2.



CODE REQUIREMENTS

The ASME Code Section XI, Subsection IWP-3210 tabulates the allowable and alert ranges of inservice test quantities

(differential pressure (DP)) in relation to the reference, or baseline, values. Table IWP-3100-2 requires an acceptable DP range of 0.93 baseline DP to 1.02 baseline DP and an alert range of 0.9 baseline DP to 1.03 baseline DP.

RELITER REQUEST/JUSTIFICATION .

Because the water-leg pumps operate at a low DP and the Code specified acceptable ranges are based on a percentage of the

baseline, a small increase in DP can result in the pump reaching the alert or action range when the pump is operating within design parameters.

Using data for the HPCS water-leg pump (1E22-C003) as a representative example, which has a baseline DP of 48.5 psid, the Code-required acceptable range varies from 45.1 to 49.5 psid, or less than 4.4 psid (SEE GRAPH 1). Likewise the Code-required alert range for 1E22-C003 varies from 43.7 to 50 psid, for a range of 6.3 psid.

CPS balieves the lower acceptable and alert range boundaries (0.93 and 0.9 of baseline DP) are achievable without undue hardship. However, based upon the Code required upper acceptable and alert range boundaries of 1.02 and 1.03 baseline DP) a deviation of only 1.0 psid above baseline DP is sufficient to force any of the CPS waterleg pumps onto increased frequency, and an increase greater

than 1.5 psid above the baseline DP will place the pumps in the action range.

ALTERNATE TESTING PROPOSED

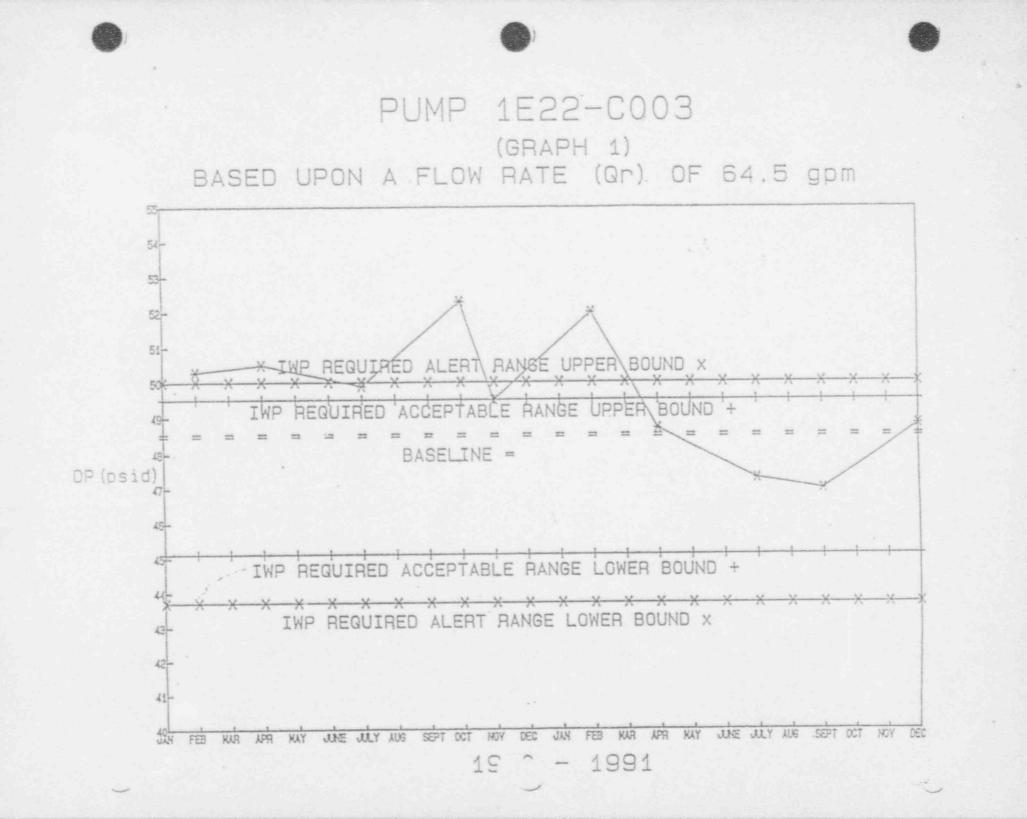
Illinois Power will utilize the following allowable, alert, and action ranges for water-leg pump differential pressure.

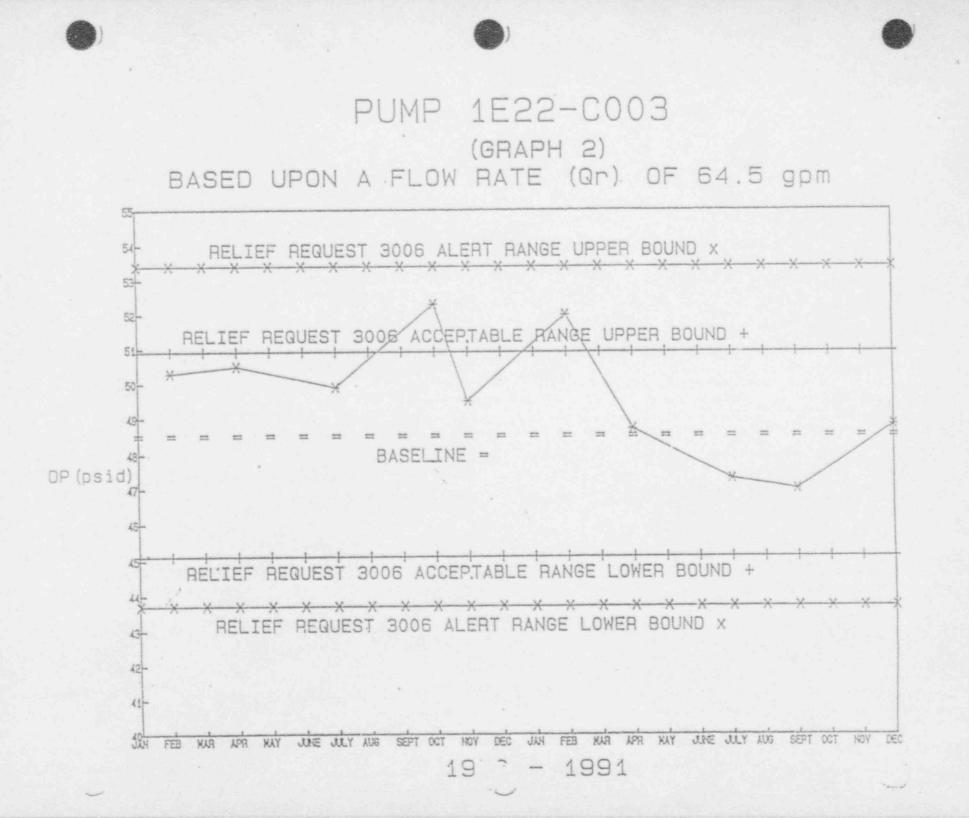
Acceptable Range	(0.93 to 1.05) x (baseline dp value)
Alert Range	(0.90 to 1.10) x (baseline dp value)
Action Range	< (0.90) x (baseline dp value) > (1.10) x (baseline dp value)

Based upon CPS's operating experience, CPS feels that the revised upper ranges will provide good indications of pump degradation without the unnecessary burden of requiring the pumps to be tested on increased frequency or declaring them inoperable for minor (1.to 2 psid) variations in DP (SEE GRAPH 2). CPS has evaluated minor fluctuations of this type and has determined that this performance is not an indication of pump degradation, and the pumps are operating within design allowable limits.

In addition, as these pumps are normally running, line pressure is continually monitored via pressure transmitters by the Main Control Room and any failure will be immediately observed by Control Room personnel.







ILLINOIS POWER COMPANY Clinton Power Station

ASME Section XI Relief Request

RELIEF REQUEST NO. 4001 (Revision 2)

COMPONENT INFORMATION

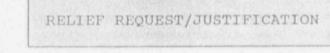
Several ASME Class 2 lines are open-ended as defined by Code Case N-408. These lines meet the Code Case requirements of

not containing water during normal plant operating conditions. Page 2 of this request lists each line for which relief from examination is requested.

CODE REQUIREMENTS

The ASME Code Section XI, Subsection IWC-1220, IWC-2500 and Table IWC-2500-1 require that welds in Class 2 piping

systems be selected for examination. Subsection IWF-2510(a) and Table IWF-2500-1 require selection of component supports for those components required to be examined under Subsection IWC-2500.



Illinois Power Company requests that the lines on page 2 and associated component supports be exempt from the Code

requirements for the following reasons:

Each of these lines is open-ended beyond the last shutoff valve and does not contain water during normal plant operating conditions. Code Case N-408,(a)(6) and (b)(4), allows lines meeting the above conditions to be exempt from the Code requirements of IWC-2500. Although Illinois Power does not intend to invoke this Code Case in it's entirety, this relief request is based on the Code Case's exemption from examining certain open-ended pipes and the fact that leakage from any of the associated welds on these pipes would be insignificant and would have no adverse safety impact on the plant.

None

ALTERNATE TESTING PROPOSED

Class 2 Open-Ended Lines

10

The following lines are in open-ended systems and require relief from examination:

1HG05AA-6" 1HG05AB-6" 1HG05BA-6" 1HG05BB-6" 1HG05CA-6" 1HG05CB-6" 1HG06AA-10" 1HG06AB-10" 1HG06AC-10" 1HG06AD-10" 1RH30BA-12" 1RH30BB-12" 1RH30CA-12" 1RH30CB-12" 1RH30DA-12" 1RH30DB-12" 1RI08B-12"

1RI08C-12"



1

10



ILLINOIS POWER COMPANY CLINTON POWER STATION SECTION XI RELIEF REQUEST . RELIEF REQUEST NO. 4004 (REV. 1)

COMPONENT INFORMATION

Hydraulic and mechanical snubbers associated with the piping lines included in the Clinton Power Station (CPS) Inservice Examination Program Plan.

CODE REQUIREMENT

4

The ASME Code specifies visual inspection frequencies for the above supports in Table IWF-2500-1 and functional testing frequencies in Subarticle IWF-5400. In addition, corrective actions with regard to selecting additional supports are specified in IWF-2420, IWF-2430, and IWF-5500.

RELIEF REQUEST/JUSTIFICATION

Illinois Power Company requests relief from the requirements identified above with regard to frequency of inspection and testing, and corrective action.

This relief request is justified because the CPS Technical Specification 4.7.4 specifies inspection and testing frequencies for these supports which are generally more restrictive than the Code requirements. Tracking the completion of inspection and testing activities with regard to both ASME Code and technical specification requirements creates additional administrative work without significant benefit in snubber reliability.

ALTERNATE TESTING PROPOSED

Visual inspection and functional testing frequencies and corrective action for selecting additional or successive supports for testing will be as specified by CPS Technical Specifications. Visual inspection of those snubbers initially selected for functional testing during each outage will be performed in accordance with ASME Code requirements for VT-3 inspection. All other visual inspections will be performed in accordance with CPS Technical Specification requirements.



Enclosure 2 to U-602264

Appendix IV, Revison 4

Revision 4

Date 11-24-92

APPENDIX IV

INSERVICE EXAMINATION PLAN

Submitted By:

Approved:

Charles in Clark Storen R. Bell Willingles

ANII Concurrence:

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Inservice Inspection Plan

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1.1 General

The Code of Federal Regulations Title 10 Part 50 Subpart 55a (10CFR50.55a) requires Illinois Power Company (IP) to perform Inservice Examination in accordance with Section XI of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code 1980 Edition with Addenda through Winter 1981. Section XI of ASME, 1980 Edition with Addenda through Winter 1981, requires IP to prepare Inservice Examination plans and schedules and submit these plans and schedules to enforcement and regulatory authorities having jurisdiction at the plant site.

As specified in Paragraph IWA-1400 of ASME Section XI, IP bears the overall responsibility for implementation of an ISI program. These responsibilities include the following:

- A. Determining the appropriate Code Class(es) for each component of the power plant, identifying the system boundaries for each class of components subject to inspection, and identifying the components exempt from examination requirements;
- B. Designing and arranging system components to include allowances for adequate access and clearances for conduct of examinations and tests;
- C. Preparing plans and schedules and filing these plans and schedules with enforcement and regulatory authorities having jurisdiction at the plant site;
- D. Preparing written examination instructions and procedures, including diagrams or system drawings, that identify the extent of areas of components subject to examination;
- E. Verifying the qualification to the required level of responsibility of personnel who perform the examinations;
- F. Arranging an agreement with an Authorized Inspection Agency to provide inspection services;
- G. Performing required examinations and tests;
- H. Recording examination and test results in a manner that provides a basis for evaluation and that facilitates comparison with subsequent examination results;
- I. Evaluating examination and test results;
- J. Performing repairs and installation of replacements;
- K. Maintaining adequate inspection, examination, test, and repair and replacement records such as radiographs, diagrams, drawings, examination and test data, descriptions of procedures used, and evidence of personnel qualifications;
- L. Retaining all inspection, examination, test, and repair and replacement records for the service lifetime of the component or system;
- M. Retaining and maintaining all basic calibration blocks used for ultrasonic examination of the components;
- N. Documenting a Quality Assurance Program;
- O. Recording regions in ferritic steel components where acceptance standards have been modified as required in IWB-3410.

WWP/APPEND4b/2

The Clinton Power Station, Unit 1, Inservice Examination Plan defines the requirements for the first 10 years of inservice examination of Class 1, Class 2, and Class 3 components, component supports, and integral attachments. This plan does not address pressure testing and VT-2 examination which are addressed in Appendix XII of the CPS ISI Program Manual. This is consistent with ASME Interpretation XI-1-83-12R-2, issued on December 12, 1984.

This plan is presented in two parts. The first part presents the component examination requirements (Table I) in accordance with the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code Section XI, 1980 Edition with Addenda through Winter 1981. The second part (Table II) is an examination table which provides a listing of components which are subject to the examination requirements of Table I. This table provides information relative to the examinations required, exemptions from examination, augmented requirements, and relief request information where applicable. By utilizing the information provided in Table II, applying the Code examination requirements (Table I), and following the inspection requirements of Program B (IWB-2400, IWC-2400, and IWD-2400), detailed schedules have been developed for the first 10-year inservice examination interval. These schedules are available for review by the enforcement and regulatory authorities having jurisdiction at the plant site and are included as Appendices VI and VII to the Clinton Power Station (CPS) ISI Program Manual.

In accordance with 10CFR50, this plan is in compliance, where possible, with the applicable requirements of the 1980 Edition of Section XI with Addenda through Winter 1981. Although the basic plant design preceded guidelines set forth in later codes, every attempt has been made to obtain maximum Code compliance. Where Code compliance is not achievable, relief requests have been submitted. These relief requests are included in Appendix III of the CPS ISI Program Manual.

1.2 Exceptions, Clarifications, Exemptions, and Augmented Requirements

This plan has been developed in accordance with the requirements of ASME Section XI, 1980 Edition with Addenda through Winter 1981 (80W81), subject to the following exceptions, clarifications, exemptions, and augmented requirements:

- A. Class 1 components, piping, and their associated component supports were exempted in accordance with the following subparagraphs of 80W81:
 - IWB-1220(a) Components that are connected to the Reactor Coolant System and part of the reactor coolant pressure boundary and that are of such a size and shape so that upon postulated rupture the resulting flow of coolant from the reactor coolant system under normal plant operating conditions is within the capacity of makeup systems which are operable from onsite emergency power.
 - IWB-1220(b)(1) Piping of 1-inch nominal pipe size and smaller, except for steam generator tubing;
 - (2) Components and their connections in piping of 1-inch nominal pipe size and smaller;
 - IWB-1220(c) Reactor vessel head connection and associated piping, 2inch nominal pipe size and smaller, made inaccessible by control rod drive penetrations.



WWP/APPEND4b/3

Class 2 components, piping, and their associated component supports were exempted in accordance with the following subparagraphs of 80W81 (for all Class 2 systems except Residual Heat Removal (RHR), Low Pressure Core Spray (LPCS), High Pressure Core Spray (HPCS), and Reactor Core Isolation Cooling (RCIC)):

IWC-1220(b) Components or systems or portions of systems, other than Residual Heat Removal Systems and Emergency Core Cooling Systems, that are not required to operate above a pressure of 275 psig (1900 kPa) or above a temperature of 200 degrees F (93 degrees C).

IWC-1220(c) Component connections (including nozzles in vessels and pumps), piping and associated valves, and their attachments that are 4-inch nominal pipe size and smaller.

- There are no examination requirements (other than pressure testing and VT-2 examination) for Class 3 components. Class 3 components were exempted from examination of integral attachments in accordance with the following subparagrap's of 80W81:
 - IWD-12^^ 1 Integral attachments of supports and restraints to components that are NPS 4" and smaller within the system boundaries of Examination Categories D-A, D-B, and D-C of Table IWD-2500-1 shall be exempt from the visual examination VT-3.
 - IWD-1220.2 Integral attachments of supports and restraints to components exceeding NPS 4" may be exempted from the visual examination VT-3 of Table IWD-2500-1 provided:
 - (a) the components are located in systems (or portions of systems) whose function is not required in support of reactor residual heat removal, containment heat removal, and emergency core cooling; and
 - (b) the components operate at a pressure of 275 psig or less and at a temperature of 200 degrees F or less.
- D. Selection of piping systems for Class 2 Residual Neat Removal, Emergency Core Cooling, and Containment Heat Removal systems is in accordance with the 1974 Edition of Section XI with Addenda through Summer 1975 (74875).
- E. The piping systems in the RHR, LPCS, HPCS, and RCIC systems were exempted in accordance with the following subparagraphs of 74S75:
 - IWC-1220(a) Components in systems where both the design pressure and temperature are equal to or less than 275 psig and 200°F, respectively.

IWC-1220(d) Component connections, piping, and associated valves and vessels (and their supports) that are 4-inch nominal pipe size and smaller.

WWP/APPEND4b/4

B ..

C.

- The CPS Updated Safety Analysis Report (USAR) Mechanical Engineering Branch (MEB) [Draft Safety Evaluation Report (DSER)] Item No. 11 for Class 1 and Section 6.6.8 for Class 2 require inspection of all piping welds between containment isolation valves (for those systems which do not have an inboard valve designated as a containment isolation valve per CPS Technical Specification Table 3.6.4-1, the first valve inside the containment shall be considered the penetration boundary in satisfying this requirement) as follows:
 - <u>Class 1</u> Piping welds greater than one (1) inch nominal pipe size, Ancluding pipe to valve welds, and associated containment head fitting welds.
 - (2) <u>Class 2</u> High energy piping welds greater than four (4) inches nominal pipe size, including pipe to valve welds, and associated containment head fitting welds as well as all socket welds.
- G. The CPS USAR (Section 6.6.9) requires ultrasonic testing of 10% of thinwall (between 3/8" and 1/2") Class 2 RHR system piping welds which would require only surface examinations per the Code.
- H. The CPS USAR requires Feedwater (FW) nozzles and the Control Rod Drive (CRD) return line nozzle, which is capped, to be examined using the methods, techniques, and frequency outlined in NUREG-0619.
- I. Austenitic stainless steel piping components susceptible to Intergranular Stress Corrosion Cracking (IGSCC) shall be examined in accordance with Illinois Power (IP) response to NRC Generic Letter 88-01, NRC Position on IGSCC in BWR Austenitic Stainles. Steel Piping and NRC Request for Additional Information - CPS response to Generic Letter 88-01 (letters from D. P. Hall to U. S. Nuclear Regulatory Commission, U-601217, dated July 29, 1988, and U-601533, dated September 21, 1989, respectively).
- J. Any flaws detected on piping susceptible to IGSCC which exceed the acceptance criteria which is listed in the ASME Section XI, 1980 Edition through Winter 1981 Addenda, shall be evaluated for continued service in accordance with the ASME Section XI 1986 Edition.
- K. IP will expand the examination area of the Reactor Pressure Vessel nozzleto-safe end weld where alloy 182 buttering is applied and extended into the nozzle bore area as recommended in IP response to General Electric Service Information Letter (GE SIL) No. 455, Rev. 1 (Memorandum from F. A. Spangenberg to File, Y-207823, dated June 13, 1988). Also, IP will incorporate the ultrasonic testing technique and repair process on nozzle to safe end welds where alloy 182 buttering is applied as recommended in IP response to GE SIL No. 455, Revision 1 Supplement 1 (Memorandum from R. D. Freeman to D. L. Holtzscher, Y-92355, dated September 25, 1989).
- L. Visual inspection of Shroud Support Access Hole Cover welds shall be performed as recommended in IP response to GE SIL No. 462, Supplement 1 and IE Information Notice No. 88-03 (Memorandum from J. D. Weaver to File, Y-210899, dated June 30, 1989).
- M. Relief Requests which have been utilized are identified in Table 2 for corresponding components.
- N. Examinations of the reactor pressure vessel performed using both manual and mechanized examination techniques from the outside surface of the vessel shall be in compliance with Regulatory Guide 1.150, Revision 1, Appendix A.

WWP/APPEND4b/5

F.

- O. NUREG-0803, Generic Safety Evaluation Report Regarding Integrity of BWR Scram System Piping, Section 5.1, page 5-3 requires inspection of Scram Discharge Volume system piping in accordance with ASME Sec. XI. However, since Scram Discharge Volume piping is required to be inspected by the ASME Sec. XI Code 1980 Edition Winter 1981 Addenda, no additional requirements were imposed.
- P. Visual inspection of jet pumps shall be performed as recommended in IP response to GE SIL NO. 330 (Memorandum from F. A. Spangenberg to File, Y-204962, dated May 21, 1987). GE SIL 330 includes the concerns expressed in IE Bulletin 80-07 and NUREG 3052.
- Q. Visual inspection of jet pumps and sensing lines shall be performed as recommended in IP response to GE SIL 420 (Memorandum from F. A. Spangenberg to File, Y-205267, dated June 29, 1987).
- R. Visual inspection of core spray spargers shall be performed as recommended in IP response to GE SIL NO. 289, Revision 1. Remote underwater TV camera resolution shall be as recommended in IE Bulletin No. 80-13. Any cracks identified in the core spray spargers shall be reported as recommended in IE Bulletin No. 80-13.
- S. Visual inspection of integral attachments on Class 3 Piping Systems not specified in the Code Table IWD-2500-1 shall be performed in accordance with Examination Category D-A, Item No. D1.20.
- T. Functional tests of 10% of each type of snubber shall be performed as required by the Code and CPS Technical Specifications and as specified in the letters from F. A. Spangenberg to A. B. Davis of NRC, U-602059, dated October 19, 1992. (The NRC will be notified of any change to the functional test sample plan.)
- U. Visual inspection of Intermediate Range Monitor (IRM) and Source Range Monitor (SRM) dry tubes shall be performed as recommended in IP response to GE SIL NO. 409 (Memorandum from F. A. Spangenberg to File, Y-204660, dated April 8, 1987).
- V. Code Cases to be utilized for inservice inspection shall be as approved by the NRC in the latest revision of Regulatory Guide 1.147 or by other written approval. Code Cases utilized shall be identified in the Piping and Component Examination Schedule and in the Component Support Examination Schedule.
- W. Visual inspection of st am dryer shall be performed as recommended in IP response to GE SIL No. 474 (Memorandum from J. D. Weaver to File, Y-210684, dated May 22, 1989).
- X. Visual inspection of shroud head studs shall be performed as recommended in GE RICSIL No. 023.
- Y. Visual inspection of shroud head bolts shall be performed as recommended in IP response to GE SIL No. 506 (Memorandum from W. S. Iliff to File, Y-213474, dated June 14, 1991).
- Z. Examination of some piping/components thought to be susceptible to thermal stratification was performed during the second refueling outage as recommended in IP response to Supplement No. 3 of I.E. Bulletin No. 88-08 (Letter from J. S. Perry to U. S. Nuclear Regulatory Commission, U-601693, dated June 22, 1990). IP revised its response to Supplement 3 (Letter from J. S. Perry to U. S. Nuclear Regulatory Commission, U-601958, dated May 30, 1992) which deletes any inspection requirements.



1.3 Records

Examination records and documentation of all results provide the basis for evaluation and facilitate comparison with previous results and subsequent inspections. In accordance with the ASME Section XI, IWA-6000, these records shall be maintained for the plant life.

1.4 Examination Methods and Personnel Qualifications

Examination methods listed for all nonexempt Class 1, Class 2, and Class 3 components and piping shall be in accordance with ASME Section XI except where other requirements are specified.

A. Visual Examination Method:

Visual examination (VT) will be performed in accordance with IWA-2210 of ASME Section XI, except as modified by Relief Request 4003 for VT-3/VT-4 examinations.

- (1) VT-1 examinations are conducted to determine the condition of the part, component, or surface examined. The examination shall determine conditions such as cracks, wear, corrosion, erosion, or physical damage on the surfaces of the part or components. This type of examination may be performed by direct or remote methods as defined in IWA-2211.
- (2) VT-3 examinations are conducted to determine the general mechanical and structural conditions of components and their supports such as the verification of clearances, settings, physical displacements, loose or missing parts, debris, corrosion, wear, & osion, or the loss of integrity at bolted or welded connections. The VT-3 examination will include examinations for conditions that could affect operability or functional adequacy of snubbers and constant load and spring type supports. This type of examination may be performed with or without optical aids to verify the structural integrity of the component.
- B. Surface Examination Method:

A surface examination is performed to detect the presence of surface cracks or discontinuities. Techniques for surface examination include either magnetic particle (MT) or liquid penetrant (PT) techniques where the surface conditions, material, and accessibility permit.

C. Volumetric Examination Method:

A volumetric examination is performed to detect discontinuities in the volume of a material. Two such volumetric techniques are radiographic (RT) and ultrasonic (UT) examinations.

For volumetric examinations, use of the UT method is emphasized for the following reasons:

- (1) Other work can be conducted in the area where UT examinations are being performed, thus potentially reducing outage time.
- (2) In some locations, background radiation levels would preclude RT examination.

- (3) Methods have been developed to permit remote UT examination with minimum occupancy time in certain areas in order to minimize radiation exposure.
- (4) Records have been obtained utilizing UT examination to indicate preservice conditions for comparison with subsequent inservice examinations.

Personnel performing non-destructive and visual examinations shall be qualified in accordance with ASME Section XI.

The detailed procedure, equipment, and examination personnel (Level II or III) used in examination of austenitic stainless steel component welds and austenitic stainless steel component welds with overlays, where applicable, are those qualified by a formal program in accordance with the Non-Destructive Examination (NDE) Coordination Plan agreed upon by NRC, Electric Power Research Institute (EPRI), and BWR Owners Group for IGSCC research, as implemented at the EPRI NDE center in Charlotte, North Carolina. It should be noted that none of the welds at Clinton Power Station (CPS) are currently overlaid.

On austenitic stainless steel component welds with Corrosion Resistant Cladding (CRC) and Reactor Pressure Vessel (RPV) nozzle assemblies with Inconel 182 buttering, the above mentioned personnel and equipment will demonstrate the capabilities to detect IGSCC on these welds utilizing modified versions of the above mentioned procedures.

Level I examiners who may become qualified by demonstrating field performance capability will not be utilized on piping susceptible to IGSCC.

1.5 Reference Documents and Control of Plan Revisions

This plan was prepared utilizing CPS Piping Line Lists (See Table III). Also, included in this plan was those vendor supplied piping that are identified on CPS P&ID drawings. One (1) inch or less nominal pipe size Class 1 components and four (4) inches or less nominal pipe size Class 2 and 3 components, except as required by an augmented examination, have not been included in Table II, since these piping lines are exempted by the Code.

Revisions to this plan will be controlled by IP. Plant Modifications/Field Alterations/Maintenance Work Requests (MWRs) which could affect this plan are reviewed by personnel responsible for implementation of ISI requirements to ensure that changes are identified and the Plan remains current. In addition, revisions to the implementation schedules shall be reviewed by Radiation Protection personnel to ensure that exposure is kept as low as reasonably achievable.

1.6 Repair/Replacement

Repairs and replacements shall be performed in accordance with the CPS ISI Program Manual and the Code requirements.



TABLE 1

ILLINOIS POWER COMPANY CLINTON POWER STATION (CPS) UNIT 1 INSERVICE EXAMINATION PLAN REQUIREMENTS

(Revision 04)









ILLINDIS POWER COMPANY CLINTON POWER STATION (CPS) UNIT 1 INSERVICE EXAMINATION PLAN - TABLE 1 KEY

CODE CLASS

ltem	Examination	Components & Parts	Examination	Examination Requirements	Examination Technique/	
Number	Category	To Be Examined	Method	For 10 - Year Interval	Examination Area Comment	
The ASME Section XI Category of examinat these columns.		Each type of examination area is listed in this column.	NDE method required to satisfy ASME Code requirements is listed in this column.	This column provides information regarding the number and/or percent of examinations required to be performed for the 10 - year interval	This column provides information specific to examination techniques and examination areas.	







ASME Section X1 Item Number	ASME Section XI Examination Category	Components & Parts To Be Examined	Examination Method	Examination Requirements for 10-Year Interval	Examination Technique/ Examination Area Comments
► REACTO	R PRESSURE VES	SEL «			
B1.10	B-A	Longitudinal and Circumferential Shell Welds.	Volumetric	100% of all circumferential and longitudinal welds to be examined. Examinations may be performed at or near the end of the inspection interval.	Examination of longitudinal and circumferential shell welds will be performed utilizing mechanized UT techniques on permanently installed vertical and circumferential tracks. Whare mechanized techniques do no: provide complete coverage, manual techniques will be utilized to the extent possible to extend the coverage.
B1.20	B-A	Meridional and Circumferential Head Welds.	Volumetric	100% of all meridional and circumferential welds of the closure head and lower head may be examined. Examinations may be performed at or near the end of each inspection interval for the lower head.	Lower head welds will be examined utilizing mechanized and manual UT techniques. Lower head weld examinations will be considered individually for accessibility and radiation levels under actual ISI conditions.
81.30	8-4	Shell-to-Flange Weld	Volumetric	100% of the circumferential weld to be examined. At least 50% of the weld shall be examined by the end of the first inspection period, and the remainder by the end of the third inspection period.	The shell-to-flange weld will be examined from the vessel outside surface with manual UT.





ASME Section XI Item Number	ASME Section XI Examination Category	Components & Parts To Be Examined	Exemination Method	Examination Requirements for 10-Year Interval	Examination Technique/ Examination Area Comments
► REACTOR	PRESSURE VESS	SEL (continued) 4			
B1.40	B-A	Head-to-Flange Weld	Volumetric and Surface	100% of circumferential weld to be examined.	The head-to-flange weld will be examined with manual UT and surface examination techniques when the head is removed.
B1.50	B-A	Repair Area in Beltline Regions	Volumetric	Clinton Power Station has no beltline region repair welds.	н/А
82.10 thru 82.61	8-8	Pressure-Retaining Welds in Vessels Other Than Reactor Vessels	Volumetric	Items B2.10 through B2.61 not applicable to Clinton Power Station.	N/A
63.10 thru 83.80	B-D	Full Penetration Welds of Nozzles in Vessels-Inspection Program A	Volumetric	Clinton Power Station to use Inspection Program B.	N/A
83.90,83.100	8-0	Primary Nozzle-to-Vessel Welds and Nozzle Inside Radius Section	Volumetric	100% of nozzles. At least 25% but not more than 50% of the nozzles shall be examined by the end of the first period, and the remainder by the end of the interval.	The primary nozzle-to-vessel welds and nozzle inside radius will be examined with manual and mechanized UT.







ASME Section XI Item Number	ASME Section X1 Examination Category	Components & Parts To Be Examined	Examination Method	Examination Requirements for 10-Year Interval	Examination Technique/ Examination Area Comments
► REACTOR F	RESSURE VESS	SEL (continued) 🖪			
83.110 thru 83.160	8-0	Full Penetration Welds of Nozzles in Vessels - Inspection Program B.	Volumetric	Items B3.110 through B3.160 are not applicable to Clinton Power Station.	N/A
84.10	B-E	Partial Penetrations	Visual (VT-2)	25% of each group of comparable size and function to be examined. The examinations to be performed when the RPV is pressurized prior to operation.	Evidence of leakage will be determined with direct or remote VT techniques.
B4.11	B-E	Vessel Nozzle Welds	Visual (VT-2)	25% of each group of comparable size and function to be examined. The examinations to be performed when the RPV is pressurized prior to operation.	Evidence of leakage will be determined with direct or remote VT techniques.
84.12	B-E	Control Rod Drive Nozzle Welds	Visual (VT-2)	25% of each group of comparable size and function to be examined. The examinations to be performed when the RPV is pressurized prior to operation.	Evidence of leakage will be determined with direct or remote VT techniques.
84.13	8-E	Instrumentation Nozzle Welds	Visual (V ⁺ ·2)	25% of each group of comparable size and function to be examined. The examinations to be performed when the RPV is pressurized prior to operation.	Evidence of leakage will be determined with direct or remote VT techniques.







ASME Section X: Item Number	ASME Section XI Examination Category	Components & Parts To Be Examined	Examination Method	Examination Requirements for 10-Year Interval	Examination Technique/ Examination Area Comments
► REACTOR	PRESSURE VES	SEL (continued) 4			
B4.20	B-E	Heater Penetrations	Visual (VT-2)	Item B4.20 not applicable to Clinton Power Station.	N/A
85.10	8-F	Reactor Vessel Nozzle-to-Safe End Welds ≿4 Inches Nominal Pipe Diameter	Volumetric and Surface	All dissimilar metal welds at nozzles to be examined.	Welds to be examined with manual or remote UT.
85.20	B-F	Reactor Vessel Nozzie-to-Safe End Welds <4 Inches Nominal Pipe Diameter	Surface	All dissimilar metal weld at nozzies to be examined.	N/A
85.30 thru 85.120	8-F	Reactor Vessel Nozzle-to-Safe End Welds	Volumetric and Surface	Items 85.30 through 85.120 not applicable to Clinton Power Station.	N/A
86-10	B-G-1	Closure Head Nuts	Surface	100% of nuts to be examined. Examination may be performed at or near the end of the inspection interval.	Nuts will be examined with MT when removed for refueling.
B6.20	B-G-1	Closure Studs, In Place	Volumetric	100% of studs to be examined. Examination may be performed at or near the end of the inspection interval.	Closure stud examinations may be performed when "in place." Examinations should he scheduled when studs are removed to reduce radiation exposure and allow the most thorough examination.







ASME Section XI Item Number	ASME Section XI Examination Category	Components & Parts To Be Examined	Examination Method	Examination Requirements for 10-Year Interval	Examination Technique/ Examination Area Comments
► REACTOR	PRESSURE VES	SEL (continued) .			
86.30	B-G-1	Closure Studs, When Removed	Volumetric and Surface	100% of studs to be examined. Examination may be performed at or near the end of the inspection interval.	The studs will be examined with UT and MT.
96.40	B-G-1	Threads in Flange	Volumetric	100% of threaded holes to be examined. Examination may be performed at or near the end of the inspection interval. 1-inch annular area around threaded hole to be examined.	The threads in flange will be examined from the flange seal surface with UT.
B6.50	8-G-1	Closure Washers and Bushings	Visual (VT-1)	All washers, and bushings upon stud removal.	Visual (VT-1) of closure washers and bushings will be performed by direct VT techniques.
86.60 thru 86.140	8-G-1	Pressure-Retaining Bolting >2 Inches in Diameter	Volumetric,Visual (VI-1)	Items 86.60 through 86.140 not applicable to Clinton Power Station.	N/A
87.10 thru 87.40	8-G-2	Pressure-Retaining Bolting ≤2 Inches In Diameter	Visual (VT-1)	Items B7.10 through B7.40 not applicable to Clinton Power Station.	N/A







ASME Section XI Item Number	ASME Section XI Examination Category	Components & Parts To Be Examined	Examination Method	Examination Requirements for 10-Year Intervai	Examination Technique/ Examination Area Comments
► REACTOR	PRESSURE VES	SEL (continued) 4		and a second	
87.80	B-G-2	CRD Housings Pressure-Retaining Bolting ≤2 Inches in Diameter	Visual (VT-1)	Bolts, studs, and nuts in CRD housing to be examined when disassembled.	Bolting will be examined with direct VT when disassembled.
88.10	8~N	Integrally Welded Vessel Supports	Volumetric or Surface	100% of accessible area of the circumference of the weld to the vessel to be examined.	The RPV integrally welded support skirt will be examined with UT or MT.
88.20 thru 88.40	B-H	Integrally Welded Vessel Supports	Volumetric or Surface	Items 88.20 through 88.40 not applicable to Clinton Power Station.	N/A
813.10	8-N-1	Vessel Interior	Visual (VT-3)	Accessible areas above and below reactor core to be examined at 1st refueling outage and every 3 years thereafter.	Visual examinations will be performed with remote VT.
B13.20	B-N-2	Interior Attachments Within Beltline Region	Visual (VT-1)	Accessible attachment welds to be examined at or near the end of the inspection interval.	Visual examinations will be performed with remote VI.
B13.21	8-6-2	Interior Attachments Beyond Beltline Region	Visual (VT-3)	Accessible attachment welds to be examined at or near the end of the inspection interval.	Visual examinations will be performed with remote VT.





ASME Section X1 Item Number	ASME Section XI Examination Category	Components & Parts To Be Examined	Examination Method	Examination Requirements for 10-Year Interval	Examination Technique/ Examination Area Comments
► REACTOR	PRESSURE VESSI	EL (continued) 🖪	1	FRANK POTENCIAL STATE	
813.22	6-N-3	Core-Support Structures	Visual (VT-3)	Accessible surfaces to be examined at or near the end of the inspection interval.	Visual examinations will be performed with remote VT.
813.30 thru 813.32	8-N-1 thru 8-N-3	Reactor Vessel Interior Attachments and Core Support Structure	Visual (VT-1/VT-3)	Items B13.30 through B13.32 not applicable to Clinton Power Station.	N/A
B14.10	8-0	Control Rod Drive Housing Welds	Volumetric or Surface	Welds in 10% of the peripheral CRD housings to be examined. Examination may be performed at or near the end of the inspection interval.	The CRD housing welds will be examined with PT.
815.10	8-P	All Pressure-Retaining Boundaries for Vessel Components	Visual (VT-2)	All components to be examined during system leakage test. Examinations to be performed in accordance with IWB-5221 for each refueling outage.	Direct VT examinations may be performed where possible. Examination areas inaccessible for direct visual examination may be examined at the lowest elevation with respect to the component.
B15.11	B-P	All Pressure-Retaining Boundaries for Vessel Components	Visual (VT-2)	All components to be examined during system hydrostatic test. Examinations to be performed once in accordance with IWB-5222 at the end of the inspection interval.	Direct VT examinations may be performed where possible. Examination areas inaccessible for direct visual examination may be examined at the lowest elevation with respect to the component.







ASME Section XI Item Number	ASME Section XI Examination Category	Components & Parts To Be Examined	Examination Method	Examination Requirements for 10-Year Interval	Examination Technique/ Examination Area Comments
► REACTOR P	RESSURE VES	SEL (continued) <			
815.20 thru 815.41	8-P	Pressure-Retaining Components	Visual (VT-2)	items B15.20 through B15.41 not applicable to Clinton Power Station.	N/A





ASME Section XI Item Number	ASME Section XI Examination Category	Components & Parts To Be Examined	Examination Method	Examination Requirements for 10-Year Interval	Examination Technique/ Examination Area Comments
► PIPING	*				
85.130	B-F	Dissimilar Metal Welds ≥4 Inches	Volumetric and Surface	100% of the welds to be examined.	The welds will be examined with manual UT and PT.
85.140	B-F	Dissimilar Metal Welds <4 Inches	Surface	100% of the welds to be examined.	The welds will be examined with PT.
85.150	B-F	Dissimilar Metal Socket Welds	Surface	Clinton Power Station has no dissimilar metal socket welds.	N/A
86.150	8×G~1	Bolts and Studs >2 Inches in Diameter, in Place	Volumetric	Clinton Power Station has no pressure-retaining bolting greater than 2-inch diameter associated with the Class 1 piping systems.	N/A
86.160	B-G-1	Flange Surface, When Connection Disassembled	Visual (VT-1)	Clinton Power Station has no pressure-retaining boiling greater than 2-inch diameter associated with the Class 1 piping systems.	N/A
86.170	B-G-1	Nuts, Bushings, and Washers	Visuel (VT-1)	Clinton Power Station has no pressure-retaining bolting greater than 2-inch diameter associated with the Class 1 piping systems.	N/A







ASME Section XI Item Number	ASME Section XI Examination Category	Components & Parts To Be Examined	Examination Method	Examination Requirements for 10-Year Interval	Examination Technique/ Examination Area Comments
► PIPING	(continued) 4				
B7.50	B-G-2	Bolting ≲2 Inches in Diameter	Visual (V7-1)	All bolts, studs, and nuts to be examined. The bolting may be examined in place under tension or when removed.	The bolting will be examined with direct VI.
89.11	8-J	Circumferential Pipe Welds ≥4 Inches in Diameter	Volumetric and Surface	25% of the circumferential butt welds, selected per Note (1), Table IWB-2500-1, Category B-J, to be examined.	The piping welds will be examined with manual UT and PT or MT as applicable.
89.12	E-3	Longitudinal Pipe Welds ≥4 Inches in Diameter	Volumetric and Surface	Adjoining longitudinal welds for scheduled circumferential welds to be examined. One pipe-diameter length of 12 inches of each longitudinal weld length required.	The piping welds will be examined with manual UT and PT or MT as applicable.
89.21	B-J	Circumferential Welds <4 Inches in Diameter	Surface	25% of the circumferential butt welds, selected per Note (1), Table IWB-2500-1, Category B-J, to be examined.	The piping welds will be examined with PI or MI as applicable.
89.22	B-1	Longitudinal Pipe Welds <4 Inches in Diameter	Surface	Clinton Power Station has no longitudinal pipe welds associated with Class 1 piping systems less than 4 inches in diameter.	N/A





ASME Section XI Item Number	ASME Section XI Examination Category	Components & Parts To Be Examined	Examination Method	Examination Requirements for 10-Year Interval	Examination Technique/ Examination Area Comments
► PIPING	(continued) <				
89.31	B-J	Branch Pipe Connection Welds ≥4 Inches in Diameter	Volumetric and Surface	25% of the branch connection joints, selected per Note (1), Table IWB-2500-1, Category B-J, to be examined.	The branch connection welds will be examined with manual UT and PT or MT as applicable.
89.32	B+J	Branch Pipe Connection Welds <4 Inches in Diameter	Surface	25% of the branch connection joints, selected per Note (1), Table IWB-2500-1, Category B-J, to be examined.	The branch connection welds will be examined with PT or MT as applicable.
89.40	B * J	Socket Welds	Surface	Item 89.40 is not applicable to Clinton Power Station.	N/A
\$10.10	B-K-1	Integrally Welded Attachments	Volumetric or Surface	25% of the supports whose attachment base material is 5/8 inch and greater to be examined.	The integrally welded attachments will be examined with PT or MT as applicable.
615.50	B-P	All Pressure-Retaining Boundaries for Piping Components	Visual (VT-2)	All components to be examined during system leakage test. Examination to be performed in accordance with IWB-5221 for each refueling outage.	All pressure-retaining boundaries for piping systems may be examined with direct visual (VT-2) where feasible. Examination areas inaccessible for direct visual examination may be examined at the lowest elevation with respect to the component.





ASME Section XI Item Number	ASME Section XI Examination Category	Components & Parts To Be Examined	Examination Rethod	Examination Requirements for 10-Year Interval	Examination Technique/ Examination Area Comments
► PIPING	(continued) <				
£15.51	В-Р	All Pressure-Retaining Boundaries for Piping Components	Visual (VT-2)	All components to be examined during system hydrostatic test. Examination to be performed in accordance with IWB-5222 at the end of the inspection interval.	All pressure-retaining boundaries for piping systems may be examined with direct visual (VT-2) where feasible. Examination areas inaccessible for direct visual examination may be examined at the lowest elevation with respect to the component.





ASME Section XI Item Number	ASME Section XI Examination Category	Components & Parts To Be Examined	Examination Method	Examination Requirements for 10-Year Interval	Examination Technique/ Examination Area Comments
► PUMPS	4				
B5.180	B-G-1	Bolts and Studs >2 Inches in Diameter	Volumetric	All bolts and studs to be examined. The bolting may be examined in place under tension, when connection is disassembled, or when the bolting is removed.	The bolting will be examined with manual UT.
86.190	8-G-1	Flange Surface for Bolting >2 Inches in Diameter when Connection is Disassembled.	Visual (VT-1)	All surfaces and 1 inch annular area around each stud hole to be examined when disassembled.	The flange surfaces will be examined with direct VT.
86.200	B-G-1	Nuts, Bushings, and Washers >2 Inches in Diameter	Visual (VT-1)	All nuts, bushings, and washers to be examined when disassembled.	The nuts and washers will be examined with direct VT.
87.60	B-G-2	Bolts, Studs and Nuts ≤2 Inches in Diameter	Visual (VT-1)	Clinton Power station has no pressure-revising bolting 2 inches in simmeter or less associate with the Class 1 pumps.	N/A
B10.20	в-к-1	Integrally Welded Attachments	Volumetric or Surface	Attachments to pumps associated with piping selected under Category B-J to be examined. Attachments whose base material thickness is 5/8 inch and greater to be examined.	Welded attachments will be examined with manual UT or surface examination techniques as applicable.







ASME Section XI Item Number	ASME Section XI Examination Category	Components & Parts To Be Examined	Examination Method	Examination Requirements for 10-Year Interval	Examination Technique/ Examination Area Comments
► PUMPS (continued) <			and the state of the second	
812.10	B-L-1	Pump Casing Welds	Volumetric	Reactor recirculation pump core closure welds are exempt from examination per IWA-2500. Clinton Power Station has no other Class 1 pump casing welds.	N/A
812.20	B-L-2	Internal Surfaces of Pump Casings	Visual (VT-3)	One reactor recirculation pump to be examined.	Pump casing internal surface will be examined with remote or direct visual techniques as applicable.
B15.60	B-P	Pressure-Retaining Boundaries for Pump Components	Visual (VT-2)	All components to be examined during system leakage test. Examination to be performed in accordance with IWB-5221 for each refueling outage.	All pressure-retaining boundaries for pumps may be examined with direct visual (VT-2) where feasible. Examination areas inaccessible for direct visual examination may be examined at the lowest elevation with respect to the component.
815.61	B-P	Presaure-Retaining Boundaries for Pump Components	Visual (VT-2)	All components to be examined during system leakage test. Examination to be performed in accordance with IWB-5222 at the end of the inspection interval.	All pressure-retaining boundaries for pumps may be examined with direct visual (VT-2) where feasible. Examination areas inaccessible for direct visual examination may be examined at the lowest elevation with respect to the component.







ASME Section X1 Item Number	ASME Section XI Examination Category	Components & Parts To Be Examined	Examination Method	Examination Requirements for 10-Year Interval	Examination Technique/ Examination Area Comments
► VALVES	*				
86.210	B-G-1	Solts and Studs, >2 Inches in Diameter	Volumetric	Clinton Power Station has no pressure-retaining bolting greater than 2-inch diameter associated with Class 1 valves.	N/A
86.220	B-G-1	Flange Surface for Bolting >2 Inches in Diameter when Connection is Disassembled	Visual (VT-1)	Clinton Power Station has no pressure-retaining bolting greater than 2-inch diameter associated with Class 1 valves.	N/A
86.230	8-6-1	Nuts, Bushings, and Washers >2 Inches in Diameter	Visual (VT-1)	Clinton Power Station has no pressure-retaining bolting greater than 2-inch diameter associated with Class 1 valves.	N/A
87.70	8-6-2	Boiting ≤2 Inches in Diameter	Visual (VT-1)	All bolts, studs, and nuts to be examined. The bolting may be examined in place under tension, when the connection is disassembled, or when the bolting is removed.	Bolting will be examined with direct VT.
B10.30	B-K-1	Integrally Welded Attachments	Volumetric or Surface	Attachments to valves associated with piping selected under Category 8-J to be examined. Attachments whose base material thickness is 5/8 inch and greater to be examined.	Welded attachments will be examined with manual UT or surface examination techniques as applicable.







ASME Section XI Item Number	ASME Section XI Examination Category	Components & Parts To Be Examined	Examination Method	Examination Requirements for 10-Year Interval	Examination Technique/ Examination Area Comments
 VALVES 	(continued) <				
812.30	8-M-1	Valve Body Welds <4 Inches Nominal Pipe Size	Surface	Clinton Power Station has no Class 1 valve body welds.	N/A
812.40	B-M-1	Valve Body Welds ≥4 Inches Nominal Pipe Size	Volumetric	Clinton Power Station has no Class 1 valve body welds.	N/A
812.50	B-M-2	Internal Surfaces of Valve Bodies on Valves >4 Inches Nominal Pipe Size	Visual (VT-3)	One valve in each group of valves that is of the same construction and similar function to be examined.	Internal surfaces will be examined with remote or direct visual techniques as applicable.
B15.70	B-P	All Pressure-Retaining Boundaries for Valve Components	Visual (VT-2)	All components to be examined during system leakage test. Examination to be performed in accordance with IWB-5221 for each refueling outage.	All pressure-retaining boundaries for valves may be examined with direct visual (VT-2) where feasible. Examination areas inaccessible for direct visual examination may be examined at the lowest elevation with respect to the component.
B15.71	B-P	All Pressure-Retaining Boundaries for Valve Components	Visual (VT-2)	All components to be examined during system hydrostatic test. Examination to be performed in accordance with IWB-5222 at the end of the inspection interval.	All pressure-retaining boundaries for valves may be examined with direct visual (VT-2) where feasible. Examination areas inaccessible for direct visual examination may be examined at the lowest elevation with respect to the component.







ASME Section X1 Item Number	ASME Section XI Examination Category	Components & Parts To Be Examined	Examination Method	Examination Requirements for 10-Year Interval	Examination Technique/ Examination Area Comments
► NOTE ◄					
816.10 thru 816.20	8-9	Steam Generator Tubing	Volumetric	Items B16.i0 through B16.20 not applicable to Clinton Power Station.	N/A







ASME Section XI Item Number	ASME Section XI Examination Category	Components & Parts To Be Examined	Examination Method	Examination Requirements for 10-Year Interval	Examination Technique/ Examination Area Comments
► PRESSUR	E VESSELS 4				
C1.10	C-A	Shell Circumferential Welds	Volumetric	100% of each weld to be examined (applies to welds at gross structural discontinuities). For multiple vessels of similar design size and service, examinations may be limited to one vessel.	The welds will be examined with manual UT.
c1.20	C-A	Read Circumferential Welds	Volumetric	100% of each weld to be examined. For multiple vessels of similar design size and service, examinations may be limited to one vessel.	The welds will be examined with manual UT.
C1.30	C-A	Tube Sheet-to-Shell Weld	Volumetric	100% of each weld to be examined. For multiple vessels of similar design size and service, examinations may be limited to one vessel.	The welds will be examined with manual UT.
C2.10 and C2.11	C-B	Nozzles in Vessels 51/2 Inch Nominal Thickness, Nozzle-to-Shell (or Head) Weld	Surface	All nozzles to be selected at terminal ends of piping runs selected for examination under Category C-F. 100% of each weld to be examined. Manways and hand holes excluded.	The welds may be examined with MT or PT as applicable.





ASME Section X: Item Number	ASME Section XI Examination Category	Components & Parts To Be Examined	E amination Aethod	Examination Requirements for 10-Year Interval	Examination Technique/ Examination Area Comments
► PRESSURE	VESSELS (CO	ntinued) ৰ			Enverting of the second se
C2.20 and C2.21	C-B	Nozzles in Vessels >1/2 Inch Nominal Thickness, Nozzle-to-Shell (or Head) Weld	Surface and Volumetric	All nozzles to be selected at terminal ends of piping runs selected for examination under Category C-F. 100% of each weld to be examined. Manways and hand holes excluded.	The welds may be examined with UT and MT or PT as applicable.
c2.22	C-B	Nozzle Inside Radius Section	Volumetric	100% of each area to be examined. Manways and hand holes are excluded.	The nozzle inside radius section will be examined with UT.
c3.10	C-C	Integrally Welded Attachments	Surface	100% of each weld to be examined. Attachments whose base material is 3/4 inch or greater to be selected.	The welded attachments wili be examined with MT or PT as applicable.
C4.10		Bolts and Studs	Volumetric	Clinton Power Station has no pressure-retaining bolting greater than the 2-inch diameter associated with Class 2 vessels.	N/A
c7.10	C-H	Pressure-Retaining Components	Visual (Vː-2)	All components to be examined during system pressure test. Examinations to be performed in accordance with IWC-5221 for each inspection period.	All pressure-retaining boundaries for vessels may be examined with direct visual (VT-2) where feasible. Examination areas inaccessible for direct visual examination may be examined at the lowest elevation with respect to the component.







ASME Section XI Item Number	ASME Section XI Examination Category	Components & Parts To Be Examined	Examination Method	Examination Requirements for 10-Year Interval	Examination Technique/ Examination Area Comments
► PRESSURE	VESSELS (CO	ntinued) 🛪			
c7.20	С-н	Pressure-Retaining Components	Visual (VT-2)	All components to be examined during system hydrostatic test. Examinations to be performed in accordance with IWC-5222 at the end of each inspection interval.	All pressure-retaining boundaries for vessels may be examined with direct visual (VT-2) where feasible. Examination areas inaccessible for direct visual examination may be examined at the lowest elevation with respect to the component.







ASME Section X1 Item Number	ASME Section XI Examination Category	Components & Parts To Be Examined	Examination Method	Examination Requirements for 10-Year Interval	Examination Technique/ Examination Area Comments
► PIPING	٩				
c3,20	2-2	Integrally Welded Attachments	Surface	100% of each weld to be examined. Attachments whose base material is 3/4 inch or greater to be selected. Selection limited to those components selected under Examination Category C-F.	The welds will be examined with MT or PT as applicable.
C4.20	C-D	Bolts and Studs	Volumetric	Clinton Power Station has no pressure-retaining bolting greater than 2-inch diameter associated with Class 2 piping.	N/A
C5.11	C-F	Circumferential Piping Welds S1/2-Inch Nominal Wall Thickness for Piping >4 Inches NPS	Surface	100% of each weld requiring examination. See Footnotes to Table IWC 2500-1.	The welds will be examined with MT or PT as applicable.
c5.12	C-F	Longitudinal Piping Welds \$1/2-Inch Nominal Wall Thickness for Piping >4 Inches NPS	Surface	Examine a length of 2.5 x nominal wall thickness at the intersecting circumferential weld requiring examination under C5.11 above.	The welds will be examined with WT or PT as applicable.
c5.21	C-F	Circumferential Piping Welds >1/2-Inch Nominal Wall Thickness for Piping >4 Inches NPS	Surface and Volumetric	100% of each weld requiring examination. See Footnotes to Table IWC 2500-1.	The welds will be examined with UT and MT or PT as applicable.







ASME Section XI Item Number	ASME Section X1 Examination Category	Components & Parts To Be Examined	Examination Method	Examination Requirements for 10-Year Interval	Examination Technique/ Examination Area Comments
► PIPING	(continued) <				
c5.22	C-F	Longitudinal Piping Welds >1/2-Inch Nominal Wall Thickness for Piping >4 Inches MPS	Surface and Volumetric	Examine a length of 2.5 x nominal walt thickness at the intersecting circumferential weld requiring examination under C5.21 above.	The welds will be examined with UT and MT or PT as applicable.
c5.31	C-F	Circumferential Pipe Branch Connection Welds >4-Inch Nominal Branch Pipe Size	Surface	100% of each weld requiring examination. See Footnotes to Table IWC 2500-1.	N/A
c5.32	C-F	Longitudinal Welds at Circumferential Branch Connection Welds	Surface	Clinton Power Station has no intersecting longitudinal seam welds at branch connections.	N/A
C7.30	С-н	Pres.ure-Retaining Compriments	Visual (VT-2)	All components to be examined during system pressure test. Examination to be performed in accordance with IWC-5221 for each inspection period.	All pressure-retaining boundaries for piping may be examined with direct visual (VT-2) where feasible. Examination areas inaccessible for direct visual examination may be examined at the lowest elevation with respect to the component.







ASME Section XI Item Number	ASME Section XI Examination Category	Components & Parts To Be Examined	Examination Method	Examination Requirements for 10-Year Interval	Examination Technique/ Examination Area Comments
► PIPING (continued) «				
C7.40	С-н	Pressure-Retaining Components	Visual (VT-2)	All components to be examined during system hydrostatic test. Examination to be performed in accordance with IWC-5222 for each inspection interval.	All pressure-retaining houndaries for piping may be examined with direct visual (VT-2) where feasible. Examination areas inaccessible for direct visual examination may be examined at the lowest elevation with respect to the component.







ASME Section XI Item Number	ASME Section XI Examination Category	Components & Parts To Be Examined	Examination Method	Examination Requirements for 10-Year Interval	Examination Technique/ Examination Area Comments
► PUMPS ·	4				
C3.30	C-C	Integrally Welded Attachments	Surface	100% of each weld to be examined. Attachments whose base material is 3/4 inch or greater to be selected. Selection limited to those components selected under Examination Category C-G.	The welds will be examined with MT or PT as applicable
C4.30	C-D	Bolts and Studs, Bolting >2 Inches in Diameter	Volumetric	Clinton Power Station has no pressure-retaining bolting greater than 2-inch diameter associated with Class 2 pumps.	N/A
c6.10	C-C	Pump Casing Welds	Surface	100% of each pump casing welds. Selection limited to those components selected under Examination Category C-F.	The welds will be examined with MT or PT as applicable
c7.50	С-н	Pressure-Retaining Components	Visual (VT-2)	All components to be examined during system pressure test. Examination to be performed in accordance with IWC-5221 for each inspection period.	All pressure-retaining boundaries for pumps may be examined with direct visual (VT-2) where feasible. Examination areas inaccessible for direct visual examination may be examined at the lowest elevation with respect to the component.







ASME Section X1 Item Number	ASME Section X1 Examination Category	Components & Parts To Be Examined	Examination Method	Examination Requirements for 10-Year Interval	Examination Technique/ Examination Area Comments
► PUMPS (continued) 🖪				
67.60	С-н	Pressure-Retaining Components	Visual (VT-2)	All components to be examined during system hydrostatic test. Examination to be performed in accordance with IWC-5222 for each inspection interval.	All pressure-retaining boundaries for pumps may be examined with direct visual (VT-2) where feasible. Examination areas inaccessible for direct visual examination may be examined at the lowest elevation with respect to the component.







ASME Section XI Item Number	ASME Section XI Examination Category	Components & Parts To Be Examined	Examination Method	Examination Requirements for 10-Year Interval	Examination Technique/ Examination Area Comments
► VALVES	4				
C3.40	C+C	Integrally Welded Attachments	Surface	100% of each weld to be examined. Attachments whose base material is 3/4 inch or greater to be selected. Selection limited to those components selected under Examination Category C-G.	The welds will be examined with MT or PT as applicable.
C4.40	C-D	Bolts and Studs, Bolting >2 Inches in Diameter	Volumetric	Clinton Power Station has no pressure-retaining bolting greater than 2-inch diameter associated with Class 2 valves.	N/A
C6.20	C-G	Valve Body Welds	Surface	Clinton Power Station has no body welds associated with Class 2 valves.	N/A
c7.70	C-H	Pressure-Retaining Components	Visual (VT-2)	All components to be examined during system pressure test. Examination to be performed in accordance with IWC-5221 for each inspection period.	All pressure-retaining boundaries for valves may be examined with direct visual (VT-2) where feasible. Examination areas inaccessible for direct visual examination may be examined at the lowest elevation with respect to the component.







ASME Section XI Item Number	ASME Section X1 Examination Category	Components & Parts To Be Examined	Examination Method	Examination Requirements for 10-Year Interval	Examination Technique/ Examination Area Comments
► VALVES ((continued) <				
C7.80	С-н	Pressure-Retaining Components	Visuat (VT-2)	All components to be examined during system hydrostatic test. Examination to be performed in accordance with IWC-5222 for each inspection interval.	All pressure-retaining boundaries for valves may be examined with direct isual (VT-2) where feasible. Examination areas inaccessible for direct visual examination may be examined at the lowest elevation with respect to the component.







ASME Section XI Item Number	ASME Section XI Examination Category	Components & Parts To Be Examined	Examination Method	Examination Requirements for 10-Year Interval	Examination Technique/ Examination Area Comments
► PRESSU	RE VESSELS 4				
01.10	D-A	Pressure-Retaining Components in Support of Reactor Shutdown Function	Visual (VT-2)	All components to be examined during system pressure or system hydrostatic test. Examination to be performed in accordance with IWD-5221 for each inspection period and performed once in accordance with IWD-5223 at the end of the inspection interval.	All pressure-retaining components may be examined with direct visual (VT-2) where feasible. Examination areas inaccessible for direct visual examination may be examined at the lowest elevation with respect to the component.
D2.10	D-B	Pressure-Retaining Components in Support of Emergency Core Cooling, Containment Heat Removal, Atmosphere Cleanup and Reactor Residual Heat Removal System.	Visuai (VT-2)	All components to be examined during system pressure or system hydrostatic test. Examination to be performed in accordance with IWD-5221 for each inspection period and performed once in accordance with IWD-5223 at the end of the inspection interval.	All pressure-retaining components may be examined with direct visual (VT-2) where feasible. Examination areas inaccessible for direct visual examination may be examined at the lowest elevation with respect to the component.
D3.10	D-C	Pressure-Retaining Components in Support of Residual Heat Removal from Spent Fuel Storage Pool	Visual (VT-2)	All components to be examined during system pressure or system hydrostatic test. Examination to be performed in accordance with IWD-5221 for each inspection period and performed once in accordance with IWD-5223 at the end of the inspection interval.	All pressure-retaining components may be examined with direct visual (VT-2) where feasible. Examination areas inaccessible for direct visual examination may be examined at the lowest elevation with respect to the component.







ASME Section XI Itam Number	ASME Section XI Examination Category	Components & Parts To Be Examined	Examination Method	Examination Requirements for 10-Year Interval	Examination Technique/ Examination Area Comments
► PIPING ·	4				
D1.10	D-A	Pressure-Retaining Components in Support of Reactor Shutdown Function	Visual (VT-2)	All components to be examined during system pressure or system hydrostatic test. Examination to be performed in accordance with IWD-5221 for each inspection period and performed once in accordance with IWD-5223 at the end of the inspection interval.	All pressure-retaining components may be examined with direct visual (VT-2) where feasible. Examination areas inaccessible for direct visual examination may be examined at the lowest elevation with respect to the component.
01.20 thru 01.60	D-A	Integral Attachments (i.e., Supports, Restraints, Mechanical and Hydraulic Snubbers, and Shock Absorbers)	Visual (VT-3)	All attachments to be examined during each inspection interval.	The integral attachments may be examined with direct VT.
D2.10	D∼B	Pressure-Retaining Components in Support of Emergency Core Cooling, Containment Heat Removal, Atmosphere Cleanup and Reactor Residual Heat Removal Systems.	Visuai (VT-2)	All components to be examined during system pressure or system hydrostatic test. Examination to be performed in accordance with IWD-5221 for each inspection period and performed once in accordance with IWD-5223 at the end of the inspection interval.	All pressure-rataining components may be examined with direct visual (VT-2) where feasible. Examination areas inaccessible for direct visual examination may be examined at the lowest elevation with respect to the component.







ASME Section X1 Item Number	ASME Section XI Examination Category	Components & Parts To Be Examined	Examination Method	Examination Requirements for 10-Year Interval	Examination Technique/ Examination Area Comments
► PIPING ((continued) <				
D2.20 thru D2.60	D-B	Integral Attachments (i.e., Supports, Restraints, Mechanical and Rydraulic Snubbers, and Shock Absorbers)	Visual (VT-3)	All attachments to be examined during each inspection interval.	The integral attachments may be examined with direct VT.
D3.10	D-C	Pressure-Retaining Components in Support of Residual Heat Removal from Spent Fuel Storage Pool	Visual (VT-2)	All components to be examined during system pressure or system hydrostatic test. Examination to be performed in accordance with IWD-5221 for each inspection period and performed once in accordance with IWD-5223 at the end of the inspection interval.	All pressure-retaining components may be examined with direct visual (VT-2) where feasible. Examination areas inaccessible for direct visual examination may be examined at the lowest elevation with respect to the component.
03.20 thru 03.60	D-C	Integral Attachments (i.e., Supports, Restraints, Mechanical and Hydraulic Snubbers, and Shock Absorbers)	Visual (VT-3)	All attachments to be examined during each inspection interval.	The integral attachments may be examined with direct V1.







ASME Section XI Item Number	ASME Section XI Examination Category	Components & Parts To Be Examined	Examination Method	Examination Requirements for 10-Year Interval	Examination Technique/ Examination Area Comments			
► PUMPS ∢								
01.10	D-A	Pressure-Retaining Components in support of Reactor Shutdown Function	Visual (VT-2)	All components to be examined during system pressure or system hydrostatic test. Examination to be performed in accordance with IWD-5221 for each inspection period and performed once in accordance with IWD-5223 at the end of the inspection interval.	All pressure-retaining components may be examined with direct visual (VI-2) where feasible. Examination areas inaccessible for direct visual examination may be examined at the lowest elevation with respect to the component.			
D1.20 thru D1.60	D-A	Integral Attachment	Visual (VT-3)	100% of each weld to be examined.	The welded attachment will be examined with direct or remote methods.			
D2.10	D~B	Pressure-Retaining Components in Support of Emergency Core Cooling, Containment Heat Removal, Atmosphere Cleanup and Reactor Residual Heat Removal Systems.	Visual (VT-2)	All components to be examined during system pressure or system hydrostatic test. Examination to be performed in accordance with IWD-5221 for each inspection period and performed once in accordance with IWD-5223 at the end of the inspection interval.	All pressure-retaining components may be examined with direct visual (VI-2) where feasible. Examination areas inaccessible for direct visual examination may be examined at the lowest elevation with respect to the component.			







ASME Section X1 Item Number	ASME Section XI Examination Category	Components & Parts To Be Examined	Examination Method	Examination Requirements for 10-Year Interval	Examination Technique/ Examination Area Comments	
► PUMPS (c	ontinued) 🖪					
D2.20 thru D2.60	D-B	Integral Attachment	Visual (VT-3)	100% of each weld to be examined.	The welded attachment will be examined with direct or remote method.	
D3.10 D+C		Pressure-Retaining Components in Support of Residual Heat Removal from Spent Fuel Storage Pool.	Visual (VT-2) All components to be examined during system pressure or system hydrostatic test. Examination to be performed in accordance with IWD-5221 for each inspection period and performed once in accordance with IWD-5223 at the end of the inspection interval.		All pressure-retaining components may be examined with direct visual (VT-2) where feasible. Examination areas inaccessible for direct visual examination may be examined at the lowest elevation with respect to the component.	
03.20 thru 03.60	D-C	Integral Attachment	Visual (VT-3)	100% of each weld to be examined.	The welded attachment will be examined with direct or remote method.	







ASME Section XI Item Number	ASME Section XI Examination Category	Components & Parts To Be Examined	Examination Method	Examination Requirements for 10-Year Interval	Examination Technique/ Examination Area Comments
► VALVES ◄	t i				
01.10	D-A	Pressure-Retaining Components in support of Reactor Shutdown Function	Vîsual (VT-2)	All components to be examined during system pressure or system hydrostatic test. Examination to be performed in accordance with IWD-5221 for each inspection period and performed once in accordance with IWD-5223 at the end of the inspection interval.	All pressure-retaining conconents may be examined with direct visual (VT-2) where feasible. Examination areas inaccessible for direct visual examination may be examined at the lowest elevation with respect to the component.
D1.20 thru D1.60		Integral Attachment	Visual (VT-3)	D1.20 through D1.60 not applicable to Clinton Power Station.	N/A
D2.10	0-B	Pressure-Retaining Components in Support of Emergency Core Cooling, Containment Neat Removal, Atmosphere Cleanup and Reactor Residual Heat Removal Systems	Visual (VT-2)	All components to be examined during system pressure or system hydrostatic test. Examination to be performed in accordance with IWD-5221 for each inspection period and performed once in accordance with IWD-5223 at the end of the inspection interval.	All pressure-retaining components may be examined with direct visual (VT-2) where feasible. Examination areas inaccessible for direct visual examination may be examined at the lowest elevation with respect to the component.







ASME Section X1 Item Number	ASME Section XI Examination Category	Components & Parts To Be Examined	Examination Method	Examination Requirements for 10-Year Interval	Examination Technique/ Examination Area Comments	
► VALVES (co	ontinued) 🖪					
02.20, D2.60	D-B	Integral Attachment	Visual (VT-3)	D2.20 through D2.60 not applicable to Clinton Power Station.	N/A	
D3.10 D-C		Pressure-Retaining Components in support of Residual Heat Removal from Spent Fuel Storage Pool	Visual (VT-2)	All components to be examined during system pressure or system hydrostatic test. Examination to be performed in accordance with IWD-5221 for each inspection period and performed once in accordance with IWD-5223 at the end of the inspection interval.	All pressure-retaining components may be examined with direct visual (VT-2) where feasible. Examination areas inaccessible for direct visual examination may be examined at the lowest elevation with respect to the component.	
D3.20 thru D3.60	D-C	Integral Attachment	Visual (VI-3)	D3.20 through D3.60 not applicable to Clinton Power Station.	N/A	





CLASS 1,2,3 COMPONENT SUPPORTS

ASME Section X1 Item Number	ASME Section XI Examination Category	Components & Parts To Be Examined	Examination Method	Examination Requirements for 10-Year Interval	Examination Technique/ Examination Area Comments
► PLATE AND	SHELL TYPE	SUPPORTS «			
F1.10 thru F1.40	F-A	Mechanical Connections to Pressure-Retaining Components and Building Structure; Weld Connections to Building Structure; Weld and Mechanical Connections at Intermediate Joints in Multiconnected Integral and Nonintegral Supports; and Component Displacement Settings of Guides and Stops, Misalignment of Supports, Assembly of Support Items	Visual (VT-3)	Component supports to be selected for examination are the supports of the components to be examined under ISI program plan. Examination boundaries established in accordance with IWF-1300. ISI of component supports may be performed during normal system operation or plant outages.	Plate and shell type supports may be examined with direct VI.





CLASS 1,2,3 COMPONENT SUPPORTS

ASME Section X: Item Number	ASME Section XI Examination Category	Components & Parts To Be Examined	Examination Method	Examination Requirements for 10-Year Interval	Examination Technique/ Examination Area Comments
► LINEAR T	YPE SUPPORTS	4			
F2.10 thru F2.40	F-B	Mechanical Connections to Pressure-Retaining Components and Building Structure; Weld Connections to Building Structure; Weld and Mechanical Connections at Intermediate Joints in Multiconnected Integral and Nonintegral Supports; and Component Displacement Settings of Guides and Stops, Misalignment of Supports, Assembly of Support Items	Visual (VT-3)	Component supports to be selected for examination are the supports of the components to be examined under ISI program plan. Examination boundaries established in accordance with IWF-1300. ISI of component supports may be performed during normal system operation or plant outages.	Linear type supports may be examined with direct VT.







CLASS 1,2,3 COMPONENT SUPPORTS

ASME Section X1 Item Number	ASME Section X1 Examination Category	Components & Parts To Be Examined	Examination Method	Examination Requirements for 10-Year Interval	Examination Technique/ Examination Area Comments
► COMPONEN	T STANDARD SU	JPPORTS 4			
F3.10 thru F3.40	F-C	Mechanical Connections to Pressure-Retaining Components and Building Structure; Weld Connections to Building Structure; Weld and Mechanical Connections at Intermediate Joints in Multiconnected Integral and Nonintegral Supports; and Component Displacement Settings of Guides and Stops, Misalignment of Supports, Assembly of Support Items	Visual (VT-3)	Component supports to be selected for examination are the supports of the components to be examined under ISI program plan. Examination boundaries established in accordance with IWF-1300. ISI of component supports may be performed during normal system operation or plant outages.	Component standard supports may be examined with direct or remote VT.

Table II

ILLINOIS POWER COMPANY CLINTON POWER STATION (CPS) UNIT 1 INSERVICE EXAMINATION PLAN COMPONENT AND PIPING EXAMINATION BOUNDARY (REVISION 4)



ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 1 COMPONENTS

REACTOR PRESSURE VESSEL

EIN	P1PE LINE SIZE	MATERIAL/ THICKNESS		EXEMPTION BASIS	ASME SEC XI ITEM NO	CODE EXAM METHOD	REMARKS
18130003			NO	N/A	B1.10 B1.20 B1.30 B1.40 B3.90 B3.100 B4.11 B4.12 B4.13 B5.10 B5.20 B6.10 B5.20 B6.20 B6.20 B6.30 B6.40 B6.50 B7.80 B8.10 B13.21 B13.22 B14.10 B13.22 B14.10 B13.21 S13.22 B14.10 B15.11	VO/SU/VT	AUGMENTED INSPECTION PERFORMED PER 1.2(H), (I), (J), (K), (L), (N), (P), (Q), (R), AND (U) OF INSERVICE EXAMINATION PLAN.



ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 1 COMPONENTS

FEEDWATER SYSTEM PIPING (FW)

EIN	P1PE LINE S1ZE	MATERIAL/ THICKNESS		EXEMPTION BASIS	ASME SEC XI ITEM NO	CODE EXAM METHOD	REMARKS
1FW02GA	18.00	CS/1.156	NO	N/A	89.11	VO/SU	
1FW02G8	18.00	CS/1.156	NO	N/A	89.11	vo/su	
1FW02HA	12.00	CS/0.844	NO	N/A	89.11	VO/SU	
1 FWOZHB	12.00	C\$/0.844	NO	A/H	89.11	VO/SU	
1 FWO2HC	12.00	CS/0.844	NO	N/A	89.11 810.10	VG/SU	
1FW02HD	12.00	CS/0.844	NO	N/A	89.11 810.10	vo/su	
1FW02JA	18.00	CS/1.781	NO	N/A	B9.11	VO/SU	AUGMENTED INSPECTION PERFORMED PER 1.2(F.1) OF INSERVICE EXAMINATION PLAN.
1FW02JB	18.00	CS/1.781	NO	N/A	89.11	vo/su	AUGMENTED INSPECTION PERFORMED PER 1.2(F.1) OF INSERVICE EXAMINATION PLAN.
1FW02KA	20.00	CS/1.969	NO	н/А	89.11 810.10	V0/SU	AUGMENTED INSPECTION PERFORMED PER 1.2(F.1) OF INSERVICE EXAMINATION PLAN.
1.FW02KB	20.00	CS/1.969	NO	N/A	89.11 810.10	Vo/su	AUGMENTED INSPECTION PERFORMED PER 1.2(F.1) OF INSERVICE EXAMINATION PLAN.
					164.5		



ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 1 COMPONENTS

HIGH PRESSURE CORE SPRAY SYSTEM PIPING (HP)

			MATERIAL/ THICKNESS	and the second sec	EXEMPTION BASIS	ASME SEC XI ITEM NO	CODE EXAM METHOD	REMARKS
-	18020	10.00	CS/0.844	NO	N/A	89.11 810.10	V0/SU	AUGMENTED INSPECTION PERFORMED PER 1.2(F.1) OF INSERVICE EXAMINATION PLAN.
	1HP02D	10.00	CS/0.719	NO	N/A	89.11 810.10	vo/su	
	1HP02E	12.00	CS/0.844	NO	N/A	89.11	VO/SU	





ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 1 COMPONENTS

MSIV LEAKAGE CONTROL SYSTEM PIPING (IS)

EIN	PIPE LINE SIZE	MATERIAL/ THICKNESS		EXEMPTION BASIS	ASME SEC X1 ITEM NO	CODE EXAM METHOD	REMARKS
11S01AA	1.50	C\$/0.281	YES	IWB-1220(A) MAKEUP	N/A	N/A	
11501AB	1.50	CS/0.281	YES	IWB-1220(A) MAKEUP	N/A	N/A	
ISO1AC	1.50	CS/0.281	YES	IWB-1220(A) MAKEUP	N/A	N/A	
ISO1AD	1.50	CS/0.281	YES	1W8-1220(A) MAKEUP	N/A	N/A	





ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINA'ION PLAN (REVISION 4)

CLASS 1 COMPONENTS

LOW PRESSURE CORE SPRAY SYSTEM FIFING (LP)

EIN		MATERIAL/ THICKNESS	EXEMPT	EXEMPTION BASIS	ASME SEC XI ITEM NO	CODE EXAM METHOD	REMARKS
LP028	10.00	CS/0.719	NO	N/A	89.11 810.10	V0/SU	AUGMENTED INSPECTION PERFORMED PER 1.2(F.1) OF INSERVICE EXAMINATION PLAN.
LP02C	12.00	CS/0.844	NO	N/A	89.11	vo/su	



ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 1 COMPONENTS

MAIN STEAM SYSTEM PIPING (MS)

EIN	PIPE LINE SIZE	MATERIAL/ THICKNESS	EXEMPT	EXEM	PTION BASIS	ASME SEC XI ITEM NO	CODE EXAM METHOD	REMARKS
1MS103AA	1.50	\$\$70.281	YES	1W8-1220(A)	MAKEUP	N/A	N/A	
1MS103AB	1.50	\$\$/0.281	YES	IW8-1220(A)	MAKEUP	N/A	N/A	
1MS103AC	1.50	\$\$70.281	YES	IW8-1220(A)	MAKEUP	N/A	N/A	
1MS103AD	1.50	\$\$/0.281	YES	IWB-1220(A)	MAKEUP	N/A	N/A	
1MS28A	2.00	CS/0.344	YES	1W8-1220(A)	MAKEUP	N/A	N/A	
1MS30AA	2.00	CS/0.344	YES	IW8-1220(A)	MAKEUP	N/A	N/A	
1MS30AB	2.00	cs/0.344	YES	IWB-1220(A)	MAKEUP	N/A	N/A	
1MS30AC	2.00	CS/0.344	YES	IW8-1220(A)	MAKEUP	N/A	N/A	
1MS30AD	2.00	CS/0.344	YES	IWB-12207 1	MAKEUP	N/A	N/A	
1MS308	3.00	C\$/0.438	YES	IWB-1220(A)	MAKEUP	N/A	N/A	
1MS32AA	1.50	CS/0.281	YES	IWB-1220(A)	MAKEUP	N/A	N/A	
1MS32AB	1.50	cs/0.281	YES	IWB-1220(A)	MAKEUP	N/A	N/A	
1MS32AC	1.50	CS/0.281	YES	1W8-1220(A)	MAKEUP	N/A	N/A	
IMS32AD	1.50	CS/0.281	YES	IW8-1220(A)	MAKEUP	N/A	N/A	
1MS32GA	2.00	CS/0.344	YES	IW8-1220(A)	MAKEUP	N/A	N/A	
1MS32GB	2.00	cs/0.344	YES	IWB-1220(A)	MAKEUP	N/A	N/A	
1MS32GC	2.00	CS/0.344	YES	1W8-1220(A)	MAKEUP	N/A	N/A	
1MS32GD	2.00	CS/0.344	YES	IW8-1220(A)	MAKEUP	N/A	N/A	
1MSA	24.00	CS/1.219	NO		N/A	89.11 B10.10	VO/SU	AUGMENTED INSPECTION PERFORMED PER 1.2(F.1) OF INSERVICE EXAMINATION PLAN.
1MSASA	10.00	CS/1.125	NO		N/A	89.11	V0/SU	
1MSASB	10.00	CS/1.125	NO		N/A	B9.11	VO/SU	
1MS6	24.00	CS/1.219	NO		N/A	89.11 810.10	vo/su	AUGMENTED INSPECTION PERFORMED PER 1.2(F.1) OF INSERVICE EXAMINATION PLAN.

NOTE: LONGITUDINAL WELDS SHALL BE EXAMINED IN ACCORDANCE WITH THE ASME SECTION XI ITEM NUMBER 89.12. BRANCH PIPE CONNECTION WELDS SHALL BE EXAMINED IN ACCORDANCE WITH THE ASME SECTION XI ITEM NUMBER 89.31.





ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

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INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 1 COMPONENTS

MAIN STEAM SYSTEM PIPING (MS)

LINE	MATERIAL/ THICKNESS	EXEMPT	EXEMPTION BASIS	ASME SEC X1 ITEM NO	CODE EXAM METHOD	REMARKS
10.00	C\$/1.125	NO	N/A	89.11	V0/SU	
10.00	CS/1.125	NO	N/A	89.11	VO/SU	
10.00	CS/1.125	NO	N/A	89.11	VO/SU	
10.00	CS/1.125	NO	N/A	89.11	VO/SU	
10.00	CS/1.125	NO	N/A	89.11	V0/SU	
24.00	CS/1.219	NO	N/A	89.11 810.10	V0/SU	AUGMENTED INSPECTION PERFORMED PER 1.2(F.1 OF INSERVICE EXAMINATION PLAN.
10.00	CS/1.125	NO	N/A	89,11	VO/SU	
10.00	CS/1.125	NO	H/A	89,11	VO/SU	
10.00	CS/1.125	NO	H/A	89.11	vo/su	
10.00	CS/1.125	NO	N/A	B9.11	VO/SU	
10.00	CS/1.125	NO	N/A	89.11	V0/SU	
10.00	CS/1.125	NO	N/A	B9.11	V0/SU	
24.00	CS/1.219	NO	N/A	89.11 810.10	VO/SU	AUGMENTED INSPECTION PERFORMED PER 1.2(F.1 OF INSERVICE EXAMINATION PLAN.
10.00	CS/1.125	NO	N/A	89.11	V0/SU	
10.00	CS/1.125	NO	N/A	89,11	V0/SU	
10.00	cs/1.125	NO	N/A	B9.11	V0/SU	
	SIZE 10.00 10.00 10.00 10.00 24.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00		SIZE THICKNESS EXEMPT 10.00 CS/1.125 NO 24.00 CS/1.219 NO 10.00 CS/1.125 NO 10.00 CS/1.125 NO 10.00 CS/1.125 NO 10.00 CS/1.125 NO	SIZE THICKNESS EXEMPT EXEMPTION BASIS 10.00 CS/1.125 NO N/A 10.00 CS/1.125	SIZE THICKNESS EXEMPT EXEMPTION BASIS ITEM NO 10.00 CS/1.125 NO N/A B9.11 10.00 CS	SIZE THICKNESS EXEMPT EXEMPTION BASIS ITEM NO METHOD 10.00 CS/1.125 NO N/A B9.11 VO/SU 10.00 CS/1.125 NO N/A B9.11 VO/SU

BRANCH PIPE CONNECTION WELDS SHALL BE EXAMINED IN ACCORDANCE WITH THE ASME SECTION XI ITEM NUMBER 89.31.



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ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 1 COMPONENTS

NUCLEAR BOILER SYSTEM PIPING (NB)

EIN		MATERIAL/ THICKNESS		EXEMPTION BASIS	ASME SEC XI ITEM NO	CODE EXAM METHOD	REMARKS
1NB01A	4.00	CS/0.438	NO	N/A	89.11	VO/SU	
1NB018	2.00	cs/0.344	YES	IVS-1220(A) MAKEUP	N/A	N/A	
ASOBAL	2.00	CS/0.344	YES	1WB-1220(A) MAKEUP	N/A	N/A	
Sec.	12						





ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 1 COMPONENTS

RESIDUAL HEAT REMOVAL SYSTEM PIPING (RH)

EIN	PIPE LINE SIZE	MATERIAL/ THICKNESS		EXEMPTION BASIS	ASME SEC XI ITEM NO	CODE EXAM METHOD	REMARKS
1RHO3CA	12.00	CS/0.844	NO	N/A	89.11 810.10	V0/SU	
1RH03CB	12.00	CS/0.844	NO	N/A	89.11 810.10	Vo/su	
1RH03DA	10.00	cs/0.719	NO	N/A	89.11	V0/SU	
1RH03DB	10.00	CS/0.719	NO	N/A	89.11	vo/su	
1RHO4B	12.00	CS/0.844	NO	N/A	89.11 810.10	VO/SU	AUGMENTED INSPECTION PERFORMED PER 1.2(F.1) OF INSERVICE EXAMINATION PLAN.
1RH04C	10.00	cs/0.719	NO	N/A	89,11	VO/SU	
184094	18.00	CS/1.156	NO	N/A	89.11 810.10	V0/SU	AUGMENTED INSPECTION PERFORMED PER 1.2(F.1) OF INSERVICE EXAMINATION PLAN.
1RH09C	18.00	S\$/1.000	NO	N/A	89.11 810.10	VO/SU	AUGMENTED INSPECTION PERFORMED PER 1.2(1) AND (J) OF INSERVICE EXAMINATION PLAN.
1RH46B	4,00	CS/0.438	NO	N. A	89.11	vo/su	AUGMENTED INSPECTION PERFORMED PER 1.2(F.1) OF INSERVICE EXAMINATION PLAN.
			F		5.15		
	1						

NOTE: DISSIMILAR METAL WELDS SHALL BE EXAMINED IN ACCORDANCE WITH THE ASME SECTION XI ITEM NUMBER 85.130.



ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 1 COMPONENTS

REACTOR CORE ISOLATION COOLING SYSTEM PIPING (RI)

EIN	PIPE LINE SIZE	MATERIAL/ THICKNESS		EXEMPTION BASIS	ASME SEC XI ITEM NO	CODE EXAM METHOD	REMARKS
181038	6,00	CS/0.562	NO	N/A	B9.11	VO/SU	AUGMENTED INSPECTION PERFORMED PER 1.2(F.1) OF INSERVICE EXAMINATION PLAN.
IRIO3C	4.00	CS/0.438	NO	N/A	89.11 810.10	vo/su	AUGMENTED INSPECTION PERFORMED PER 1.2(F.1) OF INSERVICE EXAMINATION PLAN.
IRIG4A	8.00	cs/0.500	NO	N/A	89.11 810.10	V0/SU	AUGMENTED INSPECTION PERFORMED PER 1.2(F.1) OF INSERVICE EXAMINATION PLAN.
IR129A	4.00	CS/0.438	NO	K/A	89.11 810.10	VO/SU	AUGMENTED INSPECTION PERFORMED PER 1.2(F.1) OF INSERVICE EXAMINATION PLAN.





ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 1 COMPONENTS

REACTOR RECIRCULATION SYSTEM PIPING (RR)

EIN	P1PE LINE S1ZE	MATERIAL/ THICKNESS	EXEMPT	EXEMP	TION BASIS	ASME SEC XI ITEM NO	CODE EXAM METHOD	REMARKS
1RRO4AA	2.00	\$\$/0.218	YES	IW8-1220(A)	MAKEUP	89.11	N/A	
1RR04AB	2.00	ss/0.218	YES	1W8-1220(A)	MAKEUP	89.11	N/A	
1RR15A	2.00	cs/0.344	YES	IW8-1220(A)	MAKEUP	89.11	N/A	
1RRA	20.00	\$\$/1.031	NO		N/A	89.11 810.10	VO/SU	AUGMENTED INSPECTION PERFORMED PER 1.2(1) AND (J) OF INSERVICE EXAMINATION PLAN.
1RRAA	10.00	\$\$/0.594	NO	667	N/A	89.11	vo/su	AUGMENTED INSPECTION PERFORMED PER 1.2(I) AND (J) OF INSERVICE EXAMINATION PLAN.
1RRAB	10.00	ss/0.5%4	NO		N/A	89.11	V0/SU	AUGMENTED INSPECTION PERFORMED PER 1.2(I) AND (J) OF INSERVICE EXAMINATION PLAN.
1RRAC	10.00	ss/0.594	NO		N/A	89.11	V0/SU	AUGMENTED INSPECTION PERFORMED PER 1.2(1) AND (J) OF INSERVICE EXAMINATION PLAN.
1RRACRW	4.00	ss/0.337	NO	even.	N/A	B9.11	V0/SU	AUGMENTED INSPECTION PERFORMED PER 1.2(1) AND (J) OF INSERVICE EXAMINATION PLAN.
1RRAD	10.00	ss/0.594	NO		N/A	89.11	vo/su	AUGMENTED INSPECTION PERFORMED PER 1.2(1) AND (J) OF INSERVICE EXAMINATION PLAN.
1RRADRW	4.00	ss/0.337	NO		N/A	89.11	vo/su	AUGMENTED INSPECTION PERFORMED PER 1.2(1) AND (J) OF INSERVICE EXAMINATION PLAN.
1RRAE	10.00	\$\$/0.594	NO		N/A	89.11	vo/su	AUGMENTED INSPECTION PERFORMED PER 1.2(1) AND (J) OF INSERVICE EXAMINATION PLAN.
1RRAM	15.00	SS/0.844	NO		N/A	89.11	vo/su	AUGMENTED INSPECTION PERFORMED PER 1.2(1) AND (J) OF INSERVICE EXAMINATION PLAN.
1RRB	20,00	\$\$/1.031	NO		N/A	89.11 810.10	vo/su	AUGMENTED INSPECTION PERFORMED PER 1.2(1) AND (J) OF INSERVICE EXAMINATION PLAN.
1RRBCRW	4.00	\$\$/0.337	NO		N/A	89.11	vo/su	AUGMENTED INSPECTION PERFORMED PER 1.2(1) AND (J) OF INSERVICE EXAMINATION PLAN.
1RRBDRW	4.00	ss/0.337	NO	1.0	NZ:	89.11	vo/su	AUGMENTED INSPECTION PERFORMED PER 3.2(1) AND (J) OF INSERVICE EXAMINATION PLAN.
1RRBF	10.00	ss/0.594	NO		N/A	69.11	V0/SU	AUGMENTED INSPECTION PERFORMED PER 1.2(1) AN (J) OF INSERVICE EXAMINATION PLAN.

NOTE: LONGITUDINAL WELDS SHALL BE EXAMINED IN ACCORDANCE WITH THE ASME SECTION XI ITEM NUMBER 89.12. BRANCH PIPE CONNECTION WELDS SHALL BE EXAMINED IN ACCORDANCE WITH THE ASME SECTION XI ITEM NUMBER 89.31.



ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 1 COMPONENTS

REACTOR RECIRCULATION SYSTEM PIPING (RR)

EIN		MATERIAL/ THICKNESS	EXEMPT	EXEMPTION BASIS	ASME SEC XI ITEM NO	CODE EXAM METHOD	REMARKS
1RRBG	10.00	SS/0.594	NO	N/A	B9.11	VO/SU	AUGMENTED INSPECTION PERFORMED PER 1.2(I) AND (J) OF INSERVICE EXAMINATION PLAN.
1RRBH	10.00	ss/0.594	NO	N/A	89.11	vo/su	AUGMENTED INSPECTION PERFORMED PER 1.2(1) AND (J) OF INSERVICE EXAMINATION PLAN.
1RRBJ	10.00	ss/0.594	NO	N/A	89.11	V0/SU	AUGMENTED INSPECTION PERFORMED PER 1.2(1) AND (J) OF INSERVICE EXAMINATION PLAN.
1RRBK	10.00	65/0.594	NO	N/A	B9.11	VO/SU	AUGMENTED INSPECTION PERFORMED PER 1.2(1) AND (J) OF INSERVICE EXAMINATION PLAN.
1RRBM	16.06	SS/0.844	NO	N/A	B9.11	VO/SU	AUGMENTED INSPECTION PERFORMED PER 1.2(I) AND (J) OF INSERVICE EXAMINATION PLAN.
			aid:				

NOTE: LONGITUDINAL WELDS SHALL BE EXAMINED IN ACCORDANCE WITH THE ASME SECTION XI ITEM NUMBER 89.12. BRANCH PIPE CONNECTION WELDS SHALL BE EXAMINED IN ACCORDANCE WITH THE ASME SECTION XI ITEM NUMBER 89.31.



ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 1 COMPONENTS

REACTOR WATER CLEANUP SYSTEM PIPING (RT)

	PIPE					ASME	CODE	
EIN	LINE	MATERIAL/ THICKNESS		EXEMP	TION BASIS	SEC X1 ITEM NO	EXAM METHOD	REMARKS
RTOTAA	4.00	CS/0.438	NO		N / *	89.11	V0/SU	
RTOTAB	4.00	CS/0.438	NO			B9.11	vo/su	
RT01B	6,00	cs/0.562	NO	123	N/n	89.11 810.10	V0/SU	AUGMENTED INSPECTION PERFORMED PER 1.2(F.1) OF INSERVICE EXAMINATION PLAN.
RTOIEA	4.00	\$\$/0.337	NO		N/A	B9.11	V0,*SU	AUGMENTED INSPECTION PERFORMED PER 1.2(1) A (J) OF INSERVICE EXAMINATION PLAN.
RTO1EB	4.00	\$\$/0.337	NO		N/A	9,11	vo/su	AUGMENTED INSPECTION PERFORMED PER 1.2(I) A (J) OF INSERVICE EXAMINATION PLAN.
RTOIEC	4.00	cs/0.337	NO	1.1.1.1	N/A		V0/SU	
RTOIED	4.00	CS/0.337	NO		N/A	89.11	VO/SU	AND AND A DOWN
RT28A	3.00	CS/0.438	YES	IWB-1220(A)	MAKEUP	N/A	N/A	
RT28B	3.00	cs/0.438	YES	IW8-1220(A)	MAKEUP	N/A	N/A	
RT28C	3.00	cs/0.438	YES	1WB-1220(A)	MAKEUP	N/A	N/A	
RT28D	3.00	CS/0,438	YES	IWB-1220(A)	MAKEUP	N/A	N/A	· 译字》:"你们的问题,你们的问题。"
			1.14			1.000		
			1.000			지하고		
			1: 2					
			112			제품품		
	1 - I	1.1.1		13.57				
	1.1					1. T. 199	6.8	
			t e					
	123	16	1.1	1.15		61 M S.		
		1.5						
		12.72	1.1					
			1.1.1					

NOTE: DISSIMILAR METAL WELDS SHALL BE EXAMINED IN ACCORDANCE WITH THE ASME SECTION X1 ITEM NUMBER 85.130.



ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 1 COMPONENTS

STANDBY LIQUID CONTROL SYSTEM PIPING (SC)

EIN	P1PE L1NE S1ZE	MATERIAL/ THICKNESS		EXEM.24 ION BASIS	ASME SEC XI ITEM NO	CODE EXAM METHOD	REMARKS
ISC02CA	1.50	\$\$/0.200	YES	IW8-1220(A) MAKEUP	N/A	N/A	
ISC02C8	1.50	\$\$70.200	YES	IWB-1220(A) MAKEUP	N/A	N/A	
ISCO2DA	3.00	\$\$70.300	YES	TWB-1220(A) MAKEUP	N/A	N/A	
ISC0208	3.00	\$\$/0.300	YES	IWB-1220(A) MAKEUP	N/A	N/A	
ISC02DC	3.00	C\$/0.438	YES	IWB-1220(A) MAKEUP	N/A	N/A	
SC020D	3.00	ss/0.300	YES	IWB-1220(A) MAKEUP	N/A	N/A	
SC02DE	3.00	CS/0.438	YES	IWB-1220(A) MAKEUP	N/A	N/A	



ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT I

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 1 COMPONENTS

ALL SYSTEM PIPINGS

EIN	PIPE LINE SIZE	MATERIAL/ THICKNESS	EXEMPT	EXEMPTION BASIS	ASME SEC XI ITEM NO	CODE EXAM METHOD	REMARKS
ALL BOLTING S 2 INCHES IN DIAMETER			NO	N/A	87.50	τv	
ALL PRESSURE RETAINING BOUNDARIES	***	**	NO	N/A	815.50 815.51	VT	



ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 1 COMPONENTS

PUMPS

EIN	MATERIAL/ THICKNESS	EXEMPT	EXEMPTION BASIS	ASME SEC XI ITEM NO	CODE EXAM METHOD	RÉMARKS
B33C001A	 **	NO	N/A	86.180 86.190 86.200 810.20 812.20 815.60 815.61	vo/su/vt	
833C0018	 ÷	NO.	N/A	86.180 86.190 86.200 810.20 812.20 815.60 815.61	VO/SU/VT	



ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 1 COMPONENTS

VALVES

EIN	PIPE LINE SIZE	MATERIAL/ THICKNESS	EXEMPT	EXEMPTION BASIS	ASME SEC XI ITEM NO	CODE EXAN METHOD	REMARKS
1821F010A			NO	N/A	812.50	VT	an a
182160108	1.4	44.10	NO	N/A	812.50	٧ī	
1821F011A		1.14	NO	N/A	812.50	VT.	
1821F0118			NO	N/A	812.50	VT	
1821F022A	1		NO	N/A	812.50	VT	
1821F0228			NO	N/A	812.50	VT	
1821F022C			NO	N/A	812.50	VT	
1821F0220		·	NO	N/A	812.50	VT	
1821F028A	1.1	1.00	10	K/A	B12.50	VT	
1821F0288	1.1		NO	N/A	812.50	VT	
1821F028C	1		NO	N/A	812.50	VT	
1821F0280			NO	N/A	812.50	VT	
1821F032A		1.44	NO	N/A	812.50	VT	
1821F0328			NO	N/A	B12.50	Vī	
1821F041A	1		NO	N/A	812.50	VT	
1821F0418	1	1.4	NO	N/A	812.50	VT	
1821F041C		**	NO	N/A	B12.50	VT	
1821F0410			NO	N/A	812.50	VT	
1821F041F			NO	N/A	B12.50	٧Y	
1821F041G			NO	N/A	B12.50	VT	
1821F041L		**	NO	N/A	812.50	VT	
1821F047A			NO	N/A	B12.50	VT	
1821F0478		1	NO	K/A	812.50	VT	
1821F047c			NO	N/A	B12.50	VT	
		1.00					



ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 1 COMPONENTS

VALVES

EIN	PIPE LINE SIZE	MATERIAL/ THICKNESS	EXEMPT	EXEMPTION BASIS	ASME SEC XI ITEM NO	CODE EXAM METHOD	REMARKS
B21F047D			NO	N/A	812.50	VT	
821F047F			NO	N/A	812.50	VT	
821F0518			NO	N/A	812.50	VT	
B21F051C	4.4	**	NO	N/A	812.50	VT	
821F051D			NO	N/A	B12.50	VT	
821F051G	1.4		NO	N/A	812.50	VT	
833F023A		1.1	NO	N/A	812.50	VT	
833F0238			NO	N/A	B12.50	VT	
833F060A	1 × 1	18.4	NO	N/A	812.50	VT	
833F060B			NO	N/A	812.50	VT	
B33F067A			NO	N/A	812.50	VT	
B33F067B	**	- 144 - 1	NO	N/A	812.50	Vĩ	
E12F008			NO	N/A	812.50	TV	
E12F009		44	NO	N/A	B12.50	VT	
E12F010		1.4	NO	N/A	B12.50	VT	
E 12F039A			NO	N/A	B12,50	VT	
E12F0398			NO	N/A	B12.50	VT	
IE12F039C		**	NO	N/A	B12.50	VT	
1E12F041A			NO	N/A	812.50	VT	
IE12F0418		1.42	NO	N/A	B12.50	TV	
IE12F041C	- +		NO	N/A	812.50	VT	
IE12F042A			NO	N/A	812.50	VT	
E12F0428		· •• · · ·	NO	N/A	B12.50	VT	
1E12F042C		1.1	NO	N/A	B12.50	VT	



ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 1 COMPONENTS

VALVES

LE21F005 NO N/A B12.50 VT 1E21F006 NO N/A B12.50 VT 1E21F007 NO N/A B12.50 VT 1E21F007 NO N/A B12.50 VT 1E22F006 NO N/A B12.50 VT 1E22F005 NO N/A B12.50 VT 1E22F036 NO N/A B12.50 VT 1E22F036 NO N/A B12.50 VT 1E25F063 NO N/A B12.50 VT 1E25F064 NO N/A B12.50 VT 1E33F001 NO N/A B12.50 VT 1G33F002 NO N/A B12.50 VT 1G33F002 NO N/A B12.50 VT 1G33F002 NO N/A B12.50 VT ALL NO N/A B10.30 SU ND INFEGRALLY N	PIPE LINE SIZE	MATERIAL/ THICKNESS	EXEMPT	EXEMPTION BASIS	ASME SEC XI ITEM NO	CODE EXAM METHOD	REMARKS
Itel 1 Ford Itel 1 Ford <thitel 1="" ford<="" th=""> <thitel 1="" ford<="" th=""></thitel></thitel>		**	NO	N/A	812.50	VT	
HELFINGE International and antiparticipartexpectencomenteriparticiparticipartexpectence and texp	**		NO	N/A	B12.50	VT	
Interview	**		NO	N/A	B12.50	VT	
IE22F036 NO N/A B12.50 VT IE51F013 NO N/A B12.50 VT IE51F013 NO N/A B12.50 VT IE51F063 NO N/A B12.50 VT IE51F064 NO N/A B12.50 VT IG35F001 NO N/A B12.50 VT IG33F004 NO N/A B12.50 VT IG33F004 NO N/A B12.50 VT IG33F102 NO N/A B12.50 VT ALL NO N/A B12.50 VT IG33F102 NO N/A B12.50 VT ALL NO N/A B12.50 VT ALL NO N/A B12.50 VT ALL NO N/A B10.30 SU ALL NO N/A B15.70			NO	N/A	B12.50	VT	
IESTF013 NO N/A B12.50 VT IESTF063 NO N/A B12.50 VT IESTF064 NO N/A B12.50 VT IESTF064 NO N/A B12.50 VT IG33F001 NO N/A B12.50 VT IG33F004 NO N/A B12.50 VT IG33F102 NO N/A B12.50 VT IG33F102 NO N/A B12.50 VT NUL S2 NO N/A B12.50 VT IG33F102 NO N/A B12.50 VT NUL S2 INCHES NO N/A B12.50 VT NUL S2 NO N/A B12.50 VT NUL S2 INCHES NO N/A B10.30 SU ALL NO N/A B15.70 VT			NO	N/A	812.50	VT	
HESTF063 NO N/A B12.50 VT HESTF064 NO N/A B12.50 VT IG33F001 NO N/A B12.50 VT IG33F004 NO N/A B12.50 VT IG33F005 NO N/A B12.50 VT IG33F006 NO N/A B12.50 VT NULL INTEGRALLS NO N/A B10.30 SU NULL INTEGRALLS NO N/A B10.30 SU ALL RESSURE NO N/A B15.70 VT		1 an 1	NO	N/A	812.50	VT	
HESTFOGG NO N/A B12.50 VT IG33F001 NO N/A B12.50 VT IG33F004 NO N/A B12.50 VT IG33F012 NO N/A B12.50 VT IG33F102 NO N/A B12.50 VT IG33F102 NO N/A B12.50 VT IG33F013 NO N/A B12.50 VT IG33F02 NO N/A B12.50 VT IG33F03 NO N/A B10.30 SU IG33F03 NO N/A B15.70 VT IG33F03 NO N/A B15.70 VT	143.	1 m 11	NO	N/A	B12.50	VT	
Ind No N/A B12.50 VT Ind33F004 NO N/A B12.50 VT Ind33F102 NO N/A B12.50 VT Ind33F102 NO N/A B12.50 VT ALL PRESSURE NO N/A B12.50 VT			NO	N/A	B12.50	VT	
Indian Construction Indian Construction Indian Construction Indian Construction Indian Construction Ind33F102 NO N/A B12.50 VT ALL NO N/A B10.30 SU ALL NO N/A B10.30 SU ALL NO N/A B15.70 YT		I	NO	N/A	B12.50	٧٢	
IG33F102NON/AB12.50VTALL BOLTING S 2 INCHES IN DIAMETERNON/AB7.70VTALL INTEGRALLY WELDED ATTACHMENTSNON/AB10.30SUALL PRESSURENON/AB15.70VT		1	NO	N/A	B12.50	VT	
ALL NO N/A B7.70 VT BOLTING 5 2 INCHES IN DIAMETER ALL NO N/A B10.30 SU INTEGRALLY WELDED ATTACHMENTS ALL NO N/A B15.70 VT BRESSURE			NO	N/A	B12.50	VT	
BOLTING S 2 INCHES IN DIAMETER ALL INTEGRALLY WELDED ATTACHMENTS ALL PRESSURE NO N/A B10.30 SU B10.30 SU B10.30 SU VT B15.70 VT B15.71 VT			NO	N/A	B12,50	VT	
ALL NO N/A 815.70 VT PRESSURE	••		NO	N/A	в7.70	VT	
PRESSURE B15.71			NO	N/A	B10.30	SU	
BOUNDARIES	**		Ю	N/A		VT	
		LINE 512E	LINE MATERIAL/ SIZE MATERIAL/ SIZE CONSIST CON	LINE S12E MATERIAL/ HICKNESS EXEMPT NO NO	LINE SIZE MATERIAL/ THICKNESS EXEMPT EXEMPTION BASIS NO N/A NO N/A	LINE SIZE MATERIAL/ THICKNESS EXEMPT EXEMPTION BASIS SEC XI ITEM NO NO N/A B12.50 NO N/A B10.	LINE SIZE MATERIAL/ THICKNESS EXEMPT EXEMPTION BASIS SEC XI ITEM NO EXAM METHOD NO N/A B12.50 VT NO N/A B12.50



ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 2 COMPONENTS

PRESSURE VESSELS

EIN	PIPE LINE SIZE	MATERIAL/ THICKNESS	EXEMPT	EXEMPTION	BASIS	ASME SEC X1 ITEM NO	CODE EXAM METHOD	REMARKS
1€128001A	**	**	NO	N/A		C1.10 C1.20 C1.30 C2.11 C2.21 C2.22 C3.10 C7.10 C7.20	VO/SU/VT	HEAT EXCHANGER
1E12B001B	**		NO	N/A		C1.10 C1.20 C1.30 C2.11 C2.21 C2.22 C3.10 C7.10 C7.20	VO/SU/VT	HEAT EXCHANGER



ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 2 COMPONENTS

COMPONENT COOLING SYSTEM PIPING (CC)

EIN	PIPE LINE SIZE	MATERIAL/ THICKNESS	EXEMPT	EXEMPTION BASIS	ASME SEC XI ITEM NO	CODE EXAM METHOD	REMARKS
100428	10.00	C\$/0.500	YES	IWC-1220(B) OPERATING P&T	N/A	N/A	
100420	6.00	C\$/0.562	YES	IWC-1220(B) OPERATING P&T	N/A	N/A	
100430	6.00	CS/0.432	YES	IWC-1220(B) OPERATING P&T	N/A	N/A	
1CC43E	10.00	CS/0.844	YES	INC-1220(8) OPERATING P&T	N/A	N/A	
1CC44A	8.00	CS/0.322	YES	IWC-1220(B) OPERATING P&T	N/A	N/A	
100460	8.00	CS/0.594	YES	IWC-1220(B) OPERATING P&T	N/A	N/A	
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		12112	26				



II.LINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 2 COMPONENTS

CYCLED CONDENSATE STORAGE SYSTEM PIPING (CY)

EIN	PIPE LINE SIZE	MATERIAL/ THICKNESS	EXEMPT	EXEMPTION BASIS	ASME SEC X1 ITEM NO	CODE EXAM METHOD	REMARKS
CY288	6.00	C\$/0.280	YES	IWC-1220(B) OPERATING P&T	N/A	N/A	
					1,67		
	1.14	. 1			140		
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	1.00						
					450		
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					1.164		



ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 2 COMPONENTS

FUEL POOL COOLING & CLEANUP SYSTEM PIPING (FC)

EIN	PIPE LINE SIZE	MATERIAL/ THICKNESS	EXEMPT	EXEMPTION BASIS	ASME SEC XI ITEM NO	CODE EXAM METHOD	REMARKS
1FC010	10.00	\$\$70.365	YES	IWC-1220(B) OPERATING P&T	N/A	N/A	
1FC178	8.00	\$\$/0.322	YES	IWC-1220(B) OPERATING P&T	N/A	N/A	
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	4.04				1.0		
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	19.6						
			2014				



ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 2 COMPONENTS

FIRE PROTECTION SYSTEM PIPING (FP)

EIN		MATERIAL/ THICKNESS		EXEMPTION BASIS	ASME SEC XI ITEM NO	CODE EXAM METHOD	REMARKS
1FP010	10.00	CS/0.365	YES	IWC-1220(8) OPERATING P&T	N/A	N/A	
1FP01F	10.00	CS/0,365	YES	IWC-1220(B) OPERATING P&T	N/A	N/A	
1FP490	6.00	CS/0.280	YES	IWC-1220(B) OPERATING P&T	N/A	N/A	
		1.1	1.1.1.1		1.0.1	1.1	







ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 2 COMPONENTS

FEEDWATER SYSTEM PIPING (FW)

EIN	PIPE LINE SIZE	MATERIAL/ THICKNESS	EXEMPT	EXEMPTION GAULS	ASME SEC XI ITEM NO	CODE EXAM METHOD	REMARKS
FW02FA	20.00	CS/1.969	NO	N/A	c5.21	VO/SU	
FWOZFB	20.00	CS/1.969	NO	N/A	C5.21	VO/SU	
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	1.1				800		
					1.19		
		1.0					
	123				1-22		
					10.11		
	12.3						
		1993					
	10.0	1.6.1	1.1.1		1.1.1.1.1		



ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 2 COMPONENTS

COMBUSTIBLE GAS CONTROL SYSTEM PIPING (HG)

EIN	PIPE LINE SIZE	MATERIAL/ THICKNESS	EXEMPT	EXEMPTION BASIS	ASME SEC XI ITEN NO	CODE EXAM METHOD		REMARKS
HG05AA	6.00	CS/0,280	NO	N/A	N/A	H/A	SEE RELIEF REQUEST	4001
HG05AB	6.00	cs/0.280	NO	N/A	N/A	N/A	SEE RELIEF REQUEST	4001
HG05BA	6.00	CS/0.280	NO	N/A	N/A	N/A	SEE RELIEF REQUEST	4001
HG05BB	6.00	C\$/0.280	NO	N/A	N/A	N/A	SEE RELIEF REQUEST	4001
HG05CA	6.00	\$\$/0.432	NO	N/A	N/A	N/A	SEE RELIEF REQUEST	4001
HG05C8	6.00	\$\$/0.432	NO	N/A	N/A	N/A	SEE RELIEF REQUEST	4001
HG06AA	10.00	CS/0.365	NO	N/A	N/A	N/A	SEE RELIEF REQUEST	4001
HG06AB	10.00	CS/0.365	NO	N/A	N/A	N/A	SEE RELIEF REQUEST	4001
HG06AC	10.00	CS/0.365	NO	N/A	N/A	N/A	SEE RELIEF REQUEST	4001
HG06AD	10.00	CS/0.365	NO	N/A	N/A	N/A	SEE RELIEF REQUEST	4001



ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 2 COMPONENTS

HIGH PRESSURE CORE SPRAY SYSTEM PIPING (HP)

EIN	PIPE LINE SIZE	MATERIAL/ THICKNESS	EXEMPT	EXEM	PTION BASIS	ASME SEC X1 ITEM NO	CODE EXAM METHOD	REMARKS
18014	20.00	\$\$/0.875	YES	IWC-1220(A)	DESIGN P&T74/S75	N/A	N/A	
1HPO1B	20.00	cs/0.375	YES	IWC-1220(A)	DESIGN P&T74/575	N/A	N/A	
1HP01C	24.00	cs/0.375	YES	IWC-1220(A)	DESIGN P&T74/575	N/A	N/A	
1HPOZA	14.00	CS/1.094	NO		N/A	C5.21 C3,20	VO/SU	
182028	10.00	CS/0.844	NO		N/A	C5.21	VO/SU	
1HP02F	16.00	CS/1.219	NO		N/A	C5.21	VO/SU	
1HP058	16.00	\$\$/0.375	YES	IWC-1220(A)	DESIGN P&T74/S75	N/A	N/A	
1HP05C	16.00	cs/0.375	YES	IWC-1220(A)	DESIGN P&T74/S75	N/A	N/A	
1KP18A	12.00	CS/1.000	NO		N/A	c5.21	Vo/su	
1HP188	12.00	cs/0.375	YES	IWC-1220(A)	DESIGN P&T 74/875	N/A	N/A	
1HP18C	12.00	\$\$/0,625	YES	IWC-1220(A)	DESIGN P&T74/875	N/A	N/A	
1HP180	10.00	CS/0.844	NO		N/A	C5.21	V0/SU	
1HP18E	10.00	CS/0.365	YES	IWC-1220(A)	DESIGN P&T74/S75	N/A	N/A	
18P18F	12.00	cs/1.000	NO		N/A	C5.21	VC/SU	
1HP18G	12.00	CS/0.688	YES	IWC-1220(A)	DESIGN P&T74/S75	N/A	N/A	
1HP19A	10.00	CS/0.844	NO		N/A	C5.21	VO/SU	
		12.064						



ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 2 COMPONENTS

MSIV LEAKAGE CONTROL SYSTEM PIPING (IS)

EIN	PIPE LINE SIZE	MATERIAL/ THICKNESS	EXEMPT	EXEMPTION BASIS	ASME SEC X1 ITEM NO	CODE EXAM METHOD	REMARKS
11524A	8.00	C\$/0.322	YES	IWC-1220(B) OPERATING P&T	N/A	N/A	
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ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 2 COMPONENTS

LOW PRESSURE CORE SPRAY SYSTEM PIPING (LP)

EIN	PIPE LINE SIZE	MATERIAL/ THICKNESS	EXEMPT	EXEM	PTION B	ASIS	ASME SEC X1 ITEM NO	CODE EXAM METHOD	REMARKS
P01A	20.00	\$\$/0.875	YES	IWC-1220(A)	DESIGN	P&T74/S75	N/A	N/A	
P018	20.00	CS/0.375	YES	IWC-1220(A)	DESIGN	P&T74/S75	N/A	N/A	
P02A	12,00	CS/0.406	NO		N/A		C5.11 C3.20	SU	
P02D	14.00	CS/0.438	NO		N/A		C5.11	SU	
P02E	10.00	CS/0.365	NO		N/A		C5.11	SU	
P05A	16.00	CS/0.375	YES	1WC-1220(A)	DESIGN	P&T74/S75	N/A	N/A	
P18A	10.00	CS/0.365	NO		N/A		C5.11	SU	
P188	10.00	CS/0.365	YES	IWC-1220(A)	DESIGN	P&T74/S75	N/A	N/A	



ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 2 COMPONENTS

MAIN STEAM SYSTEM PIPING (MS)

EIN	PIPE LIME SIZE	MATERIAL/ THICKNESS	EXEMPT	EXEMPTION BASIS	ASME SEC X1 ITEM NO	CODE EXAM METHOD	REMARKS
IMSO1EA	24.00	CS/1.219	NO	N/A	c5.21	VO/SU	
MS01EB	24.00	CS/1.219	NO	N/A	C5.21	VO/SU	
MS01EC	24.00	CS/1.219	NO	N/A	C5.21	vo/su	
IMS01ED	24.00	CS/1.219	NO	H/A	C5.21	VO/SU	
					6.0		



ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 2 COMPONENTS

	EIN	PIPE LINE SIZE	MATERIAL/ THICKNESS	EXEMPT	EXEMPTION BASIS	ASME SEC XI ITEM NO	CODE EXAM METHOD	REMARKS
18	HOIAA	20.00	\$\$/0.875	YES	IWC-1220(A) DESIGN P&T74/875	N/A	N/A	
18	HOTAB	20.00	\$\$/0,875	YES	IWC-1220(A) DESIGN P&T74/575	N/A	N/A	
18	H01AC	20.00	\$\$/0.875	YES	INC-1220(A) DESIGN P&T74/575	N/A	N/A	
18	HOIBA	20.00	CS/0.375	NO	N/A	C5.11	SU	AUGMENTED INSPECTION PERFORMED PER 1.2(G) OF INSERVICE EXAMINATION PLAN.
18	нотвв	20.00	CS/0.375	NO	N/A	C5.11	SU	
18	HO1BC	20.00	cs/0.375	YES	IWC-1220(A) DESIGN P&T74/875	N/A	N/A	
18	HOZAA	14.00	CS/0.438	NO	N/A	C5.11	SU	AUGMENTED INSPECTION PERFORMED PER 1.2(G) OF INSERVICE EXAMINATION PLAN.
18	HOZAB	14.00	CS/0.438	NO	N/A	C5.11	SU	AUGMENTED INSPECTION PERFORMED PER 1.2(G) OF INSERVICE EXAMINATION PLAN.
18	HO3AA	14.00	CS/0.438	NO	N/A	C5.11 C3.20	SU	AUGMENTED INSPECTION PERFORMED PER 1.2(G) OF INSERVICE EXAMINATION PLAN.
18	нозав	14.00	CS/0.438	NO	N/A	c5.11	SU	
18	H036A	12.00	CS/0.406	NO	N/A	C5.11 C3.20	SU	AUGMENTED INSPECTION PERFORMED PER 1.2(F.2) OF INSERVICE EXAMINATION PLAN.
1R	нозвв	12.00	CS/0.375	NO	N/A	C5.11 C3.20	SU	AUGMENTED INSPECTION PERFORMED PER 1.2(G) AND 1.2(F,2) OF INSERVICE EXAMINATION PLAN.
18	H03EA	18.00	CS/0.562	NO	N/A	C5.21	VO/SU	
18	нозев	18.00	CS/0.562	NO	N/A	C5.21	VO/SU	
18	NO3FB	12.00	CS/0.406	NO	N/A	C5.11	SU	
1R	HO4A	14.00	C\$/0.438	NO	N/A	C5.11 C3.20	SU	AUGMENTED INSPECTION PERFORMED PER 1.2(G) OF INSERVICE EXAMINATION PLAN.
18	H04D	12.00	CS/0.406	NO	N/A	c5.11	SU	[11] 20 11 11 11 11 11 11 11 11 11 11 11 11 11
18	H06A	16.00	C\$/0.375	NO	N/A	C5.11 C3.20	su	AUGMENTED INSPECTION PERFORMED PER 1.2(G) OF INSERVICE EXAMINATION PLAN.
18	H07A	16.00	cs/0.375	NO	N/A	C5.11	SU	
18	н07в	18.00	C\$/0.375	NO	N/A	C5.11	su	AUGMENTED INSPECTION PERFORMED PER 1.2(G) OF INSERVICE EXAMINATION PLAN.



ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 2 COMPONENTS

EIN	PIPE LINE SIZE	MATERIAL/ THICKNESS	EXEMPT	EXEMPTION BASIS	ASME SEC XI ITEM NO	CODE EXAM METHOD	REMARKS
1RH07C	16.00	CS/0.375	NO	N/A	c5.11	SU	AUGMENTED INSPECTION PERFORMED PER 1.2(G) OF INSERVICE EXAMINATION PLAN,
1RH08A	14.00	CS/0,375	NO	N/A	C5.11 C3.20	su	
181088	14.00	cs/0.375	YES	IWC-1220(A) DESIGN P&T74/875	N/A	N/A	
184098	18.00	CS/0.375	NO	N/A	C5.11 C3.20	SU	
IRH22AA	14.00	CS/0.438	NO	N/A	C5.11 C3.20	SU	AUGMENTED INSPECTION PERFORMED PER 1.2(G) OF INSERVICE EXAMINATION PLAN.
1RHZZAB	14.00	CS/0,438	NO	N/A	C5.11 C3.20	SU	AUGMENTED INSPECTION PERFORMED PER 1.2(G) OF INSERVICE EXAMINATION PLAN.
1RH22BA	18.00	CS/0.562	NO	N/A	C5.21	V0/SU	
1882288	18.00	cs/0.562	NO	N/A	C5.21	V0/SU	
1RH27C	6.00	CS/0.280	YES	IWC-1220(A) DESIGN P&T74/875	N/A	N/A	
18H288	6.00	CS/0.280	YES	IWC-1220(A) DESIGN P&T74/875	N/A	N/A	
1RH28C	6.00	\$\$/0.280	YES	1WC-1220(A) DESIGN P&T74/875	N/A	N/A	
188294	8.00	CS/0.500	NO	N/A	C5.11 C3.20	SU	AUGMENTED INSPECTION PERFORMED PER 1.2(G) OF INSERVICE EXAMINATION PLAN.
1RH29BA	8,00	cs/0.500	NO	N/A	C5.11 C3.20	SU	AUGMENTED INSPECTION PERFORMED PER 1.2(G) OF INSERVICE EXAMINATION PLAN.
1882988	8.00	CS/0.500	NO	N/A	C5.11 C3.20	SU	
1RH29CA	6.00	CS/0.432	NO	N/A	C5.11	SU	AUGMENTED INSPECTION PERFORMED PER 1.2(G) OF INSERVICE EXAMINATION PLAN.
18H29C8	6.00	CS/0.432	NO	N/A	C5.11	SU	
1RH290A	6.00	CS/0.280	NO	N/A	C5.11	SU	
1RH29DB	6,00	CS/0,280	NO	N/A	C5.11	SU	
1RH29EA	14.00	CS/0.438	NO	N/A	C5.11	su	AUGMENTED INSPECTION PERFORMED PER 1.2(G) OF INSERVICE EXAMINATION PLAN.



ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 2 COMPONENTS

EIN		MATERIAL/ THICKNESS	EXEMPT	EXEMPTION BASIS	ASME SEC XI ITEM NO	CODE EXAM NETHOD	REMARKS
1RH29EB	14.00	cs/0.438	NO	N/A	C5.11	su	
1RH29FA	6.00	CS/0.432	NO	H/A	C5.11	SU	AUGMENTED INSPECTION PERFORMED PER 1.2(G) OF INSERVICE EXAMINATION PLAN.
1RH29FB	6.00	cs/0.432	NO	N/A	c5.11	SU	
1RH29GA	6.00	CS/0.432	NO	N/A	C5.11	SU	AUGMENTED INSPECTION PERFORMED PER 1.2(G) OF INSERVICE EXAMINATION PLAN.
1RH29GB	6.00	cs/0.280	NO	N/A	c5.11	su	
1RH30AA	8.00	C\$/0,500	NO	N/A	C5.11	su	AUGMENTED INSPECTION PERFORMED PER 1.2(G) OF INSERVICE EXAMINATION PLAN.
1RH30AB	8.00	CS/0.322	NO	N/A	C5.11	SU	
1RH308A	12.00	CS/0.375	NŰ	N/A	N/A	N/A	SEE RELIEF REQUEST 4001
TRH30BB	12.00	cs/0.375	NO	N/A	N/A	N/A	SEE RELIEF REQUEST 4001
1RH30CA	12.00	\$\$/0.625	NO	N/A	N/A	N/A	SEE RELIEF REQUEST 4001
1RH3OCB	12.00	\$\$/0.625	NO	N/A	N/A	N/A	SEE RELIEF REQUEST 4001
TRH30DA	12.00	CS/0.688	NO	N/A	N/A	N/A	SEE RELIEF REQUEST 4001
1RH3008	12.00	CS/0.688	NO	N/A	N/A	N/A	SEE RELIEF REQUEST 4001
1RH37AA	12.00	CS/0.406	NO	N/A	C5.11	SU	철말 이 가지 않는 것이 같이 많이 했다.
181138AA	14.00	CS/0.438	NO	N/A	c5.11	su	AUGMENTED INSPECTION PERFORMED PER 1.2(G) OF INSERVICE EXAMINATION PLAN.
IRH38AB	14.00	CS/0.438	NO	N/A	C5.11	SU	이 같은 것은 것이 같은 것이 같아.
1RH38BA	14.00	CS/0.375	YES	IWC-1220(A) DESIGN P&T74/S	75 N/A	N/A	
1RH38BB	14.00	CS/0.375	YES	IWC-1220(A) DESIGN P&T74/S	75 N/A	N/A	
1RH38CA	14.00	\$\$/0.625	YES	IWC-1220(A) DESIGN P&T74/S	75 N/A	N/A	
1RH38CB	14.00	\$\$70,625	YES	IWC-1220(A) DESIGN P&T74/S	75 N/A	N/A	
1RH38DA	14,00	cs/0.750	YES	IWC-1220(A) DESIGN P&T74/S	75 N/A	N/A	
1RH3808	14.00	CS/0.750	YES	IWC-1220(A) DESIGN P&T74/S	75 N/A	N/A	



ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 2 COMPONENTS

EIN	PIPE LINE SIZE	MATERIAL/ THICKNESS	EXEMPT	EXEMP	PTION BASIS	ASME SEC XI ITEM NO	CODE EXAM METHOD	REMARKS
1RH39A	14.00	CS/0.438	NO		K/A	C5.11	SU	
181398	14.00	cs/0.375	YES	IWC-1220(A)	DESIGN P&T74/S75	N/A	N/A	
1RH39C	14.00	\$\$/0.625	YES	IWC-1220(A)	DESIGN P&T74/S75	N/A	N/A	
1RH390	14.00	cs/0.750	YES	IWC-1220(A)	DESIGN P&T74/875	N/A	N/A	
IRH40AA	10.00	CS/0.365	NO		N/A	C5.11 C3.20	SU	
RH40AB	10.00	cs/0.365	NO		N/A	C5.11	SU	
IRH40BA	10.00	CS/1.125	NO		H/A	C5.21 C3.20	V0/SU	
1RH4OBB	10,00	CS/1.125	NO		N/A	C5.21 C3.20	vo/su	
IRH41AA	1,00	CS/0.179	NO		N/A	N/A	SU	AUGMENTED INSPECTION PERFORMED PER 1.2(F.2 OF INSERVICE EXAMINATION PLAN.
1RH41AB	1.00	CS/0.179	NO		N/A	N/A	su	AUGMENTED INSPECTION PERFORMED PER 1.2(F.1 OF INSERVICE EXAMINATION PLAN.
18450AA	10.00	CS/0.365	NO		N/A	C5.11 C3.20	su	AUGMENTED INSPECTION PERFORMED PER 1.2(F.) OF INSERVICE EXAMINATION PLAN.
1RH50AB	10.00	CS/0.365	NO		N/A	C5.11 C3.20	SU	AUGMENTED INSPECTION PERFORMED PER 1.2(F.) OF INSERVICE EXAMINATION PLAN.
1RH50BA	10.00	CS/0.365	YES	IWC-1220(A)	DESIGN P&T74/S75	N/A	N/A	
1RH5088	10.00	CS/0.365	YES	IWC-1220(A)	DESIGN P&T74/S75	N/A	N/A	
1RH50CA	8.00	cs/0.322	YES	IWC-1220(A)	DESIGN P&T74/S75	N/A	N/A	
1RH50CB	8.00	cs/0.322	YES	IWC-1220(A)	DESIGN P&T74/575	N/A	N/Á	
1RHSODA	8,00	cs/0.322	YES	IWC-1220(A)	DESIGN P&T74/875	N/A	N/A	
1RH50DB	8.00	CS/0.322	YES	1WC-1220(A)	DESIGN P&T74/875	N/A	N/A	
1RH50EA	8.00	CS/0.322	YES	IWC-1220(A)	DESIGN P&T74/S75	N/A	N/A	
1RH50EB	8,00	CS/0.322	YES	IWC-1220(A)	DESIGN P&T74/575	N/A	N/A	
1RH50F	8.00	CS/0.322	YES	IWC-1220(A)	DESIGN P&T74/S75	N/A	N/A	



ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 2 COMPONENTS

	EIN	PIPE LINE SIZE	MATERIAL/ THICKNESS	EXEMPT	EXEMPTION BASIS	ASME SEC XI ITEM NO	CODE EXAM METHOD	REMARKS
	1885068	10.00	CS/0.594	NO	N/A	c5.21	VO/SU	AUGMENTED INSPECTION PERFORMED PER 1.2(F.2) OF INSERVICE EXAMINATION PLAN.
	1RHS1CA	10.00	CS/0.365	NO	N/A	C5.11	SU	AUGMENTED INSPECTION PERFORMED PER 1.2(F.2) OF INSERVICE EXAMINATION PLAN.
	1RH51CB	10.00	CS/0.365	NO	NZA	C5.11 C3.20	SU	AUGMENTED INSPECTION PERFORMED PER 1.2(F.2) OF INSERVICE EXAMINATION PLAN.
	1RH62A	10.00	CS/0.365	YES	IWC-1220(A) DESIGN P&T74/875	N/A	N/A	
	1RH63AA	3.00	C\$/0.300	NO	N/A	N/A	su	AUGMENTED INSPECTION PERFORMED PER 1.2(F.2) OF INSERVICE EXAMINATION PLAN.
	1RH63AB	3.00	CS/0.300	NO	N/A	N/A	SU	AUGMENTED INSPECTION PERFORMED PER 1.2(F.2) OF INSERVICE EXAMINATION PLAN.
	1RH86AA	0.75	CS/0.154	NO	N/A	N/A	SU	AUGMENTED INSPECTION PERFORMED PER 1.2(F.2) OF INSERVICE EXAMINATION PLAN.
0	1RH86AB	0.75	CS/0.154	NO	N/A	N/A	SU	AUGMENTED INSPECTION PERFORMED PER 1.2(F.2) OF INSERVICE EXAMINATION PLAN.
	1RH87AA	0.75	C\$/0.154	NO	N/A	N/A	SU	AUGMENTED INSPECTION PERFORMED PER 1.2(F.2) OF INSERVICE EXAMINATION PLAN.
	1RH87AB	0.75	CS/0.154	NO	N/A	N/A	SU	AUGMENTED INSPECTION PERFORMED PER 1.2(F.2) OF INSERVICE EXAMINATION PLAN.
	1RH97A	10.00	CS/0.365	NO	N/A	C5.11	SU	
	1RHA1AA	0.75	CS/0.154	NO	N/A	N/A	SU	AUGMENTED INSPECTION PERFORMED PER 1.2(F.2) OF INSERVICE EXAMINATION PLAN.
	1RHA1AB	0.75	CS/0.154	NO	N/A	N/A	SU	AUGMENTED INSPECTION PERFORMED PER 1.2(F.2) OF INSERVICE EXAMINATION PLAN.
1	1RHC6A	16.00	C\$/0.375	NO	N/A	C5.11	SU	
1	1RHE1AA	20.00	C\$/0.375	YES	1WC-1220(A) DESIGN P&T74/875	N/A	N/A	
and the second s	1RHE1AB	20.00	CS/0.375	YES	1WC-1220(A) DESIGN P&T74/S75	N/A	N/A	

ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 2 COMPONENTS

REACTOR CORE ISOLATION COOLING SYSTEM PIPING (RI)

T

EIN	P1PE LINE S1ZE	MATERIAL/ THICKNESS	EXEMPT	EXEMPTION BASIS	ASME SEC XI ITEM NO	CODE EXAM METHOD	REMARKS
1R1018	6.00	\$\$/0.280	YES	1WC-1220(A) DESIGN P&T74/575	N/A	N/A	
1RI01C	6.00	CS/0.280	YES	1WC-1220(A) DESIGN P&T74/875	N/A	N/A	
1R102A	6.00	\$\$70.432	YES	1WC-1220(A) DESIGN P&T74/575	N/A	N/A	
1R1028	6.00	CS/0.280	YES	1WC-1220(A) DESIGN P&T74/575	N/A	N/A	
1R103A	6.00	CS/0.562	NO	N/A	C5.21 C3.20	VO/SU	
1R1048	8,00	CS/0.500	NQ	N/A	C5.11	SU	
1R107A	12.00	CS/0,375	NO	N/A	C5.11	SU	
1R108A	12.00	CS/0.375	NO	N/A	c5.11	SU	
181088	12.00	\$\$/0.625	NO	N/A	N/A	N/A	SEE RELIEF REQUEST 4001
1R108C	12.00	CS/0.688	NO	N/A	N/A	N/A	SEE RELIEF REQUEST 4001
1R143A	8.00	C\$/0.322	NO	N/A	C5.11 C3.20	รม	
1R169A	10.00	CS/0.719	NO	N/A	C5.21	VO/SU	
	10						

ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 2 COMPONENTS

SERVICE AIR SYSTEM PIPING ('A)

EIN	PIPE LINE SIZE	MATERIAL/ THICKNESS	EXEMPT	EXEMPTION BASIS	ASME SEC X! ITEM NO	CODE EXAM METHOD	REMARKS
ISA 103A	6.00	CS/0.280	YES	IWC-1220(B) OPERATING P&T	N/A	N/A	
SAB1B	6.00	cs/0.280	YES	IWC-1220(B) OPERATING P&T	N/A	N/A	
	1.1						
					11.2		
		60.0			1.0		
	1.1				1		
	1.1				1 · 1		
					1		
					1		
	8.3					1.16	
			1.1-1				
					1		
			81				
	127	1.14			1997		
		(* 44) 1			1000		
			61.4		14 16 1		
	1.51						
			634				
			6.2				
			62.3				
			-		-		



ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 2 COMPONENTS

STANDBY LIQUID CONTROL SYSTEM PIPING (SC)

EIN	P1PE L1NE S1ZE	MATERIAL/ THICKNESS	EXEMPT	EXEMPTION BASIS	ASME SEC XI ITEM NO	CODE EXAM METHOD	REMARKS
1SC01A	6,00	ss/0.280	YES	IWC-1220(B) OPERATING P&T	N/A	N/A	
		6 - 4					
		529					



ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 2 COMPONENTS

SCRAM DISCHARGE VOLUME SYSTEM PIPING (SD)

EIN	PIPE LINE SIZE	MATERIAL/ THICKNESS	and a second second second	EXEMPTION BASIS	ASME SEC XI ITEM NO	CODE EXAM METHOD	REMARKS
1SD27010	10.00	CS/0.594	NO	N/A	c5.21	V0/SU	AUGMENTED INSPECTION PERFORMED PER 1.2(0) OF INSERVICE EXAMINATION PLAN.
1SD27012	12.00	CS/0.844	NO	N/A	C5.21 C3.20	vo/su	AUGMENTED INSPECTION PERFORMED PER 1.2(0) OF INSERVICE EXAMINATION PLAN.
1509010	10,00	CS/0.594	NO	N/A	c5.21	V0/SU	AUGMENTED INSPECTION PERFORMED PER 1.2(0) OF INSERVICE EXAMINATION PLAN.
1sD9012	12.00	CS/0.844	NO	N/A	C5.21 C3.20	vo/su	AUGMENTED INSPECTION PERFORMED PER 1.2(0) OF INSERVICE EXAMINATION PLAN.





ILLINOIS POWER COMPANY CLINTON POWER "TATION UNIT I

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 2 COMPONENTS

SUPPRESSION POOL CLEANUP & TRANSFER SYSTEM PIPING (SF)

EIN	PIPE LINE SIZE	MATERIAL/ THICKNESS		EXEMPTION BASIS	ASME SEC XI ITEM NO	CODE EXAM METHOD	REMARKS
ISF01E	10.00	CS/0.365	YES	IWC-1220(B) OPERATING P&Y	N/A	N/A	
ISF01F	12.00	CS/0.375	YES	IWC-1220(8) OPERATING P&T	N/A	N/A	
ISFOIG	12.00	\$\$/0.406	YES	IWC-1220(B) OPERATING P&T	N/A	N/A	
ISF02A	12.00	\$\$/0.406	YES	IWC-1220(B) OPERATING P&T	K/A	N/A	



ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 2 COMPONENTS

SUPPRESSION POOL MAKEUP SYSTEM PIPING (SM)

EIN	1 C C C C C C C C C C C C C C C C C C C	MATERIAL/ THICKNESS		EXEMPTION BASIS	ASME SEC XI ITEM NO	CODE EXAM METHOD	REMARKS
1SM01AA	24.00	SS/0.375	YES	IWC-1220(B) OPERATING P&Y	N/A	N/A	
ISM01AB	24.00	SS/0.375	YES	IWC-1220(B) OPERATING P&T	N/A	N/A	
ISM018A	24.00	cs/0.375	YES	IWC-1220(B) OPERATING P&T	N/A	N/A	
ISM0188	24.00	CS/0.375	YES	IWC-1220(B) OPERATING P&T	N/A	N/A	





ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 2 COMPONENTS

DRYWELL CHILLED WATER SYSTEM PIPING (VP)

EI	PIPI LINI N SIZI	E MA	ATERIAL/ HICKNESS		EXEMPTION BASIS	S	ASME EC X1 TEM NO	CODE EXAM METHOD	REMARKS
1VP02B	A 10.0	oo cs	\$/0,365	YES	IWC-1220(B) OPERATING F	P&T	N/A	N/A	
1VP028	в 10.0	00 05	\$/0.365	YES	IWC-1220(B) OPERATING P	P&T	N/A	N/A	
1VP030	A 10.1	00 05	\$/0.365	YES	IWC-1220(8) OPERATING F	P&T	N/A	K/A	
1VP030	¥ 10.0	00 05	\$/0.365	YES	IWC-1220(B) OPERATING F	P&T	N/A	N/A	
1000		180							



ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 2 COMPONENTS

DRYWELL PURGE SYSTEM PIPING (VQ)

EIN	PIPE LINE SIZE	MATERIAL/ THICKNESS		EXEMPTION BASIS	ASME SEC X1 ITEM NO	CODE EXAM METHOD	REMARKS
IVQ01A	24.00	CS/0.375	YES	IWC-1220(B) OPERATING P&T	N/A	N/A	
IVQ02A	24.00	CS/0.375	YES	IWC-1220(8) GPERATING P&T	N/A	N/A	
VQ02B	36.00	CS/0.375	YES	IWC-1220(B) OPERATING P&T	K/A	N/A	
V005A	36.00	cs/0.375	YES	IWC-1220(8) OPERATING P&T	N/A	N/A	
V013A	10.00	CS/0.365	YES	IWC-1220(B) OPERATING P&T	N/A	N/A	
VQ19A	24.00	C\$/0.375	YES	IWC-1220(B) OPERATING P&T	N/A	N/A	
	1.1.1				1 3		그는 그는 그는 것은 것을 많이 많이 했다.



ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 2 COMPONENTS

CONTAINMENT HVAC SYSTEM PIPING (VR)

EIN	PIPE LINE SIZE	MATERIAL/ THICKNESS		EXEMPTION BASIS	ASME SEC XI ITEM NO	CODE EXAM METHOD	REMARKS
IVR01B	36.00	CS/0.375	YES	WC-1220(B) OPERATING P&T	N/A	N/A	
IVR09C	12.00	CS/0.375	YES	IWC-1220(B) OPERATING P&T	N/A	N/A	
IVR14A	12.00	CS/0.375	YES	IWC-1220(B) OPERATING P&T	N/A	N/A	







ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT I

INSERVICE EXAMINATION | LAN (REVISION 4)

CLASS 2 COMPONENTS

PLANT CHILLED WATER SYSTEM PIPING (WO)

EIN	PIPE LINE SIZE	MATERIAL/ THICKNESS	EXEMPT	EXEM	PTION BASIS	ASME SEC XI ITEM NO	CODE EXAM METHOD	REMARKS
WOH1C	10.00	CS/0.365	YES	IWC-1220(B)	OPERATING P&T	N/A	N/A	
1WOK3B	6.00	CS/0.280	YES	IWC-1220(8)	OPERATING P&T	N/A	N/A	
1WOK3C	10.00	CS/0.365	YES	IWC-1220(B)	OPERATING P&T	H/A	N/A	
	14.1			1.00				
	1.5							
	1.1		10			-	1.11	
	113						1.1	
	1 .		233	- 1990 A				
		1.1	1.44					
	12.	12.74	1.1			1.55		
		1.156				30512		
						111		
		12.5						
		81.0						
			1.1					
		1.1.1						
				1000				



ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 2 COMPONENTS

ALL SYSTEM PIPINGS

EIN	PIPE LINE SIZE	MATERIAL/	EXEMPT	EXEMPTION BASIS	ASME SEC XI ITEM NO	CODE EXAM METHOD	REMARKS
ALL PRESSURE RETAINING BOUNDARIES			NO	N/A	C7.30 C7.40	Υĭ	



ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 2 COMPONENTS

PUMPS

0018YESIMC-1220(C) SIZEN/AN/A002ANON/AC6.10 C5.30SU002BNON/AC6.10 C5.30SU002CNON/AC6.10 C5.30SU003NON/AC6.10 C5.30SU004NON/AC6.10 C5.30SU005NOIMC-1220(A) DESIGN P&T74/S75N/AN/A001NON/AC6.30 C5.30SU002NOIMC-1220(A) DESIGN P&T74/S75N/AN/A001NON/AC6.10 C5.30SU002NON/AC6.10 C5.30SU003NON/AC6.10 C5.30SU004NON/AC6.10 C5.30SU005NON/AC6.10 C5.30SU006NON/AC6.10 C5.30SU007NON/AC5.10 C3.30SU008NON/AC3.30 C3.30SU009NON/AC7.50 C7.60VT	EIN	PIPE LINE SIZE	MATERIAL/ THICKNESS	EXEMPT	EXEMP	TION BASIS	ASME SEC XI ITEM NO	CODE EXAM METHOD	REMAR
OD2A $\cdot \cdot$ $\cdot \cdot$ NO H/A $C_{5,30}$ SU OD2B $\cdot \cdot$ $\cdot \cdot$ NO N/A $C_{5,30}$ SU OD2C $\cdot \cdot$ $\cdot \cdot$ NO N/A $C_{5,30}$ SU OD2C $\cdot \cdot$ $- \cdot \cdot$ NO N/A $C_{5,30}$ SU OD3 $- \cdot \cdot$ $- \cdot \cdot$ NO N/A $C_{5,30}$ SU OD4 $- \cdot \cdot$ NO N/A $C_{5,10}$ SU OD1 $- \cdot \cdot$ NO N/A $C_{5,10}$ SU OD2 $- \cdot \cdot$ NO N/A $C_{5,10}$ SU OD1 $- \cdot \cdot$ NO N/A $C_{5,10}$ SU OD1 $- \cdot \cdot$ NO N/A $C_{5,10}$ SU OD1 $- \cdot \cdot$ NO N/A $C_{5,10}$ SU OD3 $- \cdot \cdot$ NO N/A $C_{5,10}$ SU NA N/A N/A SU SU SU	C41C001A		++	YES	IWC-1220(C)	SIZE	N/A	N/A	
002B N0 N/A $\begin{bmatrix} c3.30 \\ c3.30 \\ c3.30 \\ c3.30 \end{bmatrix}$ 002c N0 N/A $\begin{bmatrix} c6.10 \\ c3.30 \\ c3.30 \\ c3.30 \end{bmatrix}$ SU 002c N0 N/A $\begin{bmatrix} c6.10 \\ c3.30 \\ c3.30 \\ c3.30 \end{bmatrix}$ SU 003 YES I/C-1220(A) DESIGN P&T74/S75 N/A N/A 001 YES I/C-1220(A) DESIGN P&T74/S75 N/A N/A 012 YES I/C-1220(A) DESIGN P&T74/S75 N/A N/A 0203	C41C0018	++ -		YES	IWC-1220(C)	SIZE	N/A	N/A	
OO2C Image: Section of the section	E12C002A			NO		N/A		su	
003 YES IWC-1220(A) DESIGN P&T74/S75 N/A N/A 001 YES IWC-1220(A) DESIGN P&T74/S75 N/A N/A 002 YES IWC-1220(A) DESIGN P&T74/S75 N/A N/A 001 YES IWC-1220(A) DESIGN P&T74/S75 N/A N/A 003 YES IWC-1220(A) DESIGN P&T74/S75 N/A N/A RALLY NO N/A C3.30 SU NHENTS NO N/A SI 30 SU NHENTS NO N/A C7.50 YT	E12C002B	***	· ++ · ·	NO		N/A		SU	
001 NO N/A C6.10 C3.30 SU 002 YES 1WC-1220(A) DESIGN P&T74/S75 N/A N/A 001 NO N/A C6.10 C3.30 SU 003 YES 1WC-1220(A) DESIGN P&T74/S75 N/A N/A 001 YES 1WC-1220(A) DESIGN P&T74/S75 N/A N/A 001 YES 1WC-1220(A) DESIGN P&T74/S75 N/A N/A 003 YES 1WC-1220(A) DESIGN P&T74/S75 N/A N/A 003 YES 1WC-1220(A) DESIGN P&T74/S75 N/A N/A 003 YES 1WC-1220(A) DESIGN P&T74/S75 N/A N/A NA YES 1WC-1220(A) DESIGN P&T74/S75 N/A N/A NA YES 1WC-1220(A) DESIGN P&T74/S75 N/A N/A NA YES 1WC-1220(A) DESIGN P&T74/S75 N/A N/A NHANA C3.30 SU SU SU SU NMAN - NO N/A SU	E12C002C	36.44		NO		N/A		SU	
002 YES 1WC-1220(A) DESIGN P&T74/S75 N/A N/A 001 YES 1WC-1220(A) DESIGN P&T74/S75 N/A N/A 003 NO N/A C6.10 C3.30 SU 003 YES 1WC-1220(A) DESIGN P&T74/S75 N/A N/A 001 YES 1WC-1220(A) DESIGN P&T74/S75 N/A N/A 001 NO N/A C6.10 C3.30 SU 003 NO N/A C6.10 C3.30 SU 003 NO N/A Design P&T74/S75 N/A N/A 003 NO N/A C6.10 C3.30 SU 003 NO N/A SU N/A NA N/A SU SU SU NMENTS NO N/A SU SU NURE NO N/A C7.50 C7.60 VT	E12003	- 4-4		YES	IWC-1220(A)	DESIGN P&T74/575	N/A	N/A	
002 $$ YES $1WC - 1220(A)$ DESIGN P&T 74/S75 N/A N/A 001 $$ $$ NO N/A $C_{3.30}^{6.10}$ SU 003 $$ YES $1WC - 1220(A)$ DESIGN P&T 74/S75 N/A N/A 001 $$ YES $1WC - 1220(A)$ DESIGN P&T 74/S75 N/A N/A 001 $$ YES $1WC - 1220(A)$ DESIGN P&T 74/S75 N/A N/A 003 $$ YES $1WC - 1220(A)$ DESIGN P&T 74/S75 N/A N/A 003 $$ YES $1WC - 1220(A)$ DESIGN P&T 74/S75 N/A N/A 003 $$ $$ YES $1WC - 1220(A)$ DESIGN P&T 74/S75 N/A N/A 003 $$ $$ ND N/A $C_{3.30}$ SU 003 $$ NO N/A $C_{3.30}$ SU WER_{NING} $$ NO N/A $C_{7.60}$ VT	E21C001			NO		N/A			
003 YES IWC-1220(A) DESIGN P&T74/S75 N/A N/A 001 NO N/A C6.10 C3.30 SU 003 YES IWC-1220(A) DESIGN P&T74/S75 N/A N/A 003 YES IWC-1220(A) DESIGN P&T74/S75 N/A N/A 003 YES IWC-1220(A) DESIGN P&T74/S75 N/A N/A RALLY DHMENTS NO N/A N/A SU URE NING NO N/A C7.50 VT	E210002			YES	1WC-1220(A)	DESIGN P&T74/575	N/A	N/A	
001 NO N/A C6.10 C3.30 SU 003 YES 1WC-1220(A) DESIGN P&T74/S75 N/A N/A RALLY HMENTS HO N/A SU SU URE NING NO N/A SU SU	E22C001	**		NO		N/A		ຣບ	
003 YES 1WC-1220(A) DESIGN P&T74/S75 N/A N/A RALLY HMENTS ND N/A SU 1 ND N/A SU URE NING ND N/A SU	E22C003	**		YES	IWC-1220(A)	DESIGN P&T74/S75	N/A	N/A	
RALLY D HMENTS NO N/A C3.30 SU UNE NING NO N/A C7.50 VT	E51C001	-	-	NO		N/A		su	
RALLY D HMENTS URE NING	E51C003	-	i A.	YES	1WC-1220(A)	DESIGN P&T74/S75	N/A	N/A	
URE C7.60	LL NTEGRALLY ELDED TTACHMENTS			NO		K/A	c3.30	su	
	LL RESSURE ETAINING OUNDARIES	**		NO		N/A		Υĭ	



ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 2 COMPONENTS

VALVES

PIPE LINE SIZE	MATERIAL/ THICKNESS	EXEMPT	EXEMPTION	BASIS	ASME SEC XI ITEM NO	CODE EXAM METHOD	REMARKS
**		NO	N/A		C3.40	su	
		Ю	N/A		C7.70 C7.80	VT	
	LINE SIZE	LINE MATERIAL/ SIZE THICKNESS	LINE MATERIAL/ SIZE THICKNESS EXEMPT	LINE MATERIAL/ SIZE THICKNESS EXEMPT EXEMPTION NO N/A NO N/A	LINE MATERIAL/ SIZE THICKNESS EXEMPT EXEMPTION BASIS	LINE MATERIAL/ SIZE THICKNESS EXEMPT EXEMPTION BASIS SEC XI ITEM NO N/A C3.40 N/A C7.70 C7.80	LINE MATERIAL/ SIZE THICKNESS EXEMPT EXEMPTION BASIS SEC XI THICKNESS EXEMPT EXEMPTION BASIS SEC XI NO N/A C3.40 SU N/A C7.70 VT C7.80 VT

ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 3 COMPONENTS

PRESSURE VESSELS

EIN	P1PE LINE SIZE	MATERIAL/ THICKNESS	EXEMPT	EXEMPTION BASIS	ASME SEC XI ITEM NO	CODE EXAM METHOD	REMARKS
ALL PRESSURE RETAINING BOUNDARIES	**	<i>6</i> 4	NO	N/A	D1.10 D2.10 D3.10	VT	SYSTEM INSERVICE TEST EVERY INSPECTION PERIOD AND SYSTEM HYDROSTATIC TEST EVERY INSPECTION INTERVAL.



ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 3 COMPONENTS

COMPONENT COOLING SYSTEM PIPING (CC)

EIN	PIPE LINE SIZE	MATERIAL/ THICKNESS	EXEMPT	EXEMPTION BASIS	ASME SEC XI ITEM NO	CODE EXAM METHOD	REMARKS
1CC02FA	14.00	CS/0.375	YES	IWD-1220.2	N/A	N/A	
10002FB	14.00	cs/0.375	YES	IND-1220.2	N/A	- A -	
100344	14.00	cs/0.375	YES	140-1220.2	N/A	N/A	
100348	14.00	CS/0.375	YES	140-1220.2	N/A	N/A	
1CC65AA	14.00	CS/0.375	YES	1WD-1220.2	N/A	H/A	
1CC65AB	14.00	cs/0.375	YES	IWD-1220.2	N/A	K.'A	
1CC67AA	14.00	cs/0.375	YES	1W0-1220.2	N/A	N/A	
1CC67AB	14.00	cs/0.375	YES	IWD-1220.2	N/A	N/A	
						1966	
		1 - 1 A			1.145	e	
					1833		
					1223		
	1.1.1				199-0a)	- C. M.	
	101				경문 문제		
	120						
				나는 것 같아요.			
		94,003			12.19		
						1.5	
		1.4				12.7.5	
					1.40	1.20	
	1.						
						103	



ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 3 COMPONENTS

FUEL POOL COOLING & CLEANUP SYSTEM PIPING (FC)

EIN	P1PE LINE SIZE	MATERIAL/ THICKNESS	EXEMPT	EXEMPTION BASIS	ASME SEC X1 ITEM NO	CODE EXAM METHOD	REMARKS
FCOIBA	10.00	\$\$/0.365	YES	IWD-1220.2	N/A	N/A	
FC0188	10.00	ss/0.365	YES	IWD-1220.2	N/A	N/A	
FC01C	10.00	ss/0.365	YES	1WD-1220.2	N/A	N/A	
FC01E	10.00	\$\$/0.365	YES	1WD-1220.2	N/A	N/A	
FCO1FA	10,00	ss/0.365	YES	IWD-1220.2	N/A	N/A	
FC01FB	6.00	\$\$/0.280	YES	140-1220.2	N/A	N/A	
FC01GA	12,00	\$\$/0,406	YES	140-1220.2	N/A	N/A	
FC01GB	12.00	\$\$/0.406	YES	1WD-1220.2	N/A	N/A	
FC01H	12.00	ss/0.406	YES	190-1220.2	N/A	N/A	
FC07AA	14.00	ss/0.375	YES	TWD-1220.2	N/A	N/A	
FC07AB	14.00	ss/0.375	YES	140-1220.2	N/A	N/A	
FC078	16.00	\$\$/0.375	YES	140-1220.2	N/A	N/A	
FC07CA	14.00	\$\$/0.375	YES	140-1220.2	N/A	N/A	
FC07CB	14.00	ss/0.375	YES	1MD-1220.2	N/A	N/A	
FCO8A	16.00	CS/0.375	YES	IWD-1220.2	N/A	N/A	
FC09AA	14.00	ss/0.375	YES	140-1220.2	N/A	N/A	
FC09AB	14.00	ss/0.375	YES	1.0-1220.2	N/A	N/A	
FC098A	8.00	\$\$/0.322	YES	1WD-1220.2	N/A	N/A	
FC09BB	12.00	ss/0.406	YES	IWD-1220.2	N/A	N/A	
FC09CA	12.00	\$\$/0.406	YES	IMD-1220.2	N/A	N/A	
FC09CB	8.00	\$\$/0.322	YES	IMD-1220.2	N/A	N/A	
FC09DA	14.00	ss/0.375	YES	IWD-1220.2	N/A	N/A	
FC09DB	14.00	\$\$/0.375	YES	IW0-1220.2	N/A	N/A	
FC10AA	8.00	\$\$/0.322	YES	1WD-1220.2	N/A	N/A	

ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 3 COMPONENTS

FUEL POOL COOLING & CLEANUP SYSTEM PIPING (FC)

EIN	PIPE LINE SIZE	MATERIAL/ THICKNESS	EXEMPT	EXEMPTION BASIS	ASME SEC XI ITEM NO	CODE EXAM METHOD	REMARKS
1FC10AB	8.00	\$\$/0.322	YES	1WD-1220.2	N/A	N/A	
1FC10B	8.00	\$\$/0.322	YES	1WD-1220.2	N/A	N/A	
1FC12C	8.00	\$\$/0.322	YES	1W0-1220.2	%/A	N/A	
1FC12DA	8.00	ss/0.322	YES	IWD-1220.2	N/A	N/A	
1FC12DB	8.00	\$\$70.322	YES	1WD-1220.2	N/A	N/A	
1FC14AA	14.00	\$\$/0.375	YES	IWD-1220.2	N/A	N/A	
1FC14AB	14.00	\$\$/0.375	YES	1WD-1220.2	H/A	N/A	
1FC148	16.00	\$\$/0.375	YES	1W0-1220.2	N/A	N/A	
1FC14CA	14.00	\$\$/0.375	YES	1WD-1220.2	N/A	N/A	
1FC14CB					N/A		VOID PER FECN 15666 (MODIFICATION FC-017)
1FC14CC		8 - 9			N/A		VOID PER FECH 15666 (MODIFICATION FC-017)
1FC14CD	14.00	ss/0.375	YES	IWD-1220.2	N/A	N/A	President and a second
1FC140	16.00	\$\$/0.375	YES	1WD-1220.2	N/A	N/A	
1FC14E	14.00	ss/0.375	YES	IWD-1220.2	H/A	N/A	
1FC14F	14.00	\$\$/0.322	YES	1MD-1220.2	N/A	N/A	LINE SIZE CHANGED PER FECN 15666 (MODIFICATION FC-017)
1FC15A	12.00	SS/0.406	YES	IWD-1220.2	H/A	N/A	
1FC17A	8.00	ss/0.322	YES	1WD-1220.2	N/A	N/A	병원 승규가 물고 가슴
1FC17C	8.00	\$\$/0.322	YES	IWD-1220.2	N/A	N/A	
1FC17D	10.00	\$\$/0.365	YES	IWD-1220.2	N/A	N/A	
1FC23AA	12.00	\$\$70.406	YES	IWD-1220.2	N/A	N/A	
1FC23AB	12.00	\$\$/0.406	YES	1WD-1220.2	N/A	H/A	
1FC23BA	10.00	\$\$/0.365	YES	IWD-1220.2	N/A	N/A	
1FC23BB	10.00	\$\$70.365	YES	IWD-1220.2	N/A	N/A	
1FCZ3CA	10.00	\$\$/0.365	YES	IWD-1220.2	N/A	R/A	



ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 3 COMPONENTS

FUEL POOL COOLING & CLEANUP SYSTEM PIPING (FC) T

	EIN	PIPE LINE SIZE	MATERIAL/ THICKNESS	EXEMPT	EXEMPTION BASIS	ASME SEC XI ITEM NO	CODE EXAM METHOD	REMARKS
1	FC23CB	10.00	ss/0.365	YES	190-1220.2	N/A	N/A	
1	FC25AA	12.00	\$\$/0.406	YES	160-1220.2	N/A	N/A	
1	FC25AB	12.00	\$\$70.406	YES	IW0-1220.2	N/A	N/A	
1	FC27C	6.00	\$\$/0.280	YES	IND-1220.2	N/A	N/A	
1	FC28AA	6.00	\$\$/0.280	YES	IWD-1220.2	N/A	N/A	
1	C28AB	6.00	\$\$/0.280	YES	140-1220.2	N/A	N/A	
1	FC31AA	6.00	\$\$/0.280	YES	140-1220.2	N/A	N/A	
11	FC31AB	6.00	\$\$/0.280	YES	IWD-1220.2	N/A	N/A	
1	FC37A	6.00	\$\$/0.280	YES	1WD-1220.2	N/A	N/A	
1	FC41A	6.00	ss/0.280	YES	1WD-1220.2	N/A	N/A	
1	FC43AA	12.00	\$\$/0.406	YES	1WD-1220.2	N/A	N/A	
1)	FC43AB	12.00	ss/0.406	YES	141-1220.2	N/A	N/A	
1	FC44AA	12.00	SS/0.406	YES	IM -1220.2	N/A	N/A	
1	C44AB	12.00	\$\$/0.406	YES	1W0 224.2	N/A	N/A	
1	FC45AB	10.00	\$\$70.365	YES	1W0-1220.2	N/A	N/A	
1	FC47A	6.00	SS/0.280	YES	140-1220.2	N/A	H/A	
1	FC478	8.00	\$\$/0.322	YES	IW0-1220.2	N/A	N/A	
1	FC51AA	6.00	\$\$/0.280	YES	140-1220.2	N/A	N/A	
1	FC51AB	6.00	\$\$70.280	YES	IWD-1220.2	N/A	N/A	
1	FC53AA	6.00	\$\$/0.280	YES	140-1220.2	N/A	N/A	
1	FC53AB	6.00	\$\$70.280	YES	IWD-1220.2	N/A	N/A	
1	FC55AA	6.00	\$\$70.280	YES	IWD-1220.2	N/A	N/A	
1	FC35AB	6.00	\$\$/0.280	YES	IWD-1220.2	N/A	N/A	
11	FC57AA	6.00	\$\$/0.280	YES	140-1220.2	N/A	N/A	
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ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 3 COMPONENTS

FUEL POOL COOLING & CLEANUP SYSTEM PIPING (FC)

EIN	PIPE LINE SIZE	MATERIAL/ THICKNESS	EXEMPT	EXEMPTION BASIS	ASME SEC X1 ITEM NO	CODE EXAM METHOD	REMARKS
FCS7AB	6.00	\$\$/0,280	YES	IWD-1220.2	N/A	N/A	
FC57BA	8.00	\$\$/0.322	YES	IWD-1220.2	N/A	N/A	
FC578B	8.00	\$\$/0.322	YES	140-1220.2	N/A	N/A	
FC59A	6.00	ss/0,280	YES	140-1220.2	N/A	N/A	
FC63B	6.00	\$\$/0.280	YES	1W0-1220.2	N/A	N/A	
FC70A	6.00	ss/0.280	YES	IWD-1220.2	N/A	N/A	
1FC708	12.00	ss/0.406	YES	1WD-1220.2	N/A	N/A	
FC70CA	14.00	\$\$/0.375	YES	IWD-1220.2	N/A	N/A	
1FC70CB	14.00	\$\$/0.375	YES	110-1220.2	N/A	N/A	
FC70DA	14.00	ss/0.375	YES	IWD-1220.2	N/A	N/A	
1FC700B	14.00	ss/0.375	YES	IWD-1220.2	N/A	N/A	
FC70EA	16.00	ss/0.375	YES	IMD-1220.2	N/A	N/A	
IFC70EB	16.00	ss/0.375	YES	IWD-1220.2	N/A	N/A	
1FC74A	6.00	\$\$/0.280	YES	IWD-1220.2	N/A	N/A	
1FCB3AA	6,00	\$\$/0.280	YES	140-1220.2	N/A	N/A	
1FCB3AB	6.00	SS/0.280	YES	IWD-1220.2	N/A	N/A	
1FC838A	8.00	CS/0.322	YES	1WD-1220.2	N/A	N/A	
1FCB38B	8.00	cs/0.322	YES	IWD-1220.2	N/A	N/A	
1FCB7A	10.00	\$\$70.365	YES	1WD-1220.2	N/A	N/A	
1FCB8A	12.00	cs/0.375	YES	IWD-1220.2	N/A	N/A	
1FCB9A	6.00	cs/0.280	YES	IWD~1220.2	N/A	N/A	
1FCB9B	6.00	CS/0.280	YES	IWD-1220.2	N/A	N/A	
1FCB9C	8.00	cs/0.322	YES	1WD-1220.2	N/A	N/A	
1FCG9A	6.00	\$\$/0.280	YES	1WD-1220.2	N/A	N/A	



ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 3 COMPONENTS

FUEL POOL COOLING & CLEANUP SYSTEM PIPING (FC)

	EIN	PIPE LINE SJZE	MATERIAL/ THICKNESS	EXEMPT	EXEMPTION BASIS	ASME SEC XI ITEM NO	CODE EXAM METHOD	REMARKS
	1FCH9AA		\$\$/0.365	1 I. M. S.	IWD-1220.2	N/A	N/A	
	1FCH9AB	10.00	\$\$/0.365	YES	IWD-1220.2	N/A	N/A	
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ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 3 COMPONENTS

MAIN STEAM SYSTEM PIPING (MS)

EIN	PIPE LINE SIZE	MATERIAL/ THICKNESS	EXEMPT	EXEMPTION BASIS	ASME SEC X1 ITEM NO	CODE EXAM METHOD	REMARKS
IMS14BA	12.00	CS/0.406	ю	N/A	01.20	VT	INSPECTION PERFORMED PER 1.2(S) OF INSERVICE EXAMINATION PLAN.
IMS14BB	12.00	CS/0.406	NO	N/A	01.20	VT	INSPECTION PERFORMED PER 1.2(S) OF INSERVICE EXAMINATION PLAN.
IMS14BC	12.00	CS/0.406	NO	N/A	D1.20	VT	INSPECTION PERFORMED PER 1.2(S) OF INSERVICE EXAMINATION PLAN.
IMS14BD	12.00	CS/0.406	NO	NZA	01.20	٧ĭ	INSPECTION PERFORMED PER 1.2(S) OF INSERVICE EXAMINATION PLAN.
IMS14CA	10.00	\$\$/0,500	NO	N/A	01,20	VT	INSPECTION PERFORMED PER 1.2(S) OF INSERVICE EXAMINATION PLAN,
IMS14CB	10,00	ss/0.500	NO	N/A	01.20	Vĩ	INSPECTION PERFORMED PER 1.2(5) OF INSERVICE EXAMINATION PLAN.
IMS14CC	10.00	\$\$/0.500	NO	N/A	D1,20	VT	INSPECTION PERFORMED PER 1.2(S) OF INSERVICE EXAMINATION PLAN.
IMS14CD	10.00	\$\$/0.500	NO	N/A	01.20	VT	INSPECTION PERFORMED PER 1.2(S) OF INSERVICE EXAMINATION PLAN.
IMS15BA	12.00	CS/0.406	NO	N/A	01.20	VŤ	INSPECTION PERFORMED PER 1.2(S) OF INSERVICE EXAMINATION PLAN.
1MS1588	12.00	C\$/0.406	NO	N/A	D1.20	vr	INSPECTION PERFORMED PER 1.2(S) OF INSERVICE EXAMINATION PLAN.
IMS15BC	12.00	CS/0.406	NO	N/A	D1.20	٧ĭ	INSPECTION PERFORMED PER 1.2(S) OF INSERVICE EXAMINATION PLAN.
IMS15BD	12.00	CS/0.406	NO	N/A	D1.20	۷ĭ	INSPECTION PERFORMED PER 1.2(S) OF INSERVICE EXAMINATION PLAN.
1MS15CA	10.00	ss/0.500	NO	N/A	01.20	٧ĭ	INSPECTION PERFORMED PER 1.2(S) OF INSERVICE EXAMINATION PLAN.
IMS15CB	10.00	ss/0.500	NO	H/A	01.20	VT	INSPECTION PERFORMED PER 1.2(S) OF INSERVICE EXAMINATION PLAN.
IMS15CC	10,00	\$\$/0.500	NO	N/A	D1.20	VT	INSPECTION PERFORMED PER 1.2(S) OF INSERVIC EXAMINATION PLAN.
IMS15CD	10.00	\$\$70.500	NO	N/A	D1.20	VT	INSPECTION PERFORMED PER 1.2(S) OF INSERVIC EXAMINATION PLAN.



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ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 3 COMPONENTS

MAIN STEAM SYSTEM PIPING (MS)

EIN	PIPE LINE SIZE	MATERIAL/ THICKNESS	EXEMPT	EXEMPTION BASIS	ASME SEC X1 ITEM NO	CODE EXAM METHOD	REMARKS
1MS1688	12.00	C\$/0.406	NO	н/а	D1.20	VT	INSPECTION PERFORMED PER 1.2(S) OF INSERVICE EXAMINATION PLAN.
IMS16BC	12.00	CS/0.406	NO	N/A	D1.20	VT	INSPECTION PERFORMED PER 1.2(S) OF INSERVICE EXAMINATION PLAN.
1MS168D	12.00	CS/0.406	NO	N/A	01.20	VT	INSPECTION PERFORMED PER 1.2(S) OF INSERVICE EXAMINATION PLAN.
1MS16CB	10.00	\$\$/0.500	NO	N/A	01.20	VT	INSPECTION PERFORMED PER 1.2(S) OF INSERVICE EXAMINATION PLAN.
1MS16CC	10.00	ss/0.500	NO	N/A	01.20	VT	INSPECTION PERFORMED PER 1.2(S) OF INSERVICE EXAMINATION PLAN.
1MS16CD	10.00	ss/0.500	NO	N/A	D1.20	٧٢	INSPECTION PERFORMED PER 1.2(S) OF INSERVICE EXAMINATION PLAN.
1MS1788	12.00	CS/0.406	NO	N/A	D1.20	VT	INSPECTION PERFORMED PER 1.2(S) OF INSERVICE EXAMINATION PLAN.
1MS178C	12.00	CS/0.406	NO	N/A	01.20	VT	INSPECTION PERFORMED PER 1.2(S) OF INSERVICE EXAMINATION PLAN.
1MS17CE	10.00	ss/0.500	NO	N/A	D1.20	VT	INSPECTION PERFORMED PER 1.2(S) OF INSERVICE EXAMINATION PLAN.
1MS17CC	10.00	\$\$/0.500	NO	N/A	D1.20	VT	INSPECTION PERFORMED PER 1.2(S) OF INSERVICE EXAMINATION PLAN.
1MS1888	12.00	CS/0.406	NO	N/A	01.20	VT	INSPECTION PERFORMED PER 1.2(S) OF INSERVICE EXAMINATION PLAN.
1MS188C	12.00	CS/0.406	NO	N/A	01.20	νĩ	INSPECTION PERFORMED PER 1.2(S) OF INSERVICE EXAMINATION PLAN.
1MS18C8	10.00	SS/0.500	NO	N/A	D1.20	VT	INSPECTION PERFORMED PER 1.2(S) OF INSERVICE EXAMINATION PLAN.
1MS18CC	10.00	ss/0.500	NO	N/A	D1.20	VT	INSPECTION PERFORMED PER 1.2(S) OF INSERVICE EXAMINATION PLAN.
1MS19BC	12.00	CS/0.406	NO	N/A	D1.20	VT	INSPECTION PERFORMED PER 1.2(S) OF INSERVICE EXAMINATION PLAN.
1MS19CC	10.00	\$\$/0.500	NO	N/A	01.20	VT	INSPECTION PERFORMED PER 1.2(S) OF INSERVICE EXAMINATION PLAN.



ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 3 COMPONENTS

MAIN STEAM SYSTEM PIPING (MS)

EIN	P1PE L1NE S1ZE	MATERIAL/ THICKNESS	EXEMPT	EXEMPTION BASIS	ASME SEC XI ITEM NO	CODE EXAM METHOD	REMARKS
1MSC5AA	10.00	CS/0.365	YES	IMD-1220.2	N/A	N/A	NO INTEGRAL ATTACHMENTS ON THIS LINE,
1MSC5AB	10.00	CS/0.365	YES	IWD-1220.2	N/A	N/A	NO INTEGRAL ATTACHMENTS ON THIS LINE.
1MSC5AC	10.00	C\$/0.365	YES	1W0-1220.2	N/A	N/A	NO INTEGRAL ATTACHMENTS ON THIS LINE.
1MSC5AD	10.00	CS/0.365	YES	IMD-1220.2	N/A	N/A	NO INTEGRAL ATTACHMENTS ON THIS LINE.
1MSC5AE	10.00	CS/0.365	YES	IWD-1220.2	N/A	K/A	NO INTEGRAL ATTACHMENTS ON THIS LINE.
1MSC5AF	10.00	CS/0.365	YES	IWD-1220.2	N/A	N/A	NO INTEGRAL ATTACHMENTS ON THIS LINE.
1MSC5AG	10.00	CS/0.365	YES	IWD-1220.2	N/A	N/A	NO INTEGRAL ATTACHMENTS ON THIS LINE,
1MSC5AH	10.00	CS/0.365	YES	IWD-1220_2	N/A	N/A	NO INTEGRAL ATTACHMENTS ON THIS LINE.
1MSC5AJ	10.00	CS/0.365	YES	IWD-1220.2	N/A	N/A	NO INTEGRAL ATTACHMENTS ON THIS LINE.
1MSC5AK	10.00	CS/0.365	YES	IWD-1220.2	N/A	N/A	NO INTEGRAL ATTACHMENTS ON THIS LINE.
1MSC5AL	10.00	CS/0.365	YES	IWD-1220.2	N/A	N/A	NO INTEGRAL ATTACHMENTS ON THIS LINE.
1MSC5AM	10.00	CS/0.365	YES	1WD-1220.2	N/A	N/A	NO INTEGRAL ATTACHMENTS ON THIS LINE.
1MCSAN	10.00	CS/0.365	YES	IWD-1220.2	N/A	N/A	NO INTEGRAL ATTACHMENTS ON THIS LINE.
1MSC5AP	10.00	C\$/0.365	YES	IWD-1220.2	N/A	N/A	NO INTEGRAL ATTACHMENTS ON THIS LINE.
1MSC5AR	10.00	CS/0.365	YES	IMD-1220.2	N/A	N/A	NO INTEGRAL ATTACHMENTS ON THIS LINE.
1MSC5AS	10.00	CS/0.365	YES	IW0-1220.2	N/A	N/A	NO INTEGRAL ATTACHMENTS ON THIS LINE.



ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 3 COMPONENTS

REACTOR WATER CLEANUP SYSTEM PIPING (RT)

EIN	PIPE LINE SIZE	MATERIAL/ THICKNESS	EXEMPT	EXEMPTION BASIS	ASME SEC XI ITEM NO	CODE EXAM METHOD	REMARKS
RTOIC	6.00	CS/0.562	NO	N/A	D1.20	¥Ϊ	INSPECTION PERFORMED PER 1.2(S) OF INSERVICE EXAMINATION PLAN.
RT02F	6.00	CS/0.562	NO	N/A	D1.20	VT	INSPECTION PERFORMED PER 1.2(S) OF INSERVICE EXAMINATION PLAN.
IRTO5FA	6.00	CS/0.562	YES	1WD-1220.2	N/A	N/A	NO INTEGRAL ATTACHMENTS ON THIS LINE.
RTOSFB	6.00	CS/0.562	YES	1W0-1220.2	N/A	N/A	NO INTEGRAL ATTACHMENTS ON THIS LINE.
IRTO6A	6.00	CS/0.562	YES	1W0-1220.2	N/A	N/A	NO INTEGRAL ATTACHMENTS ON THIS LINE.
RT06FA	6.00	CS/0.562	YES	140-1220.2	N/A	N/A	NO INTEGRAL ATTACHMENTS ON THIS LINE
IRT06F8	6.00	CS/0.562	YES	1W0-1220.2	N/A	N/A	NO INTEGRAL ATTACHMENTS ON THIS LINE.
IRT100A	10.00	CS/0.365	YES	IW0-1220.2	N/A	N/A	
RT100B	10.00	CS/0.365	YES	100-1220.2	N/A	N/A	
AA0STRI	8.00	CS/0.719	NO	N/A	D1.20	VT	INSPECTION PERFORMED PER 1.2(S) OF INSERVICE EXAMINATION PLAN.
IRT20AB	8.00	CS/0.719	NO	N/A	D1.20	VT	INSPECTION PERFORMED PER 1.2(S) OF INSERVICE EXAMINATION PLAN.
IRTZOBA	8.00	CS/0.322	YES	1WD-1220.2	N/A	N/A	States a state of
IRT2088	8,00	CS/0.322	YES	1MD-1220.2	N/A	N/A	
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ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT I

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 3 COMPONENTS

SHUTDOWN SERVICE WATER SYSTEM PIPING (SX)

EIN	PIPE LINE SIZE	MATERIAL/ THICKNESS	EXEMPT	EXEM	PTION BASIS	ASME SEC XI ITEM NO	CODE EXAM METHOD		REMARKS
SX01AA	30,00	CS/0.375	YES	IWD-1220.2		N/A	N/A	NO INTEGRAL	ATTACHMENTS ON THIS LINE.
SX01AB	30.00	CS/0.375	YES	1WD-1220.2		N/A	N/A	NO INTEGRAL	ATTACHMENTS ON THIS LINE.
SX01AC	10.00	CS/0.365	YES	1WD-1220.2		N/A	N/A	NO INTEGRAL	ATTACHMENTS ON THIS LINE.
SX02AA	30.00	CS/0.375	NO		N/A	02.20	VT		
SX02AB	30.00	cs/0.375	NO	10.00	K/A	02.20	٧T	1012	
SX02AC	10.00	CS/0.365	NO		N/A	02.20	VT		
SX028A	18.00	CS/0.375	NO		N/A	D2.20	VT	104	
SX02BB	18.00	CS/0.375	NO		N/A	D2.20	VT	10.00	
SX02CA	8,00	cs/0.322	YES	IWD-1220.2		N/A	N/A	NO INTEGRAL	ATTACHMENTS ON THIS LINE.
SX02CB	8.00	CS/0.322	YES	IWD-1220.2		N/A	N/A	NO INTEGRAL	ATTACHMENTS ON THIS LINE.
sx02cc	8.00	cs/0.322	YES	1WD-1220.2		N/A	N/A	NO INTEGRAL	ATTACHMENTS ON THIS LINE.
SX03AA	18.00	cs/0.375	NO		N/A	02.20	VT		
SX03AB	18.00	cs/0.375	NO		N/A	D2.20	VT		
SX038A	30.00	CS/0.375	NO		N/A	02.20	VT		
SX03B8	30.00	CS/0.375	NO		N/A	02.20	VT	1.1.1	
SX04AA	8.00	cs/0.322	YES	IWD-1220.2		N/A	N/A	NO INTEGRAL	ATTACHMENTS ON THIS LINE.
SX04AB	8.00	cs/0.322	NO		N/A	02.20	VT		
SX04AC	8.00	CS/0.322	NO		N/A	D2.20	VŤ	13.00	
ISX04B	10.00	cs/0.365	NO		N/A	02.20	VT		
ISX06AA	20.00	cs/0.375	YES	IWD-1220.2		N/A	N/A	NO INTEGRAL	ATTACHMENTS ON THIS LINE.
SX06AB	20.00	CS/0.375	YES	IWD-1220.2		N/A	N/A	NO INTEGRAL	ATTACHMENTS ON THIS LINE.
SX06AC	8.00	cs/0.322	YES	IND-1220.2		N/A	N/A	NO INTEGRAL	ATTACHMENTS ON THIS LINE.
ISX09A	16.00	CS/0.375	YES	140-1220.2		N/A	N/A	NO INTEGRAL	ATTACHMENTS ON THIS LINE.
SX10AA	18.00	CS/0.375	YES	IWD-1220.2		N/A	N/A	NO INTEGRAL	ATTACHMENTS ON THIS LINE.



ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 3 COMPONENTS

SHUTDOWN SERVICE WATER SYSTEM PIPING (SX)

EIN	PIPE LINE SIZE	MATERIAL/ THICKNESS	EXEMPT	EXEMPTION BASIS	ASME SEC XI ITEM NO	CODE EXAM METHOD	REMARKS
SX10AB	18.00	cs/0.375	YES	1W0-1220.2	N/A	N/A	NO INTEGRAL ATTACHMENTS ON THIS LINE.
SX1088	12.00	CS/0.375	YES	140-1220.2	N/A	N/A	NO INTEGRAL ATTACHMENTS ON THIS LINE.
SX11AA	14.00	cs/0.375	YES	140-1220.2	N/A	N/A	NO INTEGRAL ATTACHMENTS ON THIS LINE.
SX11AB	14.00	cs/0.375	YES	140-1220.2	N/A	N/A	NO INTEGRAL ATTACHMENTS ON THIS LINE.
SX13AA	8.00	cs/0.322	YES	1W0-1220.2	H/A	N/A	NO INTEGRAL ATTACHMENTS ON THIS LINE.
SX13AB	8.00	CS/0.322	YES	1WD-1220.2	N/A	N/A	NO INTEGRAL ATTACHMENTS ON THIS LINE.
SX15AA	6.00	CS/0.280	YES	IMD-1220.2	N/A	N/A	NO INTEGRAL ATTACHMENTS ON THIS LINE.
SX16A	6.00	CS/0.280	YES	190-1220.2	N/A	N/A	NO INTEGRAL ATTACHMENTS ON THIS LINE.
SX17AA	6.00	C\$/0.280	YES	IWD-1220.2	N/A	N/A	NO INTEGRAL ATTACHMENTS ON THIS LINE.
SX182A	12.00	CS/0.375	YES	IW0-1220.2	N/A	N/A	NO INTEGRAL ATTACHMENTS ON THIS LINE.
SX188	6,00	cs/0.280	YES	140-1220.2	N/A	N/A	NO INTEGRAL ATTACHMENTS ON THIS LINE.
SX20AA	8.00	cs/0.322	YES	IWD-1220.2	N/A	N/A	NO INTEGRAL ATTACHMENTS ON THIS LINE.
SX20AB	8.00	CS/0.322	YES	190-1220.2	N/A	N/A	NO INTEGRAL ATTACHMENTS ON THIS LINE.
SX26AA	20.00	cs/0.375	YES	IMD+1220.2	N/A	N/A	NO INTEGRAL ATTACHMENTS ON THIS LINE.
SXZ6AB	20.00	cs/0.375	YES	1w0-1220.2	N/A	N/A	NO INTEGRAL ATTACHMENTS ON THIS LINE.
SX26AC	8,00	cs/0.322	YES	1WD-1220.2	N/A	N/A	NO INTEGRAL ATTACHMENTS ON THIS LINE.
SX27AA	14.00	CS/0.375	YES	IM0-1220.2	N/A	N/A	NO INTEGRAL ATTACHMENTS ON THIS LINE.
SX27AB	14.00	CS/0.375	YES	IWD-1220.2	N/A	N/A	NO INTEGRAL ATTACHMENTS ON THIS LINE.
SX29CA	6.00	CS/0.280	YES	1WD-1220.2	N/A	N/A	NO INTEGRAL ATTACHMENTS ON THIS LINE.
SX29CB	6.00	CS/0.280	YES	IWD-1220.2	N/A	N/A	NO INTEGRAL ATTACHMENTS ON THIS LINE.
SX32AA	8.00	cs/0.322	YES	140-1220.2	N/A	N/A	NO INTEGRAL ATTACHMENTS ON THIS LINE.
SX32AB	8.00	cs/0.322	YES	1W0-1220.2	N/A	N/A	NO INTEGRAL ATTACHMENTS ON THIS LINE.
SX33AA	8.00	cs/0.322	YES	1WD-1220.2	N/A	N/A	NO INTEGRAL ATTACHMENTS ON THIS LINE.
SX33AB	8.00	CS/0.322	YES	1WD+1220.2	N/A	N/A	NO INTEGRAL ATTACHMENTS ON THIS LINE.



ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 3 COMPONENTS

SHUTDOWN SERVICE WATER SYSTEM PIPING (SX)

EIN	PIPE LINE SIZE	MATERIAL/ THICKNESS		EXEMPTION BASIS	ASME SEC XI ITEM NO	CODE EXAM METHOD	REMARKS
1SXK3AA	10.00	CS/0.365	YES	IWD-1220.2	N/A	N/A	NO INTEGRAL ATTACHMENTS ON THIS LINE.
ISXK3AB	10.00	C\$/0.365	YES	IMD-1220.2	N/A	N/A	NO INTEGRAL ATTACHMENTS ON THIS LINE.
2SX13AA	8.00	CS/0.322	YES	IMD-1220.2	N/A	N/A	NO INTEGRAL ATTACHMENTS ON THIS LINE.
ZSX13AB	8,00	c\$/0.322	YES	IWD-1220.2	N/A	N/A	NO INTEGRAL ATTACHMENTS ON THIS LINE.





ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 3 COMPONENTS

CONTROL ROOM HVAC SYSTEM PIPING (VC)

EIN	PIPE LINE SIZE	MATERIAL/ THICKNESS	EXEMPT	EXEMPTION BASIS	ASME SEC XI ITEM NO	CODE EXAM METHOD	REMARKS
OVCOZAA	6.00	CS/0.280	YES	1W0-1220.2	N/A	N/A	
OVCO2AB	6.00	CS/0.280	YES	IWD-1220.2	N/A	N/A	
OVCO3AA	6.00	CS/0.280	YES	IWD-1220.2	N/A	N/A	
OVC03AB	6.00	CS/0.280	YES	IW0-1220.2	N/A	N/A	
OVCO4AA	6.00	CS/0.280	YES	140-1220.2	N/A	N/A	
OVCO4AB	6.00	CS/0.280	YES	140-1220.2	N/A	N/A	
OVCO5CA	6.00	CS/0.280	YES	IWD-1220.2	N/A	N/A	
OVCOSCB	6.00	CS/0.280	YES	IWD-1220.2	N/A	N/A	
OVC28AA	18.00	CS/0.375	YES	1WD-1220.2	N/A	N/A	
0VC28AB	18.00	CS/0.375	YES	1WD-1220.2	N/A	N/A	
OVC30AA	8.00	cs/0.322	YES	IWD-1220.2	N/A	N/A	
OVC30AB	8.00	C\$/0.322	YES	IMD-1220.2	N/A	N/A	
OVC110AA	8.00	CS/0.322	YES	IWD-1220.2	N/A	N/A	
		한국가	Y.B				
					1.44		
		1.19					
					13.53		
					19.30		



ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 3 COMPONENTS

ALL SYSTEM PIPINGS

EIN	PIPE LINE SIZE	MATERIAL/ THICKNESS	EXEMPT	EXEMPTION BASIS	ASME SEC XI ITEM NO	CODE EXAM METHOD	REMARKS
ALL PRESSURE RETAINING BOUNDARIES			NO	N/A	D1.10 D2.10 D3.10	Vĭ	SYSTEM INSERVICE TEST EVERY INSPECTION PERIOD AND SYSTEM HYDROSTATIC TEST EVERY INSPECTION INTERVAL.



ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 3 COMPONENTS

PUMPS

		MATERIAL/ THICKNESS	the second se	EXEMPTION BASIS	ASME SEC XI ITEM NO	CODE EXAM METHOD	REMARKS
ALL INTEGRALLY WELDED ATTACHMENTS	•••		NO	N/A	SEE REMARKS	VT	ASME SECTION XI ITEM NO D1.20 THROUGH D1.60, D2.20 THROUGH D2.60, OR D3.20 THROUGH D3.60, AS APPLICABLE.
ALL PRESSURE RETAINING BOUNDARIES			NO	H/A	01.10 D2.10 D3.10	VT	SYSTEM INSERVICE TEST EVERY INSPECTION PERIOD AND SYSTEM HYDROSTATIC TEST EVERY INSPECTION INTERVAL.





ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 3 COMPONENTS

VALVES

EIN	PIPE LINE SIZE	MATERIAL/ THICKNESS	EXEMPT	EXEMPTION BASIS	ASME SEC XI ITEM NO	CODE EXAM METHOD	REMARKS
ALL PRESSURE RETAINING BOUNDARIES	**		NO	N/A	01.10 02.10 03.10	VT	SYSTEM INSERVICE TEST EVERY INSPECTION PERIO AND SYSTEM HYDROSTATIC TEST EVERY INSPECTION INTERVAL.



ILLINOIS POWER COMPANY CLINTON POWER STATION UNIT 1

INSERVICE EXAMINATION PLAN (REVISION 4)

CLASS 1,2 AND 3 COMPONENT SUPPORTS

EIN	PIPE LINE SIZE	MATERIAL/ THICKNESS	EXEMPT	EXEMPTION BASIS	ASME SEC XI ITEM NO	CODE EXAM METHOD	REMARKS
ALL COMPONENT SUPPORTS OF THOSE COMPONENTS NOT LISTED AS EXEMPT IN THE INSERVICE EXAMINATION PLAN	**		NO	N/A	SEE REMARKS	٧	ASME SEC XI ITEM NO F1.10 THROUGH F1.40, F2.10 THROUGH F2.40, OR F3.10 THROUGH F3.40, AS APPLICABLE. SEE RELIEF REQUESTS 4001, 4003, AND 4004.



Table III

CLINTON POWER STATION UNIT 1 PIPING LINE LIST REFERENCES

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System	P&ID	Piping Line List Revision
	Number	Date
		05/05/07
Acid Handling - AC	M05-1030	05/03/84
Auxiliary Steam - AS	M05-1031	05/15/87
Condenser Vacuum - CA	M05-1018	12/24/87
Condensate Booster - C3	M05-1006	02/01/85
Component Cooling Water - CC	M05-1032	11/04/87
Condensate - CD	M05-1005	12/14/84
Chlorination - CL	M05-1033	05/15/87
Containment Monitoring - CM	M05-1034	04/30/86
CO, Fire Protection - CO	M05-9014	12/24/87
Condensate Polishing - CP	M05-1007	11/30/84
Circulating Water - CW	M05-1010	01/14/86
Cycled Condensate - CY	M05-1012	11/04/87
Diesel Generator - DG	M05-1035	02/11/86
Laundry Radwaste Floor Drain - DL	M05-1083	05/03/84
Misc Bldg. Floor Drain - DM	M05-1059	05/15/87
Diesel Oil - DO	M05-1036	05/15/87
Feedwater Heater Misc. Vents and Drain - DV	M05-1009	05/03/84
Extraction Steam - ES	M05-1003	05/08/84
Fuel Pool Cooling & Cleanup - FC	M05-1037	11/04/87
Fuel Transfer - FH	M05-1080	12/24/87
Fire Protection - FP	M05-1039	01/27/86
	M05-1004	12/24/87
Feedwater - FW	M05-1016	05/15/84
Turbine Gland Steam Seal System - GS	M05-1008	05/03/84
Feedwater Heater Drain - HD	M05-1063	04/14/86
Combustible Gas Control - HG	M05-1074	12/24/87
High Pressure Core Spray - HP		04/16/85
Hydrogen - HY	M05-1013	04/08/86
Instrument Air - IA	M05-1040	04/08/86
MSIV Leakage Control - IS	M05-1070	
Leak Detection - LD	M05-1041	10/15/85
Low Pressure Core Spray	M05-1073	12/24/87
Make-up Condensate Storage - MC	M05-1042	11/04/87
Main Steam - MS/B21	M05-1002	04/08/86
Nuclear Boiler - NB	M05-1071	04/08/86
Off-Gas System - OG/N66	M05-1084	03/22/85
Caustic Handling - OH	M05-1043	05/18/87
Bearing Oil Transfer & Purification - OT	M05-1044	04/09/85
Process Radiation Monitoring	M05-1064	05/20/86
Post Accident Sampling & Analysis - PS	M05-1045	05/10/86
Breathing Air - RA	M05-1065	04/02/86
Control Rod Drive - RD/Cll	M05-1078	04/08/86
Equipment Drains - RE	M05-1046	12/24/87
Floor Drains - RF	M05-1047	11/04/87
Refrigeration Piping - RG	M05-1121	09/18/85
Residual Heat Removal - RH/E12	M05-1075	04/08/86
Reactor Core Isolation Cooling - RI/E51	M05-1079	04/08/86

System	P&ID Number	Piping Line List Revision Date
Particulation PP/P23	M05-1072	04/08/86
Reactor Recirculation - RR/B33	M05-1076	06/25/85
Reactor Water Clean-Up - RT/G33/G36	M05-1048	12/24/87
Service Air - SA	M05-1077	04/08/86
Standby Liquid Control - SC	M05-1060	04/08/86
Suppression Pool Clean-up & Transfer - SF	M05-1069	04/14/86
Suppression Pool Makeup System - SM	M05-1051	12/24/87
Screenwash - SW	M05-1052	04/17/86
Shutdown Water System - SX	M05-1011	09/13/85
Turbine Generator Misc. Vents & Drain - TD	1100 1011	
Turbine Rad. Off-Gas Control & Diesel Gen.	M05-1053	05/15/87
Eldg. Equipment Drains - TE	M05-1054	11/04/87
Floor Drains - TF	M05-1054	12/24/87
Filtered Water - TW	M05-1102	10/31/85
Control Room HVAC - VC	M05-1102	11/18/85
Diesel Generator Room HVAC - VD	M05-1104	05/10/84
Fuel Bldg, HVAC - VF	M05-1104	02/26/85
Standby Gas Treatment - VG	M05-1106	05/03/84
Pump House HVAC - VH	M05-1100	11/05/82
Machine Shop HVAC - VJ	M05-1118	05/03/84
Lab & Counting Rm. Humid. Steam - VL	M05-1109	06/05/84
Chilled Water - VP	M05-1110	02/03/88
Drywell Purge - VQ	M05-1110 M05-1111	11/01/85
Containment Bldg. Ventilation - VR		11/04/87
Chilled Water - VS	M05-1112	
Misc. Vents	M05-1119,1120,	11/04/87
	1122,1117	05/13/84
Radwaste Bldg. HVAC - VW	M05-1114	
Essential Switchgear Heat Removal - VX	M10-9115	11/04/87 11/04/87
Potable Water - WD	M05-1061	11/04/07
Equipment Drain Radwaste Reprocessing &	NOT ADDE IDDAE	10/0//07
Disposal - WE	M05-1085/2085	12/24/87
Floor Drain Radwaste Reprocessing &		11/01/07
Disposal - WF	M05-1086/2086	
Makeup Water Pump House - WM	M05-1055	11/04/87
Chilled Water - WO	M05-1117	09/20/85
Plant Service Water - WS	M05-1056	01/31/86
Turbine Bldg. Closed Cooling Water - WT	M05-1057	05/03/84
Solid Radwaste Collection & Processing - WX	M05-1089	12/24/87
Laundry Equipment & Floor Drain - WY	MU5-1088	05/15/87
Chemical Radwaste Processing - WZ	M05-1087/2087	11/04/87

Enclosure 3 to U-602264

Appendix V, Revision 14

Revision 14

Date 10-22-93

APPENDIX V

PUMP AND VALVE TESTING PROGRAM PLAN

Revision 14 is issued for the following:

To add Relief Request 2036 to valves 1B21-F041A, 1B21-F041B, 1B21-F041C, 1B21-F041D, 1B21-F041F, 1B21-F041G, 1B21-F041L, 1B21-F047A, 1B21-F047B, 1B21-F047C, 1B21-F047D, 1B21-F047F, 1B21-F051B, 1B21-F051C, 1B21-F051D, and 1B21-F051G.

To delete the partial exercise of valves 1E12-F041A, 1E12-F041B, 1E12-F041C, 1E21-F006, and 1E22-F005 in accordance with Relief Request 2014 (Revision 3).

To delete the position indication test of valves 1B21-F032A and 1B21-F032B. Position indication removed by Plant Modification FW-032.

Added valves 1C11-F376A, 1C11-F376B, 1C11-F377A, and 1C11-F377B to program plan. Valves added by Plant Modification NB-031.

Submitted By:	B.J. Puclitt
Approved By: _	Steven R. Bell
ANII Concurren	ce: WERuggles

WP:APPVTITL

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APPENDIX V

PUMP AND VALVE TESTING PROGRAM PLAN RECORD OF REVISION SHEET

<u>Revi</u>	sion/Date	Affected Pages
0/	12/26/85	Initial Issue as CPS 1887.00
1/	03/18/86	Complete Revision
2/	07/06/87	Complete Revision
3/	08/24/87	Complete Revision
4/	03/01/88	Complete Revision
5/	05/31/88	Complete Revision
6/	08/17/88	Revised Table II-page 87
7/	05/26/89	Complete Revision
8/	08/31/90	Revised Table II - pages 33 and 53 and Key to Table II
9/	05/15/91	Complete Revision
10/	03/11/92	Issued in response to NRC Safety Evaluation Report.
11/	06/15/92	Complete Revision
12/	12/22/92	Revised Table 2 - pages 12, 15, 25, and 34.
13/	06/07/93	Revised Table 2 - pages 13, 14, 23, 25, 26, 31, 41, 42, 47, 48, and 51.
14/	10/22/93	Revised Table 2 - pages 4, 5, 6, 7, 10, 20, 24 and 25.



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PUMP AND VALVE TESTING PROGRAM PLAN (REVISION 14)



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WP:APPVTIT2

I. INTRODUCTION

This program plan describes how safety-related pumps and valves will be tested to satisfy the requirements of the ASME Boiler and Pressure Vessel Code Section XI, Rules for the Inservice Inspection of Nuclear Power Plant Components, 1980 Edition, Winter 1981 Addenda and any additional requirements as listed below. The requirements of this edition and addenda will be used during the first 10-year inspection interval or until a later edition is selected to be used. Later editions must be endorsed in 10CFR50.55a or approved by the appropriate enforcement and regulatory agencies prior to their use. The requirements of this program plan include the relief requests as documented in Appendix III of the ISI Manual.

Revision to this program plan will be controlled by Illinois Power. Plant Modifications/Field Alterations which could affect this plan will be reviewed by personnel responsible for implementation of ISI requirements to ensure that changes are identified and the plan is revised to remain current. These identified changes to the plan may be implemented prior to revising the plan if approved by personnel responsible for implementation of ISI requirements.

The following documents have been reviewed and incorporated into the ISI Manual as necessary:

- NRC Letter dated September 22, 1987, which attached "NRR's Position on When Technical Specification LCO Action Statement Clock Begins When IST Surveillance Results Are in the Action Range."
- 2) IE Information Notice 86-50 "Inadequate Testing to Detect Failures of Safety-Related Pneumatic Components or Systems." Illinois Power Review letter Y-86498 dated November 18, 1987.
- 3) IE Information Notice "Check Valve Inservice Testing Program Deficiencies" Illinois Power review letter Y-90126 dated December 6, 1988.
- 4) NRC Generic Letter 89-04 "Guidance on Developing Acceptable Inservice Testing Programs" Illinois Power review letter Y-91415 dated May 11, 1989.
- 5) NRC Safety Evaluation Report of CPS ISI Program dated September 30, 1991.

II. PUMP TESTING

A. Scope

The requirements of this program plan shall be applied to safety-related pumps which are required to perform a specific function in shutting down the reactor or in mitigating the consequences of an accident and are provided with an emergency power source. The pumps which are included in this plan are identified in Table I of this plan.

B. Frequency of Testing

Inservice tests of pumps shall be performed every 3 months during normal plant operations. This frequency shall be maintained during extended cold shutdowns and refueling outages whenever possible. If this frequency cannot be maintained during these shutdown periods, the pump(s) shall be tested within 1 week of the plant being returned to normal operating conditions.

C. Inservice Test Requirements

The following test parameters shall be observed or measured during inservice testing of pumps.

- 1. Speed (Variable speed pumps only).
- Inlet pressure (measured prior to pump startup and during testing).
- 3. Differential pressure.
- 4. Flow rate.
- 5. Vibration amplitude.
- 6. Proper lubrication level for those pumps not lubricated by the fluid being pumped or having grease lubricated bearings.

D. Baseline Values

- Pump testing baseline reference values have been established for all pumps included in this program. If additional sets of reference values are needed, they shall be established in accordance with IWP-3112.
- 2. After a pump has been replaced, a new set or sets of reference values shall be determined from the results of the first inservice test run after the pump is put into service.

3. When a reference value or set of values have been affected by repair or routine servicing of the pump, a new reference value or set of values shall be determined or the previous value reconfirmed by an inservice test run prior to returning the pump to normal service. Deviations between the previous and new set of reference values shall be identified, and verification that the new values represent acceptable pump operation shall be placed in the test records.

E. <u>Test Procedures</u>

The procedures utilized for inservice testing shall include the following requirements.

- Each pump shall be run at least 5 minutes under conditions as stable as the associated system permits. At the end of this time, at least one measurement or observation of each of the guantities shall be made and recorded.
- 2. The test flow path to be used shall be identified.
- 3. Instruments which measure the various test quantities shall be identified by instrument number for permanent instruments or type and location if test gauges are to be used.
- 4. Reference values and limits for the quantities to be measured shall be provided in the procedure.
- 5. The resistance of the system shall be varied until either the measured differential pressure or the measured flow rate equals the corresponding reference value with a tolerance of ±2 percent. The test quantities shall then be measured of observed and recorded.
- F. Analysis of Results/Corrective Action
 - The test results analysis shall consist of a comparison of the measured test quantities and the ranges defined in IWP-3210 and as modified by Relief Requests 3002 and 3006.
 - 2. When test quantities fall within the alert range identified, the testing frequency shall be doubled until the cause of the deviation is determined and the condition corrected.

- 3. When test quantities fall within the required action range, the pump shall be declared inoperable and not returned to service until the cause of the deviation is determined and the condition corrected.
- 4. When a test shows deviation greater than allowed, the instruments involved may be recalibrated and the test rerun.
- 5. After the cause of deviations to test quantities has been determined, the condition shall be corrected by either repairing or replacing the pump or by performing an analysis to demonstrate that the condition does not impair pump operability and to ensure that the pump will perform its function. A new set of reference values shall be established after such an analysis.
- G. Inservice Test Records
 - 1. Summary Listing

The Supervisor-ISI shall maintain a log of the pumps in this program and the current status of the program.

2. Pump Records

Manufacturers' pump records shall be maintained in the IP Records Center.

3. Record of Tests

The pump test record shall include the following information:

- a. Date of test.
- b. Measured and observed quantities.
- c. Instruments used.
- d. Comparisons with allowable ranges of test values.
- e. Analysis of any deviations in test quantities.
- f. Corrective action requirements.
- g. Signatures of personnel conducting the test and analyzing the results.

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H. Instruments

1. Accuracy

Instrument accuracy shall be within the following limits:

- a. Pressure \pm 2% of full scale.
- b. Differential pressure ± 2% of full scale.
- c. Flow rate ± 2% of full scale.
- d. Speed \pm %2 of full scale.
- e. Vibration amplitude ± 5% of full scale.
- f. Temperature ± 5% of full scale.
- 2. Range

The full scale range of each instrument shall not exceed 3 times the reference value of the parameter being measured.

3. Calibration

Instruments shall be calibrated in accordance with schedules and procedures established for each instrument.

III. VALVE TESTING

A. Scope

The requirements of this program plan apply to certain safety-related valves (and their actuating and position indicating systems) which are required to perform a specific function in shutting down the reactor to a cold shutdown condition or in mitigating the consequences of an accident. The following valves are exempt from the requirements of this plan:

- Valves used for operating conveniences (such as manual vent, drain, instrument, and test valves).
- Valves used for system control (such as pressure regulating valves).
- 3. Valves used only for maintenance.
- External control and protection systems responsible for sensing plant conditions and providing signals for valve operation.

The valves which are to be tested under this plan and their ASME Category are listed in Table II.

B. Frequency of Testing

- Seat leakage tests shall be performed at least once every 2 years.
- Valve exercising and stroke timing shall be performed every 3 months unless such testing is not practical during normal plant operations. Those instances where this frequency is not practical shall be identified.
- 3. Relief valve setpoints shall be verified in accordance with a schedule that provides for all applicable relief valves to be tested every 5 years.
- 4. At least 20% of the charges in explosively actuated valves shall be removed, fired, and replaced every 2 years with charges from a fresh batch. A sample charge from the fresh batch shall have been tested satisfactorily. Charges shall not be older than 10 years.
- 5. Valves with remote position indication shall be observed at least once every 2 years to verify that valve indication is accurately indicated.
- 6. When systems are declared inoperable or not required to operate for extended periods, the exercising and stroke timing schedule need not be followed; however, within 30 days prior to returning the system to operable status, the valves shall be tested as applicable and the test frequency resumed.
- 7. Illinois Power Company will perform testing during cold shutdowns as follows:
 - a. Testing shall commence no later than 48 hours after cold shutdown is reached, and continue until complete or the plant is ready to return to power.
 - b. Completion of all valve testing is not a prerequisite to return to power.
 - c. Any testing not completed during one cold shutdown will be performed during any subsequent cold shutdowns starting from the last test performed at the previous cold shutdown.

- d. For planned cold shutdowns, where ample time is available for testing all of the valves identified which require the cold shutdown test frequency, all will be tested although testing may not begin within 48 hours.
- 8. Where Table II identifies frequencies which are more restrictive than ASME Code requirements, the CPS Technical Specification tolerance (4.0.2) may be utilized, provided that the interval between tests does not exceed the requirements of the CPS ISI Program Manual and Appendices.

C. Inservice Test Requirements

The following table identifies the types of tests required for each valve.

CATEGORY	VALVE FUNCTION	SEAT LEAKAGE TEST	STROKE TIME TEST	EXERCISE TEST	SPECIAL TEST
A	Active	Yes	Yes	Yes	No
A	Passive	Yes	No	No	No
В	Active	No	Yes	Yes	No
В	Passive	No	No	No	No
C-Relief	Active	No	No	No	Yes
Valves	Passive	No	No	No	No
C-Check	Active	No	No	Yes	No
Valves	Passive	No	No	No	No
D	Activa	No	No	No	Yes
D	Passive	No	No	No	No

D. Baseline Values

- 1. Preservice baseline values have been established for valves included in this program.
- 2. When a valve or its control system has been replaced, repaired, or has undergone maintenance that could affect performance and prior to the time it is returned to service, it shall be tested

to demonstrate that the affected performance parameters are within acceptable limits. The results of these tests shall be used during subsequent inservice testing as appropriate.

E. Test Procedures

Test procedures utilized for inservice testing shall include the following requirements:

- 1. Seat Leakage Tests
 - a. Valve seat leakage tests shall be made with the pressure differential in the same direction as when the valve is performing its function unless on the following exceptions is taken:
 - i) Globe valves may be tested with pressure under the seat.
 - ii) Butterfly valves may be tested in either direction if their seat construction is designed for sealing against pressure from both sides.
 - iii) Gate valves with 2-piece disks may be tested by pressurizing between the seats.
 - iv) Valves (except check valves) may be tested in either direction if the functional differential pressure is 15 psi or less.
 - v) Types of valves in which service pressure tends to diminish overall leakage may be tested at lower than service differential pressure. In such cases, the observed leakage (lt) shall be adjusted. This adjustment shall be made by utilizing the following formula:

 $l_{f} = l_{t} \quad \stackrel{P_{f}}{P_{t}}$ $l_{t} = observed \ leakage$ $l_{f} = functional \ leakage$ $P_{t} = test \ pressure$ $P_{f} = functional \ pressure$

- b. Seat leakage shall be measured by one of the methods described in IWV-3424 or other equivalent method.
- c. Seat leakage rates shall be evaluated for acceptability by comparing the test results with previous test results and the maximum permissible leakage rate.
- 2. Valve Exercising
 - a. Valves shall be exercised to the position required to fulfill their function.
 - b. Valve disk movement shall be determined by observing an indicator that signals the required change of disk position, or observing indirect evidence (changes in system pressure, flow rate, level, or temperature) which reflect stem or disk position.
 - c. Check valves which are normally open and are required to prevent reverse flow shall be tested in a manner that proves the disk travels to the seat promptly on the cessation or reversal of flow.
 - d. Check valves which are normally shut and whose function is to open on reversal of pressure differential shall be tested by proving that the disk moves away from the seat when the closing pressure is removed and flow through the valve is initiated, or when a mechanical force is applied to the disk.
 - e. Valves with fail-safe actuators shall be tested by observing the operation of the valves upon loss of actuator power.
- 3. Valve Stroke Timing
 - a. Stroke time shall be that time interval from initiation of the actuating signal to the desired position indication.
 - b. The stroke time of valves shall be rounded up to the nearest second.
 - c. For all values except those that are air operated, the limiting value of full stroke time for values shall be determined using the most conservative of the following values:

- 1) Design Specification
- 2) Technical Specification
- 3) USAR commitments
- For valves with full stroke time less than or equal to 10 seconds the Max. Allowable Stroke Time = Initial Base Line Time x 2
- 5) For valves with full stroke times greater than 10 seconds the Max. Allowable Stroke Time = Initial Base Line Time x 1.5
- d. For air operated valves, the limiting value shall be determined using the most conservative of the following values:
 - 1) Design Specifications
 - 2) Technical Specification
 - 3) USAR commitments
 - 4) For valves with full stroke time less than or equal to 5 seconds the Max. Allowable Stroke Time = 10 seconds (10 seconds was determined by review of all air operated valves with initial stroke times less than 5 seconds. These initial stroke times varied from 0.98 seconds to 4.93 seconds).
 - 5) For valves with full stroke times greater than 5 seconds and less than or equal to 10 seconds the Max. Allowable Stroke Time = Initial Baseline Time x 2.
 - 6) For valves with full stroke times greater than 10 seconds the Max. Allowable Stroke Time = Initial Baseline Time x 1.5.
- 4. Relief Valve Testing

Relief valve set points shall be tested in accordance with ASME PTC 25.3-1976

5. Fail-Safe Valves (Loss of Power Testing)

Valves with fail-safe actuators shall be tested by observing the operation of the valves upon loss of actuator power.

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6. Position Indication Verification

Valves with remote position indicators shall be observed to verify that valve operation is accurately indicated. Position indication testing shall be satisfied with an operator at the valve to verify actual valve movement in the proper direction against remote indication.

F. Analysis of Results/Corrective Action

1. Seat Leakage Tests

If the leakage rate exceeds the maximum permissible rate the valve shall be repaired or replaced.

- 2. Exercising and Stroke Time
 - a. If a valve fails to exhibit the required change of stem or disk position or exceeds its specified limiting value of full stroke time, the valve shall be considered inoperable.
 - b. When corrective action is required as a result of tests performed during cold shutdown periods, the condition must be corrected prior to starting the plant up.
 - c. The test frequency for power operated valves shall be increased to once per month if:
 - i) For valves with stroke times greater than 10 seconds, the valve exhibits an increase in stroke time of more than 25% from the last test.
 - ii) For valves with stroke times of 10 seconds or less, the valve exhibits an increase in stroke time of more than 50% from the last test.
 - iii) For values which have been given a reference stroke time per Relief Request 2032, the value exhibits an increase in stroke time of greater than 50% from the reference value.
- 3. Relief Valve Testing

A relief valve failing to function properly during testing shall be repaired or replaced.

4. Explosive Valve Testing

If a charge fails to fire, all charges with the same batch number shall be removed, destroyed, and replaced with charges from a fresh batch from which a sample charge shall have been tested satisfactorily.

- G. Inservice Test Records
 - 1. Summary Listing

The Supervisor-ISI shall maintain a log of the valves in this program and the current status of the program.

2. Preservice Tests

Preservice test results and manufacturers' functional test results shall be maintained in the IP Records Center.

3. Test Results

The test results records shall include the following:

- Component Identification Number
- Test Required/Performea
- ° Test Method
- Measured Quantities
- Acceptance criteria
- Dated signature of the individual responsible for the test.

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PUMP AND VALVE TESTING PROGRAM PLAN TABLE 1--PUMPS Page 1

EIN	EQUIPMENT NAME	TYPE OF TEST	FREQUENCY	RELIEF REQUEST
OVCO8PA	Control Room HVAC Chilled Water Pump A	Pump	3 Month	3001
OVCO8PB	Control Room HVAC Chilled Water Pump B	Pump	3 Month	3001
1C41-C001A	Standby Liquid Control (SLC) Pump A	Pump	3 Month	3001,3003,3005
1041-00018	Standby Liquid Control (SLC) Pump B	Pump	3 Month	3001,3003,3005
1D001PA	Diesel Oil Transfer Pump A	Pump	3 Month	3001,3002
1000128	Diesel Oil Transfer Pump B	Pump	3 Month	3001,3002
10001PC	Diesel Oil Transfer Pump C	Pump	3 Month	3001,3002
1E12-C002A	Residual Heat Removal (RHR) Pump A	Pump	3 Month	3001
1E12-C0028	Residual Heat Removal (RHR) Pump B	Pump	3 Month	3001
1E12-C002C	Residual Heat Removal (RHR) Pump C	Pump	3 Month	3001
1E12-C003	RHR Water Leg Pump	Pump	3 Month	3001,3006
1E21-C001	Low Pressure Core Spray (LPCS) Pump	Pump	3 Month	3001
1E21-C002	LPCS and RHR Loop A Water Leg Pump	Pump	3 Month	3001,3006
1622-0001	High Pressure Core Spray (HPCS) Pump	Pump	3 Month	3001
1E22-C003	HPCS Water Leg Pump	Pump	3 Month	3001,3006
1E51-C001	Reactor Core Isolation Cooling (RCIC) Pump	Pump	3 Month	
1651-0003	RCIC Water Leg Pump	Pump	3 Month	3001,3006
1FC02PA	Fuel Pool Cooling and Clean-Up Pump A	Pump	3 Month	3001
1FC02P8	Fuel Pool Cooling and Clean-Up Pump B	Pump	3 Month	3001
1SX01PA	Shutdown Service Water Pump A	Pump	3 Month	3001
1SX01PB	Shutdown Service Water Pump B	Pump	3 Month	3001
1SX01PC	Shutdown Service Water Pump C	Pump	3 Month	3001



FUMP AND VALVE TESTING PROGRAM PLAN KEY TO TABLE II -- VALVES

VALVE TYPE:

VALVE

M - Manually Operated MO - Motor Operated SO - Solenoid Operated SC - Self Contained

NORMAL POSITION/TEST POSITION: 0 - Open C - Closed LO - Locked Open LC - Locked Closed

COLD SHUTDOWN JUSTIFICATION:

A & & A & A			the strates and a second	
в		Butterfly Valve	Reference 1:	Revision 2 submittal; Letter U-600968
C		Check Valve		dated June 30, 1987 entitled *Clinton
CV	~	Control Valve		Power Station Inservice Testing Program".
EFC	*	Excess Flow Check Valve	Reference 2:	Revision 3 submittal; Letter U-601006
EX		Explosive Valve		dated August 20, 1987 entitled *Clinton
G	-	Gate Valve		Power Station Inservice Testing Program".
GL	÷.,	Globe Valve	Reference 3:	Revision 4 submittal; Letter U-601141
NC		Non-Slam Check Valve		dated March 8, 1988 entitled *Clinton
P	÷.,	Plug Valve		Power Station Inservice Testing Program*.
R		Relief Valve	Reference 4:	Revision 5 submittal; Letter U-601194,
SR	÷.	Safety Relief Valve		dated May 27, 1988, entitled *Clinton Power
VR	-	Vacuum Relief Valve		Station Inservice Testing Program".
MFC		Manual Flow Control Valve	Reference 5:	Technical Specification: Table 3.6.4-1 Note G
GSC		Discharge Stop Check Valve	Reference 6:	Revision 8 submittal; Letter U-601736, dated
DIA		Diaphram Valve		September 27, 1990, entitled "Clinton Power
2WAY	-	Two Way Valve		Station Pump and Valve Testing Program Plan".
			Reference 7:	Revision 10 submittal; Letter U-601949, dated
ACTUA	TOR			April 3, 1992, entitled "Clinton Power
AO	-	Air Operated		Station Proposed Resolution of Issues Related
HO	-	Hydraulic Operated		to NRC Review of Inservice Testing Program."



PUMP AND VALVE TESTING PROGRAM PLAN TABLE II -- VALVES

Page 1

EQUIPMENT NUMBER	TYPE	SIZE	CLASS	CATE- GORY	ACTU- ATOR	POSIT		P&ID/SHEET; coordinates	REQUIRED TESTS (Additional Tests Satisfied)	FREQUENCY	RELIEF REQUEST	COLD SHUTDOWN JUSTIFICATION
0MC009	G	¥.	2	A	MO	0	C	M05-1042/4;E-5	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 2 Year 18 Month	2011,2034	
ОМСО10	G	4	2	A	мо	0	c	M05-1042/4;D-5	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 2 Year 18 Month	2011,2034	
0RA026	CV	1	2	A	AD	0	С	M05-1065/7;D-8	Stroke Time (Exercise, Loss of Power) Leak Rate Position Indication	3 Month 2 Year 18 Month	2032 2011,2034	
ORA027	CV	1	2	A	AO	0	С	M05-1065/7;D-7	Stroke Time (Exercise, Loss of Power) Leak Rate Position Indication	3 Month 2 Year 18 Month	2032 2011,2034	
0RA028	CV	1	2	В	AO	0	C	M05-1065/7;D-6	Stroke Time (Exercise, Loss of Power) Position Indication	3 Month 2 Year	2032	
ORAC29	cv	1	2	B	AO	0	с	M05-1065/7;D-5	Stroke Time (Exercise, Loss of Power) Position Indication	3 Month 2 Year	2032	
0VC010A	CV	2	3	В	AO	0	0	M05-1102/5;A-7	Stroke Time (Exercise, Loss of Power)	3 Month	2032	
0VC0108	ĊV	2	*	8	AO	0	O	M05-1102/6;A-7	Stroke Time (Exercise, Loss of Power)	3 Month	2032	
0VC017A	C	2	3	с		С	0	M05-1102/5;F-7	Exercise	3 Month		
0VC0178	C	2	3	С		С	0	M05-1102/6;F-7	Exercise	3 Month		
0VC020A	С	2	3	B	1	C	C	M05-1102/5;F-7	Exercise	3 Month		
0VC020B	c	2	3	8		c	с	M05-1102/6;F-7	Exercise	3 Month		-
0VC022A	CV	1.5	3	В	AO	с	0	M05-1102/5;F-7	Stroke Time (Exercise, Loss of Power)	3 Month	2032	
0VC0228	CV	1.5	3	8	AO	c	0	M05-1102/6;F-7	Stroke Time (Exercise, Loss of Power)	3 Month	2032	





PUMP AND VALVE TESTING PROGRAM PLAN

TABLE II -- VALVES

Page 2

EQUIPMENT				CATE -	ACTU-	POSIT		P&ID/SHEET;	REQUIRED TESTS		RELIEF	COLD SHUTDOW
NUMBER	TYPE	SIZE	CLASS	GORY	ATOR	NORMAL	TEST	coordinates	(Additional Tests Satisfied)	FREQUENCY	REQUEST	JUSTIFICATIO
0VC025A	R	1x1.5	3	C		С	0	M05-1102/5;E-6	Bench	5 Year		
0vc0258	R	1x1.5	3	С		C	0	M05-1102/6;E-6	Bench	5 Year		
1821-F001	GL	2	1	A-P*	MO	C	С	M05-1071/2;D-4	Leak Rate Position Indication	2 Year 2 Year	2011	
1 <u>821-</u> £002	GL	2	1	A-P*	MO	С	С	M05-1071/2;E-4	Leak Rate Position Indication	2 Year 2 Year	2011	
1821-F010A	NC	18	1	A/C		0	C,0	M05-1004;C-7	Exercise (Open) Leak Rate (Exercise Closed)	Cold Shutdown Cold Shutdown	2011,2034	Ref 3
1821-F0108	NC	18	1	A/C		0	C,0	M05-1004;A-7	Exercise (Open) Leak Rate (Exercise Closed)	Cold Shutdown Cold Shutdown	2011,2034	Ref 3
1821-F016	G	3	1	A	MO	0	С	M05-1002/1;B-1	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 2 Year 18 Month	2011,2034	
1B21-F019	G	3	1	A	мо	Ð	С	M05-1002/1;B-1	Stroke Time (Exercise) Leax Rate Position Indication	3 Month 2 Year 18 Month	2011,2034	
1821-F022A	GL	24	1	A	AO	0	с	M05-1002/1;C-2	Stroke Time (Exercise, Loss of Power) Partial Exercise Leak Rate Position Indication	Cold Shutdown 3 Month 18 Month 18 Month	2011,2034	Ref 1
1821-F022B	GL	24	1	Å	AO	0	с	M05-1002/1;F-2	Stroke Time (Exercise, Loss of Power) Partial Exercise Leak Rate Position Indication	Cold Shutdown 3 Month 18 Month 18 Month	2011,2034	Ref 1
1821-F022C	GL	24	1	Á	AO	0	c	M05-1002/1;A-2	Stroke Time (Exercise, Loss of Power) Partial Exercise Leak Rate Position Indication	Cold Shutdown 3 Month 18 Month 18 Month	2011,2034	Ref 1

* Passive valve



PUMP AND VALVE TESTING PROGRAM PLAN TABLE II--VALVES

EQUIPMENT				CATE-	ACTU-	POSIT	ION	P&ID/SHEET;	REQUIRED TESTS		RELIEF	COLD SHUTDOW
NUMBER	TYPE	SIZE	CLASS	GORY	ATOR	NORMAL	TEST	coordinates	(Additional Tests Satisfied)	FREQUENCY	REQUEST	JUSTIFICATIO
1821-F022D	GL	24	1	Å	AO	G	C	M05-1002/1;D-2	Stroke Time (Exercise, Loss of Power) Partial Exercise Leak Rate Position Indication	Cold Shutdown 3 Month 18 Month 18 Month	2011,2034	Ref 1
1821-F024A	С	0.5	3	С		0	С	H10-9002/5	Exercise	Cold Shutdown		Ref 1
1821-F0248	C	0.5	3	С		0	С	M10-9002/5	Exercise	Cold Shutdown		Ref 1
1821-F024C	С	0.5	3	С		0	с	M10-9002/5	Exercise	Cold Shutdown		Ref 1
1821-F024D	C	0.5	3	C		0	Ċ	M10-9002/5	Exercise	Cold Shutdown		Ref 1
1821-F028A	GL	24	1	A	AO	D	С	M05-1002/2;C-5	Stroke Time (Exercise, Loss of Power) Partial Exercise Leak Rate Position Indication	Cold Shutdown 3 Month 18 Month 18 Month	2011,2034	Ref 1
1821-F0288	GL	24	1	A	AO	0	C	M05-1002/2;F-5	Stroke Time (Exercise, Loss of Power) Partial Exercise Leak Rate Position Indication	Cold Shutdown 3 Month 18 Month 18 Month	2011,2034	Ref 1
1821-F028C	GL.	24	1	A	AG	0	C	M05-1002/2;B-5	Stroke Time (Exercise, Loss of Power) Partial Exercise Leak Rate Position Indication	Cold Shutdown 3 Month 18 Month 18 Month	2011,2034	Ref 1
1821-F028D	GL	24	1	A	AO	0	С	M05-1002/2;E-5	Stroke Time (Exercise, Loss of Power) Partial Exercise Leak Rate Position Indication	Cold Shutdown 3 Month 18 Month 18 Month	2011,2034	Ref 1
1821-F029A	С	0.5	3	C		0	с	M10-9002/5	Exercise	Cold Shutdown		Ref 1
1821-F0298	C	0.5	3	С	-	0	c	M10-9002/5	Exercise	Cold Shutdown		Ref 1







PUMP AND VALVE TESTING PROGRAM PLAN

TABLE II -- VALVES

EQUIPMENT			1	CATE-	ACTU-	POSI	TION	P&ID/SHEET;	REQUIRED TESTS		RELIEF	COLD SHUTDOWN
NUMBER	TYPE	SIZE	CLASS	GORY	ATOR	NORMAL	TEST	coordinates	(Additional Tests Satisfied)	FREQUENCY	REQUEST	JUSTIFICATION
1821-F029C	С	0.5	3	c		0	C	M10-9002/5	Exercise	Cold Shutdown		Ref 1
1821-F029D	c	0.5	3	С		0	Ċ	M10-9002/5	Exercise	Cold Shutdown		Ref 1
1821-F032A	NC	20	1	A/C	AO	0	C,0	M05-1004;C-6	Exercise (Open) Leak Rate(Exer Closed, Loss of Power)	Cold Shutdown Cold Shutdown	2011,2034	Ref 3
1821-F0328	NC	20	1	A/C	AO	0	C,0	M05-1004;A-6	Exercise (Cpen) Leak Rate(Exer Closed, Loss of Power)	Cold Shutdown Cold Shutdown	2011,2034	Ref 3
1821-F036A	C	0.5	3	С		c	С	M10-9002/2	Exercise	Cold Shutdown		Ref 1
1821-F036F	ĉ	0.5	3	ć		ċ	C	M10-9002/2	Exercise	Cold Shutdown		Ref 1
1821-F036G	c	0.5	3	с		2	c	M10-9002/2	Exercise	Cold Shutdown		Ref 1
1821-F036J	С	0.5	3	с		C	С	M10-9002/2	Exercise	Cold Shutdown		Ref 1
1821-F036L	c	0.5	3	C ·		с	c	M10-9002/2	Exercise	Cold Shutdown		Ref 1
1821-F036M	c	0.5	3	С	1	c	С	M10-9002/2	Exercise	Cold Shutdown		Ref 1
1821-F036N	C	0.5	3	С		С	c	M10-9002/2	Exercise	Cold Shutdown		Ref 1
1821-F036P	c	0.5	3	C		C	С	M10-9002/2	Exercise	Cold Shutdown		Ref 1
1821-F036R	c	0.5	3	c		С	C	M10-9002/2	Exercise	Cold Shutdown		Ref 1
1821-F037A	VR	10	3	C		c	0,0	M05-1002/1;C-6	Exercise	Cold Shutdown		Ref 1
1821-F0378	VR	10	3	C	1	C	0,0	M05-1002/1;E-6	Exercise	Cold Shutdown		Ref 1
1821-F037C	VR	10	3	С		c	0,0	M05-1002/1;A-7	Exercise	Cold Shutdown		Ref 1
1821-F037D	VR	10	3	с		c	0,0	M05-1002/1;D-7	Exercise	Cold Shutdown		Ref 1
1821-F037E	VR	10	3	c		C	0,0	M05-1002/1;E-4	Exercise	Cold Shutdown		Ref 1



PUMP AND VALVE TESTING PROGRAM PLAN

TABLE II -- VALVES

EQUIPMENT				CATE-	ACTU-	POSIT	10N	P&ID/SHEET;	REQUIRED TESTS	al 21 36 96.	RELIEF	COLD SHUTDOW
NUMBER	TYPE	SIZE	CLASS	GORY	ATOR	NORMAL	TEST	coordinates	(Additional Tests Satisfied)	FREQUENCY	REQUEST	JUSTIFICATIO
1821-F037F	VR	10	3	С		С	0,0	M05-1002/1;A-5	Exercise	Cold Shutdown		Ref 1
1821-F037G	VR	10	3	C		С	0,0	M05-1002/1;A-4	Exercise	Cold Shutdown		Ref 1
1821-F037H	VR	10	3	С		C	0,0	M05-1002/1;C-5	Exercise	Cold Shutdown		Ref 1
1821-F037J	VR	10	3	С		С	0,0	M05-1002/1;E-7	Exercise	Cold Shutdown		Ref 1
1821-F037K	VR	10	3	C		2	0,C	M05-1002/1;A-5	Exercise	Cold Shutdown		Ref 1
1821-F037L	VR	10	3	С		С	0,0	M05-1002/1;D-6	Exercise	Cold Shutdown		Ref 1
1821-F037M	VR	10	3	С		C	0,0	M05-1002/1;E-3	Exercise	Cold Shutdown		Ref 1
1821-F037N	VR	10	3	С		С	0,0	M05-1002/1;E-5	Exercise	Cold Shutdown		Ref 1
1821-F037P	VR	10	3	С		С	0,0	M05-1002/1;A-6	Exercise	Cold Shutdown		Ref 1
1821-F037R	VR	10	3	С		С	0,0	M05-1002/1;D-5	Exercise	Cold Shutdown		Ref i
1821-F037S	VR	10	3	С		с	0,0	M05-1002/1;A-3	Exercise	Cold Shutdown		Ref 1
1821-F0398	с	0.5	3	A/C		с	0,0	M10-9002/1	Leak Rate (Exercise)	Cold Shutdown	2029,2011	Ref 1
1821-F039C	С	0.5	3	A/C		с	0,0	M10-9002/1	Leak Rate (Exercise)	Cold Shutdown	2029,2011	Ref 1
1821-F039D	с	0.5	3	A/C		C	0,0	M10-9002/1	Leak Rate (Exercise)	Cold Shutdown	2029,2011	Ref 1
1821-F039E	С	0.5	3	A/C	1	С	0,0	M10-9002/1	Leak Rate (Exercise)	Cold Shutdown	2029,2011	Ref 1
1821-F039H	С	0.5	3	A/C		С	0,0	M10-9002/1	Leak Rate (Exercise)	Celd Shutdown	2029,2011	Ref 1
1821-F039K	C	0.5	3	A/C		С	0,0	M10-9002/1	Leak Rate (Exercise)	Cold Shutdown	2029,2011	Ref 1
1821-F039S	C	0.5	3	A/C		с	0,0	M10-9002/1	Leak Rate (Exercise)	Cold Shutdown	2029,2011	Ref 1
1B21-F041A	SR	8x10	1	С	AO	с	0	M05-1002/1;C-6	Position Indication Bench	2 Year 5 Year	2036	







PUMP AND VALVE TESTING PROGRAM PLAN TABLE II--VALVES

EQUIPMENT NUMBER	TYPE	SIZE	CLASS	CATE- GORY	ACTU- ATOR	POSIT		P&ID/SHEET; coordinates	REQUIRED TESTS (Additional Tests Satisfied)	FREQUENCY	RELIEF REQUEST	COLD SHUTDOWN
1821-F0418	SR	8x10	1	B/C	A0	с	0	M05-1002/1;F-7	Stroke Time (Exercise, Loss of Power) Position Indication Bench	Refueling 2 Year 5 Year	2012 2036	
1B21-F041C	SR	8x10	1	B/C	AŬ	С	0	M05-1002/1;B-8	Stroke Time (Exercise, Loss of Power) Position Indication Bench	Refueling 2 Year 5 Year	2012 2036	
1B21-F0410	SR	8x10	1	B/C	AO	с	0	M05-1002/1;D-8	Stroke Time (Exercise, Loss of Power) Position Indication Bench	Refueling 2 Year 5 Year	2012 2036	
1821-F041F	SR	8x10	1.	B/C	AO	с	0	M05-1002/1;F-5	Stroke Time (Exercise, Loss of Power) Position Indication Bench	Refueling 2 Year 5 Year	2012 2036	
1821-F041G	SR	8x10	1	С	AG	с	0	M05-1002/1;8-6	Position Indication Bench	2 Year 5 Year	2636	
1821-F041L	SR	8x10	1	С	AO	C	0	M05-1002/1;8-4	Position Indication Bench	2 Year 5 Year	2036	
1B21-F047A	ŚR	8x10	1	B/C	AO	c	0	M05-1002/1;C-6	Stroke Time (Exercise, Loss of Power) Position Indication Bench	Refueling 2 Year 5 Year	2012 2036	
1821-F0478	SR	8×10	1	с	AO	с	0	M05-1002/1;F-8	Position Indication Bench	2 Year 5 Year	2036	
1821-F047C	SR	8x10	1	B/C	AO	С	0	M05-1002/1;8-5	Stroke Time (Exercise, Loss of Power) Position Indication Bench	Refueling 2 Year 5 Year	2012 2036	
1821-F047D	SR	8x10	1	с	AO	с	0	M05-1002/1;D-7	Position Indication Bench	2 Year 5 Year	2036	
1821-F047F	SR	8×10	1	С	AO	c	0	M05-1002/1;F-4	Position Indication Bench	2 Year 5 Year	2036	1.20





PUMP AND VALVE TESTING PROGRAM PLAN TABLE II--VALVES

EQUIPMENT			1	CATE-	ACTU-	POSIT	ION	P&ID/SHEET;	REQUIRED TESTS		RELIEF	COLD SHUTDOW
NUMBER	TYPE	SIZE	CLASS	GORY	ATOR	NORMAL	TEST	coordinates	(Additional Tests Satisfied)	FREQUENCY	REQUEST	JUSTIFICATIO
1821-F0518	SR	8x10	1	С	AO	C	0	M05-1002/1;F-6	Position Indication Bench	2 Year 5 Year	2036	
1821-F0510	SR	8×10	1	С	AO	с	o	M05-1002/1;8-7	Position Indication Bench	2 Year 5 Year	2036	
1821-F051D	SR	8x10	1	C	AO	С	0	M05-1002/1;D-6	Position Indication Bench	2 Year 5 Year	2036	
1821-F051G	SR	8x10	1	B/C	AO	с	0	M05-1002/1;B-4	Stroke Time (Exercise, Loss of Power) Position Indication Bench	Refueling 2 Year 5 Year	2012 2036	
1821-F065A	G	20	2	A	MO	0	С	M05-1004;C-5	Stroke Time (Exercise) Leak Rate Position Indication	Cold Shutdown 2 Year 2 Year	2011,2034	Ref 1
1821-F0658	G	20	2	A	MO	0	С	M05-1004;A-5	Stroke Time (Exercise) Leak Rate Position Indication	Cold Shutdown 2 Year 2 Year	2011,2034	Ref 1
1821-F067A	GL	1.5	1	A.	MO	0	с	M05-1002/2;C-6	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 18 Month 18 Month	2011,2034	
1B21-F067B	GL	1.5	1	A	мо	0	С	M05-1002/2;E-6	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 18 Month 18 Month	2011,2034	
1821-F067C	GL	1.5	1	A	MO	C	с	M05-1002/2;A-6	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 18 Month 18 Month	2011,2034	
1621-F0670	GL	1.5	1	A	MO	0	c	M05-1002/2;D-6	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 18 Month 18 Month	2011,2034	



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PUMP AND VALVE TESTING PROGRAM PLAN TABLE II--VALVES

EQUIPMENT				CATE-	ACTU-	POSIT	ION	P&ID/SHEET;	REQUIRED TESTS		RELIEF	COLD SHUTDOW
NUMBER	TYPE	SIZE	CLASS	GORY	ATOR	NORMAL	TEST	coordinates	(Additional Tests Satisfied)	FREQUENCY	REQUEST	JUSTIFICATIO
1821-F078A	VR	10	3	C .		C	0,0	M05-1002/1;C-5	Exercise	Cold Shutdown		Ref 1
1821-F0788	VR	10	- 3	C		Ċ	0,0	M05-1002/1;E-6	Exercise	Cold Shutdown		Ref 1
1821-F078C	VR	10	3	С		С	O,C	M05-1002/1;A-7	Exercise	Celd Shutdown		Ref 1
1821-F078D	VR	10	3	Ċ		C	0,0	M05-1002/1;D-7	Exercise	Cold Shutdown		Ref 1
1821-F078E	VR	10	3	C		C	0,0	M05-1002/1;E-4	Exercise	Cold Shutdown		Ref 1
1821-F078F	VR	10	3	С		С	0,0	M05-1002/1;A-5	Exercise	Cold Shutdown		Ref 1
1821-F078G	VR	10	3	c		С	0,0	M 1-1002/1;A-4	Exercise	Cold Shutdown		Ref 1
1821-F078H	VŘ	10	3	C		С	o,c	M05-1002/1;C-5	Exercise	Cold Shutdown		Ref 1
1821-F078J	VR	10	3	С		С	0,0	M05-1002/1;E-7	Exercise	Cold Shutdown		Ref 1
1821-F078K	VR	10	3	¢		c	0,0	M05-1002/1;A-5	Exercise	Cold Shutdown		Ref 1
1821-F078L	VR	10	3	C		с	O,C	M05-1002/1;D-6	Exercise	Cold Shutdown		Ref 1
1821-F078M	VR	10	3	c		c	O,C	M05-1002/1;E-3	Exercise	Cold Shutdown		Ref 1
1821-F078N	VR	10	3	c		С	0,0	M05-1002/1;E-5	Exercise	Cold Shutdown		Ref 1
1821-F078P	VR	10	3	C		C	0,0	M05-1002/1;A-6	Exercise	Cold Shutdown		Ref 1
1821-F078R	VR	10	3	C		с	O,C	M05-1002/1;D-5	Exercise	Cold Shutdown		Ref 1
1821-F0785	VP	10	3	С		c	0,0	M05-1002/1;A-3	Exercise	Cold Shutdown		Ref 1
1821-F379A	VR	2	3	C		c	0	M05-1002/1;F-7	Exercise	Cold Shutdown		Ref 1
1821-F3798	VR	2	3	С		C	0	M05-1002/1;F-6	Exercise	Cold Shutdown		Ref 1
1821-F379C	VR	2	3	С		С	O	M05-1002/1;F-5	Exercise	Cold Shutdown		Ref 1



PUMP AND VALVE TESTING PROGRAM PLAN

TABLE II -- VALVES

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EQUIPMENT				CATE -	ACTU-	POSIT	NOIT	P&1D/SHEET;	REQUIRED TESTS		RELIEF	COLD SHUTDOW
NUMBER	TYPE	SIZE	CLASS	GORY	ATOR	NORMAL	TEST	coordinates	(Additional Tests Satisfied)	FREQUENCY	REQUEST	JUSTIFICATIO
1821-F379D	VR	Z	3	c		С	0	M05-1002/1;F-4	Exerlise	Cold Shutdown		Ref 1
1821-F379E	VR	2	3	С		c	0	M05-1002/1;F-3	Exercise	Cold Shutdown	464	Ref 1
1821-F379F	VR	Z	3	Ċ		с	0	M05-1002/1;E-7	Exercise	Cold Shutdown		Ref 1
1821-F3796	VR	2	3	С		Ċ	0	M05-1002/1;E-6	Exercise	Cold Shutdown		Ref 1
1921 · F379H	VR	S	3	C		C	0	M05-1002/1;E-5	Exercise	Cold Shutdown		Ref 1
1821-F379J	VR	2	3	ċ		¢	C	M05-1002/1;C-6	Exercise	Cold Shutdown	1.0	Ref 1
1821-F379K	VR	2	3	C		С	o	M05-1002/1;C-5	Exercise	Cold Shutdown		Ref 1
1521-F379L	VR	2	3	С		C	0	M05-1002/1;8-7	Exercise	Cold Shutdown		Ref 1
1821-F379M	VR	2	3	С		С	0	M05-1002/1;B-6	Exercise	Cold Shutdown		Ref 1
1821-F379N	VR	2	3	C		С	0	M05-1002/1;8-5	Exercise	Cold Shutdown		Ref 1
1821-5379P	VR	2	3	с		с	0	M05-1002/1;8-5	Exercise	Cold Shutdown		Ref 1
1821-F3790	VR	2	3	С		С	0	M05-1002/1;B-4	Exercise	Cold Shutdown		Ref 1
1821-F379R	VR	2	3	С		С	o	M05-1002/1;B-3	Exercise	Cold Shutdown		Ref 1
1821-F433A	с	0.5	3	C	1	0	с	M10-9004/8	Exercise	Cold Shutdown		Ref 1
1821-F4338	C	0.5	3	c		0	С	M10-9004/8	Exercise	Cold Shutdown		Ref 1
1833-F019	CV	0.75	z	8	AO	0	с	M05-1072/1;E-5	Stroke Time (Exercise, Loss of Power) Position Indication	3 Month 2 Year	2032	
1833-F020	CV	0.75	2	В	AD	. 0	C	M05-1072/1;E-8	Stroke Time (Exercise, Loss of Power) Position Indication	3 Month 2 Year	2032	
1011-114 **	c	0.75	0	C		c	0	CLN-001	Exercise	10%/120 days	2024	

** Typical (145 of each)





PUMP AND VALVE TESTING PROGRAM PLAN TABLE II--VALVES

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EQUIPMENT				CATE-	ACTU-			P&ID/SHEET;	REQUIRED TESTS	FREQUENCY	RELIEF	COLD SHUTDOW
NUMBER	TYPE	SIZE	CLASS	GORY	ATOR	NORMAL	TEST	coordinates	(Additional Tests Satisfied)	FREQUENCI		JUSTIFICATIO
1011-115 **	С	0.5	0	A/C		0	С	CLN-001	Lesk Rate (Exercise)	Refueling	2023,2011	
1011-126 **	DIA	1	0	В	AO	С	0	CLN-001	Stroke Time (Exercise, Loss of Power)	10%/120 days	2024	
1011-127 **	DIA	0.75	0	В	AO	с	0	CLN-001	Stroke Time (Exercise, Loss of Power)	10%/120 deys	2024	
1011-138 **	С	0.5	0	С		0	C	CLN-001	Exercise	3 Month	2025	
1011-139 **	DIA	0.75	0	B	so	C	Ö	CLN-001	Stroke Time (Exercise, Loss of Power)	10%/120 days	2024	
1C11-F010	GL	1	2	В	AO	0	С	CLN-001	Stroke Time (Exercise, Loss of Power) Position Indication	3 Month 2 Year	2032	
1C11-F011	GL	2	2	В	AO	0	Ċ	CLN-001	Stroke Time (Exercise, Loss of Power) Position Indication	3 Month 2 Year	2032	
1C11-F083	GL	Z	2	A	MO	0	С	M05-1078/1;E-1	Stroke Time (Exercise) Leak Rate Position Indication	Cold Shutdown 2 Year 2 Year	2011,2034	Ref 1
1C11-F122	С	2	2	A/C		0	С	M05-1078/1;C-7	Leak Rate (Exercise)	Refueling	2002,11,34	
1C11-F180	GL	1	2	8	AO	0	С	CLN-001	Stroke Time (Exercise, Loss of Power) Position Indication	3 Month 2 Year		
1C11-F181	GL	2	2	8	AO	0	С	CLN-001	Stroke Time (Exercise, Loss of Power) Position Indication	3 Month 2 Year		
1C11-F376A	С	0.25	0	A/C		0	O,C	M05-1078/1	Leak Rate (Exercise)	Cold Shutdown		
1C11-F376B	c	0.25	0	A/C		0	0,0	M05-1078/1	Leak Rate (Exercise)	Cold Knutdown		
1011-F377A	C	0.25	0	A/C		0	o,c	M05-1078/1	Leak Rate (Exercise)	Cold Shutdown		
1C11-F377B	С	0.25	0	A/C		0	0,0	M05-1078/1	Leak Rate (Exercise)	Cold Shutdown		
1041-F001A	GL	3	2	B	MO	С	0	M05-1077;C-6	Stroke Time (Exercise) Position Indication	3 Nonth 2 Year		

** Typical (145 of each)





PUMP AND VALVE TESTING PROGRAM PLAN TABLE II--VALVES

EQUIPMENT			1	CATE-	ACTU-	POSIT	ION	P&ID/SHEET;	REQUIRED TESTS		REL1EF	COLD SHUTDOW
NUMBER	TYPE	SIZE	CLASS	GORY	ATOR	NORMAL	TEST	coordinates	(Additional Tests Satisfied)	FREQUENCY	REQUEST	JUSTIFICATIO
1C41-F0018	GL.	3	2	В	MO	с	0	M05-1077;E-6	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
1041-F004A	EX	1.5	1	D		С	0	M05-1077;C-3	Explosive	Alt Refueling	_Bitter.c	
1041-F0048	EX	1.5	1	D		С	0	M05-1077;D-3	Explosive	Alt Refueling		1
1C41-F005	NC	3	1	с		3	0,0	M05-1077;D-2	Exercise (Open) Exercise (Closed) Exercise (Open) alternate	Cold Shutdown Cold Shutdown Cold Shutdown	2030	Ref 3 Ref 7
1C41-F029A	R	1.5x2	2	С		C	0	M05-1077;C-4	Bench	5 Year		
1c41-F0298	R	1.5x2	2	C		С	0	M05-1077;E-4	Bench	5 Year		
1C41-F033A	NC	1.5	2	C		C	0,0	M05-1077;C-4	Exercise (Open) Exercise (Full Stroke)	3 Month Cold Shutdown		Ref 3
1C41-F0338	NČ	1.5	Z	С		С	0,0	M05-1077;D-4	Exercise (Open) Exercise (Full Stroke)	3 Month Cold Shutdown		Ref 3
1c41-F336	c	4	1	C .		c	O,C	M05-1077;E-1	Exercise (Open) Exercise (Closed)	Refueling Refueling	2028	
100049	G	10	2	A	мо	0	с	M05-1032/3;C-8	Stroke Time (Exercise) Leak Rate Position Indication	Cold Shutdown 2 Year 18 Month	2011,2034	Ref 1
100050	G	6	2	A	мо	0	c	M05-1032/3;C-7	Stroke Time (Exercise) Leak Rate Position Indication	Cold Shutdown 2 Year 18 Month	2011,2034	Ref 1
100053	G	6	2	A	мо	0	с	M05-1032/3;C-3	Stroke Time (Exercise) Leak Rate Fosition Indication	Cold Shutdown 2 Year 18 Month	2011,2034	Ref 1
100054	G	10	2	A	MO	0	с	M05-1032/3;C-1	Stroke Time (Exercise) Leak Rate Position Indication	Cold Shutdown 2 Year 18 Month	2011,2034	Ref 1





PUMP AND VALVE TESTING PROGRAM PLAN

TABLE II -- VALVES

EQUIPMENT				CATE-	ACTU-	POSIT		P&1D/SHEET;	REQUIRED TESTS (Additional Tests Satisfied)	FREQUENCY	RELIEF	COLD SHUTDOW
NUMBER	TYPE	SIZE	CLASS	GORY	ATOR	NORMAL	TEST	coordinates	(Additional rests satisfied)	FREQUENCE	REGUEST	003111104110
100957	G	8	2	В	MO	0	С	M05-1032/3;D-8	Stroke Time (Exercise) Position Indication	Cold Shutdown 2 Year		Ref 1
10060	G	8	2	A	MO	0	C	M05-1032/3;C-2	Stroke Time (Exercise) Leak Rate Position Indication	Cold Shutdown 2 Year 18 Month	2011,2034	Ref 1
100071	G	4	2	A	MO	c	c	M05-1032/3;E-2	Stroke Time (Exercise) Leak Rate Position Indication	Cold Shutdown 2 Year 18 Month	2011,2034	Ref 1
10072	G	4	2	A	MO	С	С	M05-1032/3;E-1	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 2 Year 18 Month	2011,2034	Ref 1
100073	G	4	2	A	мо	С	с	M05-1032/3;F-1	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 2 Year 18 Month	2011,2034	Ref 1
100074	G	4	2	A	MO	с	С	M05-1032/3;F-2	Stroke Time (Exercise) Leak Rate Position Indication	Cold Shutdown 2 Year 18 Month	2011,2034	Ref 1
100075A	B	14	3	В	MO	O	C	M05-1032/2;E-3	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
1CC0758	B	14	3	ß	мо	0	C	M05-1032/2;C-3	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
1CC076A	В	14	3	В	MO	0	С	M05-1032/2;D-2	Stroke T.me (Exercise) Position ,ndication	3 Month 2 Year		
1000768	B	14	3	8	мо	0	C	M05-1032/2;C-2	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
100127	G	8	Z	A	MQ	0	c	M05-1032/3;D-8	Stroke Time (Exercise) Leak Rate Position Indication	Cold Shutdown 2 Year 18 Month	2011,2034	Ref 1



PUMP AND VALVE TESTING PROGRAM PLAN

TABLE II--VALVES

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EQUIPMENT				CATE-	ACTU-			P&ID/SHEET;	REQUIRED TESTS	PRPAUPUAU	RELIEF	COLD SHUTDOW
NUMBER	TYPE	SIZE	CLASS	GORY	ATOR	NORMAL	TEST	coordinates	(Additional Tests Satisfied)	FREQUENCY	REQUEST	JUSTIFICATIO
100128	G	8	2	8	MO	0	c	M05-1032/3;C-2	Sticke Time (Exercise) Position Indication	Cold Shutdown 2 Year		Ref 1
100280A	R	0.75x1	3	с		C.	0	M05-1032/2	Bench	5 Year		
1002808	R	0.75x1	3	С		C	Ö	M05-1032/2	Bench	5 Year		
1CM002A	EFC	0.75	2	A/C		0	С	M05-1034/1;B-7	Exercise Position Indication Leak Rate	Cold Shutdown 2 Year 3 Year ***	2011	Ref 2
1040028	EFC	0.75	2	A/C		0	с	M05-1034/1;A-7	Exercise Position Indication Leak Rate	Cold Shutdown 2 Year 3 Year ***	2011	Ref 4
1CM003A	EFC	0.75	2	A/C		O	С	M05-1034/1;8-4	Exercise Position Indication Leak Rate	Cold Shutdown 2 Year 3 Year ***	2011	Ref 2
1CM0038	EFC	0.75	2	A/C		0	Ċ	M05-1034/1;B-7	Exercise Position Indication Leak Rate	Cold Shutdown 2 Year 3 Year ***	2011	Ref 2
104011	G	0.75	2	A	SO	0	с	M05-1034/2;C-7	Stroke Time (Exercise, Loss of Power) Leak Rate Position Indication	3 Month 2 Year 18 Month	2013 2011,2034	
1CM012	G	0.75	2	A	50	0	¢	M05-1034/2;C-6	Stroke Time (Exercise, Loss of Power) Leak Rate Position Indication	3 Month 2 Year 18 Month	2013 2011,2034	
104022	G	0.75	Z	A	SO	С	с	M05-1034/2;D-3	Stroke Time (Exercise, Loss of Power) Leak Rate Position Indication	3 Month 2 Year 18 Month	2013 2011,2034	
10023	G	0.75	2	A	\$0	c	С	M05-1034/2;D-3	Stroke Time (Exercise, Loss of Power) Leak Rate Position Indication	3 Month 2 Year 18 Month	2013 2011,2034	

*** Tested by ILRT during alternate refueling outages





PUMP AND VALVE TESTING PROGRAM PLAN

TABLE II -- VALVES

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EQUIPMENT				CATE-	ACTU-	POSIT	NOI	P&1D/SHEET;	REQUIRED TESTS		RELIEF	COLD SHUTDOW
NUMBER	TYPE	SIZE	CLASS	GORY	ATOR	NORMAL	TEST	coordinates	(Additional Tests Satisfied)	FREQUENCY	REQUEST	JUSTIFICATIO
1CM025	G	0.75	2	A	50	C	С	N05-1034/2;C-3	Stroke Time (Exercise, Loss of Power) Leak Rate Position Indication	3 Month 2 Year 18 Month	2013 2011,2034	
10026	G	0.75	2	A	SO	С	с	M05-1034/2;C-3	Stroke Time (Exercise, Loss of Power) Leak Rate Position Indication	3 Month 2 Year 18 Month	2013 2011,2034	
1CM047	G	0.75	2	A	50	0	С	M05-1034/2;D-6	Stroke Time (Exercise, Loss of Power) Leak Rate Position Indication	3 Month 2 Year 18 Month	2013 2011,2034	
1048	G	0.75	2	A	\$0	0	С	M05-1034/2;D-7	Stroke Time (Exercise, Loss of Power) Leak Rate Position Indication	3 Month 2 Year 18 Month	2013 2011,2034	
104051	EFC	0.75	2	A/C		0	С	MOS-1034/2;C-6	Exercise Position Indication Leak Rate	Cold Shutdown 2 Year 3 Year ***	2011	Ref 2
1CM053	EFC	0.75	2	A/C		0	C	M05-1034/3;C-5	Exercise Position Indication Leak Rate	Cold Shutdown 2 Year 3 Year ***	2011	Ref 2
1CM066	EFC	0.75	2	A/C		0	c	NC5 1071/1;F-3	Exercise Position Indication Leak Rate	Cold Shutdown 2 Year 3 Year ***	2011	Ref 2
104067	EFC	0.75	2	A/C		0	C	M05-1071/1;E-6	Exercise Position Indication Leak Rate	Cold Shutdown 2 Year 3 Year ***	2011	Ref 2
101016	G	6	2	A	MO	0	с	M05-1012/6;C-6	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 2 Year 18 Month	2011,2034	
101017	G	6	2	A	МО	0	с	M05-1012/6;C-6	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 2 Year 18 Month	2011,2034	

*** Tested by ILRT during alternate refueling outages







PUMP AND VALVE TESTING PROGRAM PLAN

TABLE II -- VALVES

EQUIPMENT				CATE-	ACTU-	POSIT	TION	P&ID/SHEET;	REQUIRED TESTS		RELIEF	COLD SHUTDOW
NUMBER	TYPE	SIZE	CLASS	GORY	ATOR	NORMAL	TEST	coordinates	(Additional Tests Satisfied)	FREQUENCY	REQUEST	JUSTIFICATIO
101020	Ġ	3	2	B	MO	- 0	с	M05-1012/6;D-3	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
104021	G	3	2	В	мо	O	С	M05-1012/6;D-2	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
10.6005A	R	0.75x1	0	С		c	O	M05-1035/1;E-6	Bench	5 Year		
1000068	R	0.75x.	Ö	С		С	0	M05-1035/1;D-6	Bench	5 Year		
1060060	R	0.75x1	ō	C		C.	0	M05-1035/2;E-6	Bench	5 Year		
1000060	R	0.75×1	0	С		c	0	M05-1035/2;D-6	Bench	5 Year		
1DG006E	R	0.75x1	0	С		C	0	M05-1035/3;E-6	Bench	5 Year		
1DG006F	R	0.75x1	0	÷		С	0	M05-1035/3;D-6	Bench	5 Year		
10G008A	DIA	1.5	0	В	SO	c	0	M05-1035/1;E-3	Stroke Time (Exercise) -Alt Procedure Stroke Time (Exercise)	3 Month 3 Month	2026	
1060088	DIA	1.5	0	8	so	c	0	M05-1035/1;C-3	Stroke Time (Exercise) Stroke Time (Exercise) -Ait Procedure	3 Month 3 Month	2026	
1060080	DIA	1.5	0	8	so	c	0	M05-1035/1;F-3	Stroke Time (Exercise) Stroke Time (Exercise) -Alt Procedure	3 Month 3 Month	2026	
1060080	DIA	1.5	0	В	so	C	0	M05-1035/1;B-3	Stroke Time (Exercise) Stroke Time (Exercise) -Alt Procedure	3 Month 3 Month	2026	
10.0008E	DIA	1.5	O	В	so	С	0	M05-1035/2;E-3	Stroke Time (Exercise) Stroke Time (Exercise) -Alt Procedure	3 Month 3 Month	2026	
10G008F	DIA	1.5	0	В	so	C	0	M05-1035/2;C-3	Stroke Time (Exercise) Stroke Time (Exercise) -Alt Procedure	3 Month 3 Month	2026	
10G008G	DIA	1.5	0	в	so	c	0	M05-1035/2;F-3	Stroke Time (Exercise) Stroke Time (Exercise) -Alt Procedure	3 Month 3 Month	3026	



PUMP AND VALVE TESTING PROGRAM PLAN

TABLE II -- VALVES

EQUIPMENT	1			CATE-	ACTU-	POSIT	ION	P&ID/SHEET;	REQUIRED TESTS		RELIEF	COLD SHUTDOW
NUMBER	TYPE	SIZE	CLASS	GORY	ATOR	NORMAL	TEST	coordinates	(Additional Tests Satisfied)	FREQUENCY	REQUEST	USTIFICATIO
106008H	DIA	1.5	0	В	so	С	0	M05-1035/2;8-3	Stroke Time (Exercise) -Alt Procedure Stroke Time (Exercise)	3 Month 3 Month	2026	
196008J	DIA	1.5	0	8	SO	с	0	M05-1035/3;E-3	Stroke Time (Exercise) Stroke Time (Exercise) -Alt Procedure	3 Month 3 Month	-1026	
10G008K	DIA	1.5	0	B	so	с	0	M05-1035/3;D-3	Stroke Time (Exercise) Stroke Time (Exercise) -Alt Procedure	3 Month 3 Month	2026	
106168	C	1	0	A/C		с	С	M05-1035/1;E-7	Leak Rate (Exercise) -Alt Procedure Leak Rate (Exercise)	3 Month 3 Month	2029,2011	
100169	C .	1	0	A/C		с	С	M05-1035/1;C-7	Leak Rate (Exercise) -Alt Procedure Leak Rate (Exercise)	3 Month 3 Month	2029,2011	
106170	C	1	0	A/C		с	C	M05-1035/2;E-7	Leak Rate (Exercise) -Alt Procedure Leak Rate (Exercise)	3 Month 3 Month	2029,2011	
106171	c	1	0	A/C		C	c	M05-1035/2;C-7	Leak Rate (Exercise) Leak Rate (Exercise) -Alt Procedure	3 Month 3 Month	2029,2011	
106172	C	1	0	A/C		C	C	M05-1035/3;E-7	Leak Rate (Exercise) Leak Rate (Exercise) -Ait Procedure	3 Month 3 Month	2029,2011	
106173	С	1	0	A/C		с	с	M05-1035/3;C-7	Leak Rate (Exercise) Leak Rate (Exercise) -Alt Procedure	3 Month 3 Month	2029,2011	
100001A	c	1.5	3	С	1	с	0	M05-1036/1;8-1	Exercise	3 Month		
1000018	C	1.5	3	с		с	0	M05-1036/1;8-5	Exercise	3 Month		
100001c	С	1.5	3	C		C	0	M05-1036/2;8-3	Exercise	3 Month		
100005A	R	0.75x1	3	C		C	0	M05-1036/1;C-1	Bench	5 Year		1.0.03
1000358	R	0.75x1	3	с		С	o	M05-1036/1;C-5	Bench	5 Year		





PUMP AND VALVE TESTING PROGRAM PLAN

TABLE II -- VALVES

EQUIPMENT				CATE-	ACTU-	POSIT		P&ID/SHEET;	REQUIRED TESTS	 Galillande 	RELIEF	COLD SHUTDOW
NUMBER	TYPE	SIZE	CLASS	GORY	ATOR	NORMAL	TEST	coordinates	(Additional Tests Satisfied)	FREQUENCY	REQUEST	JUSTIFICATIO
100005c	8	0.75x1	3	C		С	0	M05-1036/2;C-3	Bench	5 Year		
1E12-F003A	GL	14	2	ß	MO	0	0	M05-1075/4;C-2	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
1E12-F003B	GL	14	2	B	MO	0	0	M05-1075/4;C-7	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
1E12-F004A	G	20	2	A	МO	0	0,0	M05-1075/1;A-4	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 18 Month 2 Year	2011,2034	
1E12-F004B	G	20	2	A	мо	0	0,0	M05-1075/2;A-6	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 18 Month 2 Year	2011,2034	
1E12-F005	R	1.5x2	2	A/C		C	0,0	M05-1075/1;8-5	Leak Rate Bench	18 Month 5 Year	2011,2034	
1E12-F006A	G	16	2	В	мо	C	С	M05-1075/1;A-5	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
1E12-F0068	G	16	2	В	MO	c	с	M05-1075/2;A-6	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
1E12-F008	G	18	1	A	MO	c	C	M05-1075/1;B-4	Stroke Time (Exercise) Leak Rate Position Indication	Cold Shutdown 18 Month 18 Month	2011,2034	Ref 1
1E12-F009	G	18	1	A	MO	с	С	M05-1075/1;8-2	Stroke Time (Exercise) Leak Rate Position Indication	Cold Shutdown 18 Month 18 Month	2011,2034	Ref 1
1E12-F011A	GL	4	2	A	ем	С	c	M05-1075/4;C-4	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 18 Month 18 Month	2011,2034	







PUMP AND VALVE TESTING PROGRAM PLAN

TABLE II -- VALVES

EQUIPMENT				CATE-	ACTU-			P&ID/SHEET;	REQUIRED TESTS		RELICE	COLD SHUTDOW
NUMBER	TYPE	SIZE	CLASS	GORY	ATOR	NORMAL	TEST	coordinates	(Additional Tests Satisfied)	FREQUENCY	REQUEST	JUSTIFICATIO
1E12-F011B	GL	4	2	A	КО	C	с	M05-1075/2;C-3	Stroke îime (Exercise) Leak Rate Position Indication	3 Month 18 Month 18 Month	2011,2034	
1E12-F014A	G	18	3	8	MO	С	0	M05-1052/1;D-2	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
1E12-F0148	G	18	3	В	MO	C	0	M05-1052/2;D-2	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
1E12-F017A	R	1.5×2	2	A/C		с	0,0	M05-1075/1;8-	Leak Rate Bench	18 Month 5 Year	2011,2034	
1E12-F0178	R	1.5x2	2	A/C		C	0,0	M05-1075/2;B-6	Leak Rate Bench	18 Month 5 Year	2011,2034	
1E12-F019	С	4	1	С		С	0	x05-1075/3;c-5	Exercise	Cold Shutdown		Ref 1
1E12-F021	GL	14	2	A	MO	С	2	M05-1075/3;D-3	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 18 Month 18 Month	2011,2034	
1E12-F023	GL	4	1	A	MO	c	0,0	M05-1075/2;C-5	Stroke Time (Exercise) Leak Rate Position Indication	Cold Shutdown 18 Month 18 Month	2011,2034	Ref 1
1E12-F024A	G	14	Z	A	мо	C	0,0	M05-1075/1;C-7	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 18 Month 18 Month	2011,2034	
1E12-F0248	G	14	2	A	мо	C	0,0	M05-1075/2;C-2	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 18 Month 18 Month	2011,2034	
1E12-F025A	R	1x1.5	2	A/C		С	0,0	M05-1075/1;D-4	Leak Rate Bench	2 Year 5 Year	2011,2034	





PUMP AND VALVE TESTING PROGRAM PLAN TABLE II--VALVES

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EQUIPMENT				CATE -	ACTU-	POSIT	10N	P&ID/SHEET;	REQUIRED TESTS		RELIEF	COLD SHUTDOW
NUMBER	TYPE	STZE	CLASS	1944 - 1944 - 1	ATOR	NORMAL	TEST	coordinates	(Additional Tests Satisfied)	FREQUENCY	REQUEST	JUSTIFICATIO
1E12-F025B	R	1x1.5	2	A/C		с	ο,ε	M05-1075/2;E-5	Leak Rate Bench	2 Year 5 Year	2011,2034	
1E12-F025C	R	1x1.5	2	A/C		С	0,0	M05-1075/3;F-3	Leak Rate Bench	18 Month 5 Year	2011,2034	
1E12-F026A	G	4	2	В	MO	с	с	M05-1075/4;E-3	Stroke Time (Exarcise) Position Indication	3 Month 2 Year		
1E12-F0268	G	4	2	B	MO	C	С	M05-1075/4;E-6	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
1E12-F027A	G	12	2	A	MO	0	0,0	M05-1075/1;D-4	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 2 Year 2 Year	2011,2034	
1E12-F027B	G	12	2	A	MO	0	0,0	M05-1075/2;D-5	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 2 Year 2 Year	2011,2034	
1E12-F028A	G	10	2	A	MO	c	0,0	M05-1075/1;F-3	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 2 Year 2 Year	2011,2034	
1E12-F0288	G	10	2	A	MC	с	0,0	M05-1075/2;F-6	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 2 Year 2 Year	2011,2034	
1E12-F030	R	1x1.5	2	A-P*		C .	С	M05-1075/2;B-3	Lesk Rate	18 Month	2011	
1E12-F031A	NC	14	2	С	1.2	С	0	M05-1075/1;8-8	Exercise	3 Month		
1E12-F0318	NC	14	2	С		С	0	M05-1075/2;B-1	Exercise	3 Month		
1E12-F031C	NC	14	2	С		С	0	M05-1075/3;0-1	Exercise	3 Month		
1E12-F036	R	4x6	2	A/C		C	o,c	M05-1075/4;E-5	Leak Rate Bench	18 Month 5 Year	2011,2034	1.1.1

* Passive valve





PUMP AND VALVE TESTING PROGRAM PLAN

TABLE II -- VALVES

EQUIPMENT				CATE -	ACTU-	POSIT	ION	P&ID/SHEET;	REQUIRED TESTS		RELIEF	COLD SHUTDOW
NUMBER	TYPE	SIZE	CLASS	GORY	ATOR	NORMAL	TEST	coordinates	(Additional Tests Satisfied)	FREQUENCY	REQUEST	JUSTIFICATIO
1E12-F037A	GL	10	2	A	MO	C	С	M05-1075/1;F-2	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 2 Year 18 Month	2011,2034	
1E12-F037B	GL	10	2	A	мо	¢	С	MOS-1075/1;F-7	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 2 Year 18 Month	2011,2034	
1E12-F040	GL	3	2	В	MO	с	с	M05-1075/2;E-1	Position Indication Stroke Time (Exercise)	2 Year 3 Month		
1E12-F041A	NC	12	1	A/C	AO	с	o,c	M05-1075/1;D-2	Exercise Leak Rate Position Indication	Refueling 18 Month 2 Year	2014 2011,2034	
1E12-F041B	NC	12	1	A/C	AO	С	C,C	M05-1075/2;D-7	Exercise Leak Rate Position Indication	Refueling 18 Month 2 Year	2014 2011,2034	
1E12-F041C	NC	12	1	A/C	AO	C	o,c	M05-1075/3;E+7	Exercise Leak Rate Position Indication	Refueling 18 Month 2 Year	2014 2011,2034	
1E12-F042A	G	12	1	A	мо	С	0,0	M05-1075/1;D-3	Stroke Time (Exercise) Leak Rate Position Indication	Cold Shutdown 18 Month 2 Year	2011,2034	Ref 1
1E12-F042B	G	12	1	A	мо	C	0,0	M05-1075/2;D-6	Stroke Time (Exercise) Leak Rate Position Indication	Cold Shutdown 18 Month 2 Year	2011,2034	Re∮ 1
1E12-F042C	G	12	1	A	мо	C	0,0	M05-1075/3;E-5	Stroke Time (Exercise) Leak Rate Position Indication	Cold Shutdown 18 Month 2 Year	2011,2034	Ref 1
1E12-F046A	c	4	2	С		0	0	M05-1075/1;B-7	Exercise	3 Month		



PUMP AND VALVE TESTING PROGRAM PLAN

TABLE II -- VALVES

EQUIPMENT				CATE-	ACTU-	POSIT	ION	P&ID/SHEET;	REQUIRED TESTS		RELIEF	COLD SHUTDOWN
NUMBER	TYPE	SIZE	CLASS	GORY	ATOR	NORMAL	TEST	coordinates	(Additional Tests Satisfied)	FREQUENCY	REQUEST	JUSTIFICATIO
1E12-F0468	c :	4	2	C		0	0	M05-1075/2;8-2	Exercise	3 Month		
1E12-F046C	ċ	4	2	С		C	0	M05-1075/3;B-2	Exercise	3 Month		
1E12-F047A	G	14	2	В	MO	0	0	M05-1075/4;C-2	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
1E12-F0478	4	14	2	B	MO	0	0	M05-1075/4;C-8	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
1E12-F048A	GL	14	2	B	мо	0	0,0	M05-1075/1;C-8	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
1E12-F048B	GL	14	2	B	мо	0	0,0	M05-1075/2;C-1	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
1E12-F049	G	3	2	A	мо	c	с	M05-1075/2;E-1	Leak Rate Position Indication Stroke Time (Exercise)	18 Month 2 Year 3 Month	2011	
1E12-F050A	NC	10	2	A/C		C	0,0	M05-1075/1;D-5	Exercise (Open) Leak Rate (Alternate Exercise Closed) Exercise (Closed)	Cold Shutdown 18 Month Cold Shutdown	2011	Ref 3 Ref 7
1E12-F0508	NC	10	2	A/C		c	0,0	M05-1075/2;E-5	Exercise (Open) Leak Rate (Alternate Exercise Closed) Exercise (Closed)	Cold Shutdown 1& Month Cold Shutdown	2011	Ref 3 Ref 7
1E12-F051A	G	6	2	A	AO	C	С	M05-1075/4;F-2	Stroke Time (Exercise) Leak Rate	3 Month 18 Month	2011	
1E12-F0518	G	6	Z	A	AO	с	С	M05-1075/4;F-6	Stroke Time (Exercise) Leak Rate	3 Month 18 Month	2011	
1E12-F052A	GL	8	2	8	MO	с	с	M05-1075/4;E-4	Stroke Time (Exercise) Position Indication	3 Month 2 Year		



PUMP AND VALVE TESTING PROGRAM PLAN

TABLE II -- VALVES

EQUIPMENT				CATE-	ACTU-			P&ID/SHEET;	REQUIRED TESTS	-	RELIEF	COLD SHUTDOW
NUMBER	TYPE	SIZE	CLASS	GORY	ATOR	NORMAL	TEST	coordinates	(Additional Tests Satisfied)	FREQUENCY	REQUEST	JUSTIFICATIO
1E12-F0528	GL	8	2	В	MO	C	с	M05-1075/4;E-6	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
1E12-F053A	GL	10	Z	A	MO	С	0,0	M05-1075/1;D-6	Stroke Time (Exercise) Leak Rate Position Indication	Cold Shutdown 18 Month 18 Month	2011,2034	Ref 1
1E12-F0538	GL	10	2	A	MO	c	0,C	M05-1075/2;E-4	Stroke Time (Exercise) Leak Rate Position Indication	Cold Shutdown 18 Month 18 Month	2011,2034	Ref 1
1812-F054A	с	4	2	С		C	0	M05-1075/4;0-3	Exercise	3 Month		
1E12-F0548	с	4	Z	С		С	0	M05-1075/4;D-6	Exercise	3 Month		
1E12-F055A	R	8x12	2	A/C		C	0,0	M05-1075/4;C-2	Leak Rate Bench	18 Month 5 Year	2011,2034	
1612-F0558	R	8x12	2	A/C		C	0,0	M05-1075/4;C-7	Leak Rate Bench	18 Month 5 Year	2011,2034	
1E12-F060A	G	0.75	2	В	so	s	С	M05-1075/4;8-4	Stroke Time (Exercise, Loss of Power) Position Indication	3 Month 2 Year	2013	
1E12-F0608	G	0.75	2	В	\$0	С	С	M05-1075/4;8-5	Stroke Time (Exercise, Loss of Power) Position Indication	3 Month 2 Year	2013	
1E12-F064A	G	4	2	A	MO	0	0,0	M05-1075/1;8-8	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 18 Month 2 Year	2011,2034	
1E12-F064B	G	4	2	A	MO	0	0,0	M05-1075/2;8-1	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 18 Month 2 Year	2011,2034	
1E12-F064C	G	4	2	A	MO	0	0,C	M05-1075/3;B-1	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 18 Month 2 Year	2011,2034	





PUMP AND VALVE TESTING PROGRAM PLAN TABLE II--VALVES

EQUIPMENT				CATE -	ACTU-	POSIT		P&ID/SHEET;	REQUIRED TESTS		RELIEF	JUSTIFICATIO
NUMBER	TYPE	SIZE	CLASS	GORY	ATOR	NORMAL	TEST	coordinates	(Additional Tests Satisfied)	FREQUENCY	REQUEST	JUSTIFICATIO
1E12-F065A	G	4	2	В	AO	С	C	M05-1075/4;0-3	Stroke Time (Exercise)	3 Month		
1E12-F065B	G	4	2	3	AO	С	С	M05-1075/4;D-6	Stroke Time (Exercise)	3 Month		
1E12-F068A	G	18	3	8	MÖ	С	0	M05-1052/1;C-1	Stroke Time (Exercise) Position Indication	3 Month 2 Year	12.993	
1E12-F068B	G	18	3	В	MO	с	0	M05-1052/2;C-1	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
1E12-F075A	G	0.75	2	8	so	с	C	M05-1075/4;B-4	Stroke Time (Exercise, Loss of Power) Position Indication	3 Month 2 Year	2013	
1E12-F0758	G	0.75	2	Б	so	с	С	M05-1075/4;B-5	Stroke Time (Exercise, Loss of Power) Position Indication	3 Month 2 Year	2013	
1E12-F084A	С	2.5	2	С		0	0	M05-1075/1;B-7	Exercise (Open) Exercise (Closed) ****	3 Month 3 Month		
1E12-F0848	ε	2.5	2	C		0	0	M05-1075/2;B-2	Exercise (Open) Exercise (Closed) ****	3 Month 3 Month		
1E12-F084C	с	2.5	2	С		0	0	M05-1075/3;E-2	Exercise (Open) Exercise (Closed) ****	3 Month 3 Month		
1E12-F085A	GSC	2	2	C		0	0,0	M05-1075/1;B-8	Exercise (Open) Exercise (Closed) ****	3 Month 3 Month	2008	
1E12-F085B	GSC	2	2	C		0	0,0	M05-1075/2;8-1	Exercise (Open) Exercise (Closed) ****	3 Month 3 Month	2008	
1E12-F085C	GSC	2	2	C		. 0	0,0	M05-1075/3;E-1	Exercise (Open) Exercise (Closed) ****	3 Month 3 Month	2008	
1E12-F087A	G	6	2	A	MO	С	с	M05-1075/4;E-3	Stroke Time (Exercise) Leak Rate	3 Month 18 Month	2011	



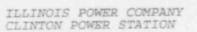
PUMP AND VALVE TESTING PROGRAM PLAN TABLE II--VALVES

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EQUIPMENT				CATE-	ACTU-			P&ID/SHEET;	REQUIRED TESTS		RELIEF	COLD SHUTDOW
NUMBER	TYPE	SIZE	CLASS	GORY	ATOR	NORMAL	TEST	coordinates	(Additional Tests Satisfied)	FREQUENCY	REQUEST	JUSTIFICATIO
1E12-F0878	G	6	2	A	MO	С	С	M05-1075/4;E-7	Stroke Time (Exercise) Leak Rate	3 Month 18 Month	2011	
1E12-F094	G	4	3	8	MO	c	с	M05-1075/4;E-7	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
1E12-F096	G	4	2	8	MO	С	С	M05-1075/4;E-7	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
1E12-F098	С	- 4	2	NON		С		M05-1075/4;D-7	Exercise	3 Month		
1E12-F101	R	1x1.5	Z	A/C		2	0,0	M05-1075/3;0-5	Leak Rate Bench	18 Month 5 Year	2011,2034	
1E12-F105	G	20	2	A	MO	0	U, c	M05-1075/3;8-5	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 18 Month 2 Year	2011,2034	
1E12-F475	c	1	2	A/C		С	0,0	M05-1075/1;B-2	Leak Rate (Exercise Closed) Exercise (Open)	Refueling Refueling	2011,18,34 2018	
1E21-F001	G	20	2	A	MO	0	0,0	M05-1073;8-4	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 18 Month 2 Year	2011,2034	
1E21-F003	NC	12	2	С		C	0	M05-1073;E-6	Exercise	3 Month		
1E21-F005	G.	10	1	A	MO	с	0,0	M05-1073;E-4	Stroke Time (Exercise) Leak Rate Position Indication	Cold Shutdown 18 Month 2 Year	2011,2034	Ref 1
1E21-F006	NC	10	1	A/C	AO	c	0,0	M05-1073;E-2	Exercise Leak Rate Position Indication	Refueling 18 Month 2 Year	2014 2011,2034	
1E21-F011	G	4	2	A	мо	O	0,0	M05-1073;D-6	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 18 Month 2 Year	2011,2034	

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PUMP AND VALVE TESTING PROGRAM PLAN

TABLE II -- VALVES

EQUIPMENT				CATE-	ACTU-	POSIT	ION	P&ID/SHEET;	REQUIRED TESTS		RELIEF	COLD SHUTDOW
NUMBER	TYPE	SIZE	CLASS		ATOR	NORMAL		coordinates	(Additional Tests Satisfied)	FREQUENCY	REQUEST	JUSTIFICATIO
1E21-F012	GL	10	2	A	MO	С	С	M05-1073;D-5	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 18 Month 18 Month	2011,2034	
1621-F018	R	1.5x2	- 2	A/C		С	0,0	M05-1073;E-5	Lesk Rate Bench	18 Month 5 Year	2011,2034	
1E21-F031	R	1.5x1	2	A/C		с	0,0	M05-1073;C-8	Leak Rate Bench	18 Month 5 Year	2011,2034	
1E21-F033	C.	2.5	2	с		0	0	M05-1073;D-6	Exercise (Open) Exercise (Closed) ****	3 Month 3 Month		
1E21-F034	GSC	2	2	С		0	0,0	M05-1073;D-6	Exercise (Open) Exercise (Closed) ****	3 Month 3 Month	2008	
1E21-F303	NC	10	2	C		С	σ	M05-1073;C-5	Exercise	3 Month		
1E22-F001	G	16	2	В	MO	0	с	M05-1074;A-6	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
1E22-F002	С	16	2	с		0	0	M05-1074;A-5	Exercise Exercise - Alt Method	3 Month 3 Month		
1E22-F004	G	10	1	A	MO	c	0,0	M05-1074;E-7	Stroke Time (Exercise) Leak Rate Position Indication	Cold Shutdown 18 Month 2 Year	2011,2034	Ref 1
1E22-F005	NC	10	1	A/C	AO	c	o,c	M05-1074;E-8	Exercise Leak Rate Position Indication	Refueling 18 Month 2 Year	2014 2011,2034	
1E22-F006	GSC	2	2	С	м	0	o,c	M05-1074;D-4	Exercise (Open) Exercise (Closed) ****	3 Month 3 Month	2008	
1E22-F007	C	2.5	2	С		0	0	M05-1074;D-4	Exercise (Open) Exercise (Closed) ****	3 Month 3 Month		





PUMP AND VALVE TESTING PROGRAM PLAN

TABLE II -- VALVES

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FOUTPMENT				CATE-	ACTU-	POSIT	ION	P&ID/SHEET;	REQUIRED TESTS		RELIEF	COLD SHUTDOW
NUMBER	TYPE	SIZE	CLASS		ATOR	NORMAL	TEST	coordinates	(Additional Tests Satisfied)	FREQUENCY	REQUEST	JUSTIFICATIO
1E22-F010	GL	10	2	В	MO	с	C	M05-1074;D-6	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
1E22-F011	GL	10	2	В	MO	С	С	M05-1074;D-5	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
1E22-F012	G	4	2	Â	MO	C	0,0	M05-1074;D-3	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 18 Month 2 Year	2011,2034	
1E22-F014	R	1x0.75	2	A/C		С	O,C	M05-1074;c-5	Leak Rate Bench	18 Month 5 Year	2011,2034	
1EZ2-F015	6	20	2	A	MO	c	0,0	M05-1074;B-7	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 18 Month 2 Year	2011,2034	
1E22-F016	C	20	2	C		с	0	M05-1074;8-6	Exercise Exercise - Alt Method	3 Month 3 Month		
1E22-F023	GL	10	Z	A	мо	c	С	M05-1074;D-8	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 18 Month 18 Month	2011,2034	
1E22-F024	NC	14	2	с		C	0	M05-1074;E-3	Exercise	3 Month		
1E22-F035	R	1x0.75	2	A/C		C	o,c	M05-1074;E-3	Leak Rate Bench	18 Month 5 Year	2011,2034	
1E22-F039	R	1x0.75	2	A/C		c	0,0	M05-1074;C-6	Leak Rate Bench	18 Month 5 Year	2011,2034	
1E22-F330	EFC	0.75	2	A/C		0	С	M10-9074/3	Exercise Position Indication Leak Rate	Cold Shutdown 2 Year 3 Year ***	2011	Ref 2
1E22~F332	EFC	0.75	2	A/C		0	3	M10-9074/3	Exercise Position Indication Leak Rate	Cold Shutdown 2 Year 3 Year ***	2,11	Ref 4

*** *ested by ILRT during alternate refueling outages





PUMP AND VALVE TESTING PROGRAM PLAN

TABLE II -- VALVES

EQUIPMENT				CATE-	ACTU-			P&ID/SHEET;	REQUIRED TESTS	and an interior of the	RELIEF	COLD SHUTDOW
NUMBER	TYPE	SIZE	CLASS	GORY	ATOR	NORMAL	TEST	coordinates	(Additional Tests Satisfied)	FREQUENCY	REQUEST	JUSTIFICATIO
1E31-F014	G	-1	2	8	SO	0	С	M05-1041/4;E-8	Stroke Time (Exercise, Loss of Power) Position Indication	3 Month 2 Year	2013	
1E31-F015	G	1	2	В	\$0	0	c	M05-1041/4;E-7	Stroke Time (Exercise, Loss of Power) Position Indication	3 Month 2 Year	2013	
1E31-F017	G	1	2	В	so	0	С	M05-1041/4;C-7	Stroke Time (Exercise, Loss of Power) Position Indication	3 Month 2 Year	2013	
1E31-F018	G	1	2	В	50	Ö	С	M05-1041/4;C-8	Stroke Time (Exercise, Loss of Power) Position Indication	3 Month 2 Year	2013	
1E32-F001A	GL	1.5	1	A	MO	c	0,0	мо5-1070;С-7	Stroke Time (Exercise) Leak Rate Position Indication	Cold Shutdown 18 Month 2 Year	2011,2034	Ref 1
1E32-F001E	GL	1.5	1	A	MD	с	0,0	M05-1070;E-7	Stroke Time (Exercise) Leak Rate Position Indication	Cold Shutdown 18 Month 2 Year	2011,2034	Ref 1
1E32-F001J	GL	1.5	1	A	MO	С	0,0	M05-1070;B-7	Stroke Time (Exercise) Leak Rate Position Indication	Cold Shutdown 18 Month 2 Year	2011,2034	Ref 1
1E32-F001N	GL	1.5	1	A	MO	с	0,0	M05-1070;D-7	Stroke Time (Exercise) Leak Rate Position Indication	Cold Shutdown 18 Month 2 Year	2011,2034	Ref 1
1E32-F002A	GL	1.5	2	B	мо	с	0,0	M05-1070;C-7	Stroke Time (Exercise) Position Indication	Cold Shutdown 2 Year		Ref 1
1E32-F002E	GL	1.5	2	В	MG	с	e,c	M05-1070;E-7	Stroke Time (Exercise) Position Indication	Cold Shutdown 2 Year		Ref 1
1532-F002J	GL	1.5	2	ß	мо	c	0,0	M05-1070;8-7	Stroke Time (Exercise) Position Indication	Cold Shutdown 2 Year		Ref 1





PUMP AND VALVE TESTING PROGRAM PLAN

TABLE II -- VALVES

EQUIPMENT			1	CATE-	ACTU-	POSIT	10N	P&ID/SHEET;	REQUIRED TESTS		RELIEF	COLD SHUTDON
NUMBER	TYPE	SIZE	CLASS	GORY	ATOR	NORMAL	TEST	coordinates	(Additional Tests Satisfied)	FREQUENCY	REQUEST	JUSTIFICATIO
1E32-F002N	GL	1.5	2	В	MO	C	0,0	M05-1070;D-7	Stroke Time (Exercise) Position Indication	Cold Shutdown 2 Year		Ref 1
1E32-F003A	GL.	1.5	2	B	MO	С	0,0	M05-1070;C-7	Stroke Time (Exercise) Position Indication	Cold Shutdown 2 Year		Ref 1
1E32-F003E	GL	1.5	2	8	MO	¢	0,0	M05-1070;E-7	Stroke Time (Exercise) Position Indication	Cold Shutdown 2 Year		Ref 1
1£32-F003J	GL	1.5	2	В	MO	С	0,0	M05-1070;A-7	Stroke Time (Exercise) Position Indication	Cold Shutdown 2 Year		Ref 1
1E32-F003N	GL	1.5	2	В	мо	c	0,0	M05-1070;D-7	Stroke Time (Exercise) Position Indication	Celd Shutdown 2 Year		Ref 1
1632-F006	G	2.5	2	В	MO	c	0,0	M05-1070;C-4	Stroke Time (Exercise) Position Indication	Cold Shutdown 2 Year		Ref 1
1E32-F007	G	2.5	2	8	MO	С	0,0	M05-1070;C-3	Stroke Time (Exercise) Position Indication	Cold Shutdown 2 Year		Ref 1
1E32-F008	G	2.5	2	В	мо	C	0,0	M05-1070;A-4	Stroke Time (Exercise) Position Indication	Cold Shutdown 2 Year		Ref 1
1E32-F009	G	2.5	2	В	MO	С	o,c	M05-1070;A-3	Stroke Time (Exercise) Position Indication	Cold Shutdown 2 Year		Ref 1
1E3F010	с	0.75	2	C		C	0,0	M05-1070;E-4	Exercise (Open) Exercise (Closed)	Cold Shutdown 3 Month		Ref 1
1E32-F011	C	0.75	2	с		с	o,c	M05-1070;B-2	Exercise (Open) Exercise (Closed)	Cold Shutdown 3 Month		Ref 1
1E32-F315A	С	0.75	2	c		C	0,0	MU5-1070;A-4	Exercise (Open) Exercise (Closed)	Cold Shutdown 3 Month		Ref 1
1E32-F3158	C	0.75	2	с		C	0,0	M05-1070;A-4	Exercise (Open) Exercise (Closed)	Cold Shutdown 3 Month		Ref 1





PUMP AND VALVE TESTING PROGRAM PLAN

TABLE II -- VALVES

EQUIPMENT				CATE -	ACTU-	POSIT		P&ID/SHEET;	REQUIRED TESTS		RELIEF	COLD SHUTDOW
NUMBER	TYPE	SIZE	CLASS	GORY	ATOR	NORMAL		coordinates	(Additional Tests Satisfied)	FREQUENCY	REQUEST	JUSTIFICATIO
1E32-F3150	С	0.75	2	С		с	0,0	M05-1070;A-4	Exercise (Open) Exercise (Closed)	Cold Shutdown 3 Month		Ref 1
1E32-F3150	C	0.75	2	С		C	0,0	M05-1070;A-4	Exercise (Open) Exercise (Closed)	Cold Shutdown 3 Month		Ref 1
1E51-C002E	G	4	2	8	мо	0	с	M05-1079/2;D-3	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
1E51-F004	C.A.	1	2	3	AO	0	С	M05-1079/1;8-1	Stroke Time (Exercise, Loss of Power) Position Indication	3 Month 2 Year	2032	
1E51-F005	CV	1	2	В	AO	с	С	M05-1079/1;B-2	Stroke Time (Exercise, Loss of Power) Position Indication	3 Month 2 Year	2032	
1E51-F010	G	5	2	В	МО	0	C	M05-1079/2;A-6	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
1651-F011	C	6	2	Ċ		C	0	M05-1079/2;A-4	Exercise	3 Month		
1E51-F013	G	6	1	A	MO	C	e,c	M05-1079/2;F-6	Stroke Time (Exercise) Leak Rate Position Indication	Cold Shutdown 18 Month 2 Year	2011,2034	Ref 1
1651-F018	R	2×3	2	C		c	0	M05-1079/2;C-5	Bench	5 Year		
1E51-F019	GL	2	2	A	MO	C	0,0	M05-1079/2;D-6	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 18 Month 2 Year	2011,2034	
1E51-F021	c	2.5	2	C		C	0	M05-1079/2;D-5	Exercise	3 Month		
1E51-F022	GL	.4	2	В	MO	C	с	M05-1079/2;E-5	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
1651-F025	CV	1	2	8	AO	0	C	M05-1079/1;D-5	Stroke Time (Exercise, Loss of Power) Position Indication	3 Month 2 Year	2032	1. 1.2





PUMP AND VALVE TESTING PROGRAM PLAN

TABLE II -- VALVES

EQUIPMENT			1	CATE-	ACTU-	POSIT		P&ID/SHEET;	REQUIRED TESTS		RELIEF	COLD SHUTDOW
NUMBER	TYPE	SIZE	CLASS	GORY	ATOR	NÓRMAL	TEST	coordinates	(Additional Tests Satisfied)	FREQUENCY	REQUEST	JUSTIFICATIO
1651-6026	εv	1	2	8	AO	0	С	M05-1079/1;D-5	Stroke Time (Exercise, Loss of Power) Position Indication	3 Month 2 Year	2032	
1ES1-F030	с	6	2	С		C	0	M05-1079/2;8-4	Exercise	3 Month		
1E51-F031	G	6	2	A	MO	C	0,0	M05-1079/2;C-6	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 18 Month 18 Month	2011,2034	
1E51-F040	с	12	2	A/C		с	0,0	M05-1079/1;C-4	Exercise (Open) Leak Rate (Alternate Exercise Closed) Exercise (Closed)	3 Month 18 Month 3 Month	2011,2034	
1E51-F045	GL	4	2	В	MÖ	С	0,0	M05-1079/1;D-4	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
1E51-F046	GL	2	2	8	MO	с	0	MC5-1079/2;C-3	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
1E51-F059	G	4	2	В	MO	С	C	M05-1079/2;E-5	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
1E51-F061	C	2.5	. 2	С		0	0	M05-1079/2;8-4	Exercise	3 Month		
1E51-F062	ć.	2	2	C		0	0	M05-1079/2;8-4	Exercise	3 Month		
1E51-F063	ü	8	1	A	мо	0	С	M05-1079/1;E-8	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 2 Year 18 Month	2011,2034	
1E51-F064	G	8	1	A	MO	0	С	M05-1079/1;E-5	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 2 Year 18 Month	2011,2034	
1E51-F065	NC	4	1	С		C	0	M05-1079/2;E-6	Exercise	Cold Shutdown		Ref 1
1E51-F066	NC	4	1	A/C	AO	с	o,c	M05-1079/2;F-8	Exercise (Open) Leak Rate (Exercise Closed)	Cold Shutdown 18 Month	2011,2034	Ref 4





PUMP AND VALVE TESTING PROGRAM PLAN

TABLE II -- VALVES

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EQUIPMENT				CATE-	ACTU-	POSIT	NOIT	P&ID/SHEET;	REQUIRED TESTS		RELIEF	COLD SHUTDOW
NUMBER	TYPE	SIZE	CLASS	GORY	ATOR	NORMAL	TEST	coordinates	(Additional Tests Satisfied)	FREQUENCY	REQUEST	JUSTIFICATIO
1E51-F068	G	12	2	A	MÖ	0	с	M05-1079/1;C-5	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 18 Month 2 Year	2011,2034	
1E51-F076	GL	1	1	A	MO	с	С	M05-1079/1;E-8	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 2 Year 18 Month	2011,2034	
1E51-F077	64	1.5	Z	Å	MO	C	С	M05-1079/1;C-5	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 2 Year 18 Month	2011,2034	
1E51-F078	G	3	2	A	MO	0	С	M05-1079/1;C-6	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 2 Year 18 Month	2011,2034	
1E51-F079	VR	2	S	C		c	0	M05-1079/1;C-6	Exercise	3 Month	7.44	
1E51-F081	VR	2	2	C		с	0	M05-1079/1;C-6	Exercise	3 Month		
1E51-F090	R	0.75×1	2	A/C		C	0,0	M05-1079/2;E-5	Leak Rate Bench	18 Month 5 Year	2011,2034	
1E51-F095	G	1	2	В	MO	C	0,0	M05-1079/1;D-4	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
1E51-F377A	EFC	0.75	2	A/C		0	С	M10-9079/2	Exercise Position Indication Leak Rate	Cold Shutdown 2 Year 3 Year ***	2011	Ref 2
1E51-F3778	EFC	0.75	2	A/C		0	c	M10-9079/2	Exercise Position Indication Leak Rate	Cold Shutdown 2 Year 3 Year ***	2011	Ref 4
1FC004A	CV	8	3	В	AO	0	0	M05-1037/3;E-5	Stroke Time (Exercise, Loss of Power) Position Indication	3 Month 2 Year		

*** Tested by ILRI during alternate refueling outages



PUMP AND VALVE TESTING PROGRAM PLAN

TABLE II -- VALVES

EQUIPMENT				CATE-	ACTU-	POSIT	ION	P&ID/SHEET;	REQUIRED TESTS		RELIEF	COLD SHUTDOWN
NUMBER	TYPE	SIZE	CLASS	GORY	ATOR	NORMAL	TEST	coordinates	(Additional Tests Satisfied)	FREQUENCY	REQUEST	00011F10A110
1FC0048	CV	8	3	B	AD	0	0	M05-1037/3;A-5	Stroke Time (Exercise, Loss of Power) Position Indication	3 Month 2 Year		
1FC007	G	10	2	A	МО	0	С	M05-1037/1;B-2	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 2 Year 18 Month	2011,2034	-
1FC008	G	10	2	A	MO	0	с	M05-1037/1;8-1	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 2 Year 18 Month	2011,2034	
1FC011A	B	14	3	В	MO	0	0,0	M05-1037/3;E-7	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
1FC011B	8	14	3	B	MO	0	ō,ċ	M05-1037/3;A-7	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
1FC013A	NC	14	3	C		0	o,c	M05-1037/3;E-7	Exercise Open Exercise Close	3 Month 3 Month		
1FC0138	NC	14	3	С		0	o,c	M05-1037/3;A-7	Exercise Open Exercise Close	3 Month 3 Month		
1FC015A	8	14	3	в	MO	0	0	M05-1037/3;E-2	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
1FC0158	8	14	3	Б	мо	0	0	M05-1037/3;A-2	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
1FC016A	8	8	3	B	MO	0	С	M05-1037/3;D-6	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
1FC016B	8	8	3	В	мо	0	С	M05-1037/3;C-6	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
1FC017	8	8	3	В	AO	0	C	M05-1037/3;C-6	Stroke Time (Exercise, Loss of Power) Position Indication	3 Month 2 Year		



PUMP AND VALVE TESTING PROGRAM PLAN TABLE II--VALVES

EQUIPMENT				CATE-	ACTU-	POSIT		P&ID/SHEET;	REQUIRED TESTS		RELIEF	COLD SHUTDOW
NUMBER	TYPE	SIZE	CLASS	GORY	ATOR	NORMAL	TEST	coordinates	(Additional Tests Satisfied)	FREQUENCY	REQUEST	JUSTIFICATIO
1FC023	8	8	3	8	AQ	O	c	M05-1037/3;C-3	Stroke Time (Exercise, Loss of Power) Position Indication	3 Month 2 Year	2032	
1FC024A	B	8	3	В	MO	0	с	M05-1037/3;E-2	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
1FC0248	B	8	3	В	MO	0	С	M05-1037/3;C-2	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
1FC026A	8	14	3	В	МО	Q	0,0	M05-1037/3;E-2	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
1FC0268	ß	14	3	В	MO	0	0,0	M05-1037/3;B-2	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
1FC036	ij	8	2	A	MO	0	с	M05-1037/1;E-1	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 2 Year 18 Month	2011,2034	
1FC037	G	8	2	A	MO	0	с	M05-1037/1;E-2	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 2 Year 18 Month	2011,2034	
150091	R	4×6	3	c		C	0	M05-1037/3;E-1	Bench	5 Year		
159050	G	6	2	A	MO	0	c	M05-1039/9;D-3	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 2 Year 18 Month	2011,2034	
1FP051	G	10	2	A	MO	0	c	M05-1039/9;C-7	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 2 Year 18 Month	2011,2034	
15P052	G	10	2	A	MO	0	с	M05-1039/9;C-6	Stroke 7ime (Exercise) Leak Rate Position Indication	3 Month 2 Year 18 Month	2011,2034	







PUMP AND VALVE TESTING PROGRAM PLAN

TABLE II -- VALVES

EQUIPMENT				CATE-	ACTU-	POSIT	NION	P&ID/SHEET;	REQUIRED TESTS		RELIEF	COLD SHUTDOW
NUMBER	TYPE	SIZE	CLASS	GORY	ATOR	NORMAL	TEST	coordinates	(Additional Tests Satisfied)	FREQUENCY	REQUEST	JUSTIFICATIO
16053	G	10	2	A	MO	0	C	M05-1039/9;C-4	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 2 Year 18 Month	2011,2034	
1FP054	G	10	2	A	MO	0	с	M05-1039/9;C-2	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 2 Year 18 Month	2011,2034	
15078	G.	4	2	В	MO	0	C	M05-1039/9;D-5	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
152079	G	4	2	8	мо	0	С	M05-1039/9;D-6	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
1FP092	G	6	2	A	MO	Ó	С	M05-1039/9;D-3	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 2 Year 18 Month	2011,2034	
1G33-F001	ũ	6	1	A	MO	0	Ċ	M05-1076/4;B-8	Stroke Time (Exercise) Leak Rate Position Indication	Cold Shutdown 2 Year 18 Month	2011,2034	Ref 7
1G33-FC04	G	6	1	A	мо	0	С	M05-1076/4;8-5	Stroke Time (Exercise) Leak Rate Position Indication	Cold Shutdown 2 Year 18 Month	2011,2034	Ref 7
1633-F028	G	4	2	A	MO	с	с	M05-1076/4;E-8	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 2 Year 18 Month	2011,2034	
1G33-F034	G	4	2	A	MO	с	C	M05-1076/4;E-7	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 2 Year 18 Month	2011	
1G33-F039	G	4	2	A	MO	0	c	M05-1076/4;D-7	Stroke Time (Exercise) Leak Rate Position Indication	Cold Shutdown 2 Year 18 Month	2011,2034	Ref 7







PUMP AND VALVE TESTING PROGRAM PLAN

TABLE II -- VALVES

EQUIPMENT				CATE-	ACTU-	POSIT	TION	P&1D/SHEET;	REQUIRED TESTS		RELIEF	COLD SHUTDOWN
NUMBER	TYPE	SIZE	CLASS		ATOR	NORMAL	TEST	coordinates	(Additional Tests Satisfied)	FREQUENCY	REQUEST	JUSTIFICATION
1G33-F040	G	4	2	Á	MO	0	С	M05-1076/4;D-8	Stroke Time (Exercise) Leak Rate Position Indication	Cold Shutdown 2 Year 18 Month	2011,2034	Ref 7
1G33-F051	NC	4	2	С		0	с	M05-1076/4;D-6	Exercise	Alt Refueling	2033	
1G33-F052A	NC	4	2	c		0	С	M05-1076/4;D-5	Exercise	Alt Refueling	2033	
1G33-F0528	NC	4	2	C		0	C	M05-1076/4;D-5	Exercise	Alt Refueling	2033	
1633-F053	G	4	2	A	мо	0	с	M05-1076/4;C-8	Stroke Time (Chercise) Leak Rate Position Indication	Cold Shutdown 2 Year 18 Month	2011,2034	Ref 7
1G33-F054	G	4	2	A	MO	0	c	M05-1076/4;C-7	Stroke Time (Exercise) Leak Rate Position Indication	Cold Shutdown 2 Year 18 Month	2011,2034	Ref 7
1HG001	B	2	2	A	MO	c	U, C	M05-1063;0-3	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 2 Year 18 Month	2011,2034	
18004	8	Z	2	A	MQ	C.	0,0	M05-1063;C-3	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 2 Year 18 Month	2011,2034	
1#6005	8	2	2	A	MO	C	0,0	M05-1063;E-3	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 2 Year 18 Month	2011,2034	
146003	8	2	2	A	мо	c	0,0	M05-1063;E-3	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 2 Year 18 Month	2011,2034	
1HG009A	G	6	2	B	MO	c	o,c	M05-1063;E-4	Stroke Time (Exercise) Position Indication	3 Month 2 Year		



PUMP AND VALVE TESTING PROGRAM PLAN

TABLE II -- VALVES

EQUIPMENT NUMBER	TYPE	SIZE	CLASS	CATE- GORY	ACTU- ATOR	POSIT NORMAL		P&ID/SHEET; ccordinates	REQUIRED TESTS (Additional Tests Satisfied)	FREQUENCY	RELIEF REQUEST	COLD SHUTDOWN
1HG0098	G	6	2	ία.	MO	С	0,0	M05-1063;E-6	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
1HG010A	VR	10	2	C		с	0,0	M05-1063;C-4	Exercise (Actuator) Position Indication Exercise (Set Point)	3 Month 2 Year Cold Shutdown		Ref 3
1860108	VR.	10	2	с		c	0,0	M05-1063;C-7	Exercise (Actuator) Position Indication Exercise (Set Point)	3 Month 2 Year Cold Shutdown		Ref 3
180100	VR	10	2	c		C	0,0	M05-1063;B-4	Exercise (Actuator) Position Indication Exercise (Set Point)	3 Month 2 Year Cold Shutdown		Ref 3
1HG010D	VR	10	2	c		2	0,0	M05-1063;B-7	Exercise (Actuator) Position Indication Exercise (Set Point)	3 Month 2 Year Cold Shutdown		Ref 3
1HG011A	VR	10	2	C		C	0,0	M05-1063;C-4	Exercise (Actuator) Position Indication Exercise (Set Point)	3 Month 2 Year Cold Shutdown		Ref 3
1HG0118	VR	10	2	c		C	0,0	M05-1063;C-6	Exercise (Actuator) Position Indication Exercise (Set Point)	3 Month 2 Year Cold Shutdown		Ref 3
1HG011C	VR	10	2	C		с	0,0	M05-1063;8-4	Exercise (Actuator) Position Indication Exercise (Set Point)	3 Month 2 Year Cold Shutdown		Ref 3
1HG011D	VR	10	2	c		С	0,0	M05-1063;B-6	Exercise (Actuator) Position Indication Exercise (Set Point)	3 Month 2 Year Cold Shutdown		Ref 3
114005	cv	3	2	A	AO	0	с	M05-1040/5;D-2	Stroke Time (Exercise, Loss of Power) Leak Rate Position Indication	Cold Shutdown 2 Year 18 Month	2011,2034	Ref 1



PUMP AND VALVE TESTING PROGRAM PLAN TABLE II--VALVES

EQUIPMENT	1			CATE -	ACTU-	POSIT	ION	P&ID/SHEET;	REQUIRED TESTS		RELIEF	COLD SHUTDOWN
NUMBER	TYPE	SIZE	CLASS	GORY	ATOR	NORMAL	TEST	coordinates	(Additional Tests Satisfied)	FREQUENCY	REQUEST	JUSTIFICATION
114006	CV.	3	2	Ā	AO	0	С	M05-1040/5;D-3	Stroke Time (Exercise, Loss of Power) Leak Rate Position Indication	Cold Shutdown 2 Year 18 Month	2011,2034	Ref 1
114007	CV	3	2	8	AO	0	С	M05-1040/5;0-3	Stroke Time (Exercise, Loss of Power) Position Indication	Cold Shutdown 2 Year		Ref 1
11A008	CV	3	2	В	AÖ	0	с	M05-1040/5;D-3	Stroke Time (Exercise, Loss of Power) Position Indication	Cold Shutdown 2 Year		Ref 1
11A012A	GL	1	2	A	MO	0	0,0	M05-1040/7;D-2	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 2 Year 2 Year	2011,2034	
11A012B	GL	1	2	A	MO	0	c	M05-1040/7;C-3	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 2 Year 18 Month	2011,2034	
1IA013A	GL	1	2	A.	мо	0	0,0	M05-1040/7;D-7	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 2 Year 2 Year	2011,2034	
1140138	GL	1	2	A	MO	0	с	M05-1040/7;C-6	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 2 Year 18 Month	2011,2034	
11A042A	с	1	2	A/C		0	с,о	M05-1040/7;D-6	Exercise Leak Rate	Cold Shutdown 2 Year	2011,2034	Ref 1
11A0428	с	1	2	A/C		0	c,0	M05-1040/7;D-4	Exercise Leak Rate	Cold Shutdown 2 Year	2011,2034	Ref 1
11A128A	R	1.5x3	D	C		C	0	M05-1040/7;E-7	Bench	5 Year		
11A1288	R	1.5x3	D	с	1	C	0	M05-1040/7;E-2	Bench	5 Year		
11A175	c	0.5	2	A/C	1	0	c	M05-1040/5;E-3	Leak Rate (Exercise)	2 Year	2011,22,34	





PUMP AND VALVE TESTING PROGRAM PLAN TABLE II--VALVES

EQUIPMENT NUMBER	TYPE	\$175	CLASS	CATE - GORY	ACTU- ATOR	POSIT NORMAL	in.	P&ID/SHEET; coordinates	REQUIRED TESTS (Additional Tests Satisfied)	FREQUENCY	RELIEF REQUEST	COLD SHUTDOWN
1PS004	G	0.75	2	A	\$0	c		M05-1045/12;E-6	Stroke Time (Exercise, Loss of Power) Leak Rate Position Indication	3 Month 2 Year 18 Month	2013 2011,2034	
1PS005	G	0.75	2	A	so	C	с	M05-1045/12;E-6	Stroke Time (Exercise, Loss of Power) Leak Rate Position Indication	3 Month 2 Year 18 Month	2013 2011,2034	
195009	G	0.75	2	A	SO	C	c	M05-1045/12;E-6	Stroke Time (Exercise, Loss of Power) Leak Rate Position Indication	3 Month 2 Year 18 Month	2013 2011,2034	
1PS010	G	0.75	2	A	SO	с	c	M05-1045/12;E-5	Stroke Time (Exercise, Loss of Power) Leak Rate Position Indication	3 Month 2 Year 18 Month	2013 2011,2034	
1PS016	G	0.5	2	A	so	С	c	M05-1045/12;E-5	Stroke Time (Exercise, Loss of Power) Leak Rate Position Indication	3 Month 2 Year 18 Month	2013 2011,2034	
1PS017	G	0.5	2	A	SO	с	c	M05-1045/12;E-5	Stroke Time (Exercise, Loss of Power) Leak Rate Position Indication	3 Month 2 Year 18 Month	2013 2011,2034	
1PS022	G	0.5	2	A	so	c	с	M05-1045/12;E-4	Stroke Time (Exercise, Loss of Power) Leak Rate Position Indication	3 Month 2 Year 18 Month	2013 2011,2034	
125023	G	0.5	2	A	SO	с	C	M05-1045/12;E-4	Stroke Time (Exercise, Loss of Power) Leak Rate Position Indication	3 Month 2 Year 18 Month	2013 2011,2034	
1PS031	G	0.75	2	A	SO	c	с	M05-1045/12;E-2	Stroke Time (Exercise, Loss of Power) Leak Rate Position Indication	3 Month 2 Year 18 Month	2013 2011,2034	
1PS032	G	0.75	2	A	SO	c	c	1:05-1045/12;E-2	Stroke Time (Exercise, Loss of Power) Leak Rate Position Indication	3 Month 2 Year 18 Month	2013 2011,2034	





PUMP AND VALVE TESTING PROGRAM PLAN TABLE II--VALVES

EQUIPMENT		-		CATE-	ACTU-	POSIT	ION	P&ID/SHEET;	REQUIRED TESTS		RELIEF	COLD SHUTDOW
NUMBER	TYPE	SIZE	CLASS	GORY	ATOR	NORMAL	TEST	coordinates	(Additional Tests Satisfied)	FREQUENCY	REQUEST	JUSTIFICATIO
125034	G	0.75	2	A	\$0	С	¢	M05-1045/12;F-1	Stroke Time (Exercise, Loss of Power) Leak Rate Position Indication	3 Month 2 Year 18 Month	2013 2011,2034	
1PS035	G	0.75	2	A	so	С	С	M05-1045/12;E-1	Stroke Time (Exercise, Loss of Power) Leak Rate Position Indication	3 Month 2 Year 18 Month	2013 2011,2034	
1PS037	G	0.75	2	A	SO	С	¢	M05-1045/12;E-8	Stroke Time (Exercise, Loss of Power) Leak Rate Position Indication	3 Month 2 Year 18 Month	2013 2011,2034	
1PS038	G	0.75	3	A	SO	С	С	M05-1045/12;E-8	Stroke Time (Exercise, Loss of Power) Leak Rate Position Indication	3 Month 2 Year 18 Month	2013 2011,2034	
1PS043A	G	0.75	2	8	so	с	C	M05-1045/12;F-2	Stroke Time (Exercise, Loss of Power) Position Indication	3 Month 2 Year	2013	
1PS0438	G	0.75	2	В	\$0	C	c	M05-1045/12;F-3	Stroke Time (Exercise, Loss of Power) Position Indication	3 Month 2 Year	2013	
1P\$044A	G	0.75	2	В	so	c	с	M05-1045/12;E-2	Stroke Time (Exercise, Loss of Power) Position Indication	3 Month 2 Year	2013	
1PS0448	G	0.75	2	8	SO	С	С	M05-1045/12;E-3	Stroke Time (Exercise, Loss of Power) Position Indication	3 Month 2 Year	2013	
1PS047	G	0.75	5	A	so	с	С	M05-1045/12;F-7	Stroke Time (Exercise, Loss of Power) Leak Rate Position Indication	3 Month 2 Year 18 Month	2013 2011,2034	
1PS048	G	0.75	2	A	so	c	c	M05-1045/12;E-7	Stroke Time (Exercise, Loss of Power) Leak Rate Position Indication	3 Month 2 Year 18 Month	2013 2011,2034	
1PS055	G	0.5	2	A	so	С	c	M05-1045/12;c-3	Stroke Time (Exercise, Loss of Power) Leak Rate Position Indication	3 Month 2 Year 18 Month	2013 2011,2034	





PUMP AND VALVE TESTING PROGRAM PLAN

TABLE II -- VALVES

EQUIPMENT	1	-		CATE-	ACTU-	POST	I ON	P&ID/SHEET;	REQUIRED TESTS		RELIEF	COLD SHUTDOWN
NUMBER	TYPE	SIZE	CLASS		ATER	NORMAL	TEST	coordinates	(Additional Tests Satisfied)	FREQUENCY	REQUEST	JUSTIFICATION
1PS056	G	0.5	2	A	50	c	C	M05-1045/12;C-3	Stroke Time (Exercise, Loss of Power) Leak Rate Position Indication	3 Month 2 Year 18 Month	2013 _011,2034	
1PS069	G	0.5	2	A	SO	c	с	M05-1045/12;8-3	Stroke Time (Exercise, Loss of Power) Leak Rate Position Indication	3 Month 2 Year 18 Month	2013 2011,2034	
1P\$070	G	0.5	2	A	SO	¢	с	M05-1045/12;B-3	Stroke Time (Exercise, Loss of Power) Leak Rate Position Indication	3 Month 2 Year 18 Month	2013 2011,2034	
1RA016A	R	1x1.5	3	с		С	0	M05-1065/8;C-7	Bench	5 Year		
1RA0168	R	1x1.5	3	С		с	0	M05-1065/8;C-3	Bench	5 Year		
1RE019	CV	3	2	8	AO	0	с	M05-1046/4;A-7	Stroke Time (Exercise, Loss of Power) Position Indication	3 Month 2 Year	2032	
1RE020	CV	3	2	В	AQ	0	С	M05-1046/3;A-4	Stroke Time (Exercise, Loss of Power) Position Indication	3 Month 2 Year	2032	
1RE021	cv	3	2	A	AO	0	c	M05-1046/3;B-5	Stroke Time (Exercise, Loss of Power) Leak Rate Position Indication	3 Month 2 Year 18 Month	2032 2011,2034	
1RE022	CV	3	2	A	AO	0	с	M05-1046/3;B-6	Stroke Time (Exercise, Loss of Power) Leak Rate Position Indication	3 Month 2 Year 18 Month	2032 2011,2034	
1RF019	CV	3	2	в	AO	0	с	M05-1047/3;8-2	Stroke Time (Exercise, Loss of Power) Position Indication	3 Month 2 Year	2032	
1RF020	CV	3	2	B	AO	0	с	M05-1047/3;B-3	Stroke Time (Exercise, Loss of Power) Position Indication	3 Month 2 Year	2032	
1RF021	CV	3	2	A	AO	0	c	M05-1047/3;B-6	Stroke Time (Exercise, Loss of Power) Leak Rate Position Indication	3 Month 2 Year 18 Month	2032 2011,2034	



PUMP AND VALVE TESTING PROGRAM PLAN TABLE II--VALVES

EQUIPMENT	-			CATE -	ACTU-	POSI	TION	P&ID/SHEET;	REQUIRED TESTS		RELIEF	COLD SHUTDOW
NUMBER	TYPE	SIZE	CLASS	GORY	ATOR	NORMAL	TEST	coordinates	(Additional Tests Satisfied)	FREQUENCY	REQUEST	JUSTIFICATIO
187022	CV	3	2	A	AO	0	c	M05-1047/3;8-7	Stroke Time (Exercise, Loss of Power) Leak Rate Position Indication	3 Month 2 Year 18 Month	2032 2011,2034	
15A029	CV	3	2	A	AO	C	c	M05-1048/6;D-2	Stroke Time (Exercise, Loss of Power) Leak Rate Position Indication	3 Month 2 Year 18 Month	2011,2034	
15A030	CV	3	2	A	AO	O	c	M05-1048/6;D-3	Stroke Time (Exercise, Loss of Power) Leak Rate Position Indication	3 Month 2 Year 18 Month	2032 2011,2034	
15A031	cv	3	2	8	AO	0	с	M05-1048/6;D-4	Stroke Time (Exercise, Loss of Power) Position Indication	3 Month 2 Year	2032	
1SA032	cv	3	2	В	AO	0	¢	M05-1048/6;D-5	Stroke Time (Exercise, Loss of Power) Position Indication	3 Month 2 Year		
1SF001	G	10	2	A	MO	C	с	M05-1060;E-5	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 2 Year 18 Month	2011,2034	
1SF002	G	10	2	A	МО	c	с	M05-1060;E-5	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 2 Year 18 Month	2011,2034	
1SF004	G	12	2	A	MO	c	с	M05-1060;C-5	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 18 Month 18 Month	.2011,2034	
15M001A	ß	24	2	8	MO	c	0	M05-1069;D-5	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
1SM0018	В	24	2	8	MO	с	0	M05-1069;D-4	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
15M002A	ß	24	2	B	MO	C	0	M05-1069;D-5	Stroke Time (Exercise) Position Indication	3 Month 2 Year		1.44.3







PUMP AND VALVE TESTING PROGRAM PLAN TABLE II--VALVES Page 42

COLD SHUTDOWN RELIEF REQUIRED TESTS CATE- ACTU-POSITION P&ID/SHEET; EQUIPMENT FREQUENCY REQUEST JUSTIFICATION NORMAL TEST coordinates (Additional Tests Satisfied) SIZE CLASS GORY ATOR NUMBER TYPE 3 Month Stroke Time (Exercise) C 0 M05-1069;D-4 MO. 1\$M0028 8 24 2 8 2 Year Position Indication 5 Year M05-1069; D-5 Bench C 0 0.75×1 2 C 15M003A R 5 Year Bench C 0 0 M05-1069:0-4 0.75x1 2 1SM0038 R Ref 4 Cold Shutdown M05-1069:A-3 Exercise EFC 0.75 2 A/C 0 C 1SM008 2 Year Position Indication 2011 3 Year *** Leak Rate Ref 2 Cold Shutdown M05-1069;C-3 Exercise A/C 0 C 1SM009 EFC 0.75 2 2 Year Position Indication 3 Year *** 2011 Leak Rate Ref 2 Cold Shutdown C M05-1069:C-3 Exercise 0 1SH010 EFC 0.75 2 A/C 2 Year Position Indication 3 Year *** 2011 Leak Rate Ref 4 Cold Shutdown Exercise EFC 0.75 C. C M05-1069;8-4 2 A/C 1SM011 2 Year Pesition Indication 2011 3 Year *** Leak Rate 3 Month M05-1052/1;D-7 Exercise 30 3 ·C | C 0 1SX001A NC 3 Month 0 M05-1052/2;D-7 Exercise 0 30 3 0 15X0018 NC 3 Month 10 3 C C 0 M05-1052/3:D-7 Exercise 15X001C NC 3 Month Stroke Time (Exercise) M05-1052/1;D-6 MO 0 0 15X003A 8 30 3 8 2 Year Position Indication 3 Month Stroke Time (Exercise) M05-1052/2:0-6 30 3 8 MO 0 0 15X0038 8 2 Year Position Indication 3 Month 0 M05-1052/3;0-6 Stroke Time (Exercise) 0 10 3 8 MO 1sx003c 8 2 Year Position Indication

*** Tested by ILRT during alternate refueling cutages





PUMP AND VALVE TESTING PROGRAM PLAN

TABLE II -- VALVES

EQUIPMENT				CATE-	ACTU-	POSIT		P&ID/SHEET;	REQUIRED TESTS		RELIEF	COLD SHUTDOW
NUMBER	TYPE	SIZE	CLASS	GORY	ATOR	NORMAL	TEST	coordinates	(Additional Tests Satisfied)	FREQUENCY	REQUEST	JUSTIFICATIO
15X004A	8	30	3	B	MO	0	Ö	M05-1052/1;0-5	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
15X0048	8	30	3	ß	MO	0	0	M05-1052/2;D-5	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
1sx004c	8	10	3	8	MO	0	0	M05-1052/3;D-5	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
15X006C	B	8	3	В	MO	c	0	M05-1052/3;D-2	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
15X008A	B	20	3	8	MO	с	O	M05-1052/1;E-6	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
15x0088	В	20	3	В	MO	c	0	M05-1052/2;E-6	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
15X008C	8	8	3	В	MO	с	0	M05-1052/3;D-6	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
15X010A	cv	2	3	8	AO	с	0	M05-1052/1;E-3	Stroke Time (Exercise, Loss of Power)	3 Month	2032	
1SXC10B	cv	2	3	В	AO	с	0	M05-1052/2;E-3	Stroke Time (Exercise, Loss of Power)	3 Month	2032	
1SX010C	CV	1.5	3	8	AO	с	0	M05-1052/3;E-4	Stroke Time (Exercise, Loss of Power)	3 Month	2032	
15X011A	В	16	3	8	MO	с	C	M05-1052/1;D-3	Stroka Time (Exercise) Position Indication	3 Month 2 Year		
15X0118	В	16	3	B	MO	c	с	M05-1052/2;E-3	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
15X012A	В	14	3	В	MO	с	0	M05-1052/1;C-3	Stroke Time (Exercise) Position Indication	Cold Shutdown 2 Year		Ref 1
15X012B	В	14	3	В	мо	C	0	M05-1052/2;C-3	Stroke Time (Exercise) Position Indication	Cold Shutdown 2 Year		Ref 1







PUMP AND VALVE TESTING PROGRAM PLAN TABLE II--VALVES

EQUIPMENT			1	CATE-	ACTU-	POSIT		P&ID/SHEET;	REQUIRED TESTS		RELIEF	COLD SHUTDOW
NUMBER	TYPE	SIZE	CLASS	GORY	ATOR	NORMAL	TEST	coordinates	(Additional Tests Satisfied)	FREQUENCY	REQUEST	JUSTIFICATIO
1SX014A	8	20	3	8	MO	0	C	M05-1052/1;F-3	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
15X0148	8	20	3	8	MÖ	0	С	M05-1052/2;F-3	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
1SX014C	8	8	3	8	MO	0	c	M05-1052/3;E-4	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
15X016A	G	2.5	3	В	MO	c	0,0	M05-1052/1;C-3	Stroke Time (Exercise) Position Indication	Refueling 2 Year	2004	
1\$X016B	G	2.5	3	ß	MO	С	0,0	M05-1052/2;D-3	Stroke Time (Exercise) Position Indication	Refueling 2 Year	2004	
1SX020A	В	12	3	В	MO	Ċ	C	M05-1052/1;C-4	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
15X020B	В	12	3	В	MG	0	¢	M05-1052/2;C-4	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
15X023A	CV	2	3	в	AO	С	0	M05-1052/1;C-2	Stroke Time (Exercise, Loss of Power)	3 Month	2032	
15x0238	CV	2	3	В	AO	C.	0	M05-1052/2;C-2	Stroke Time (Exercise, Loss of Power)	3 Month	2032	
15X027A	CV	2	3	B	AO	C	0	M05-1052/4;D-6	Stroke Time (Exercise, Loss of Power)	3 Month	2032	
15X0278	CV	2.5	3	8	AO	с	0	M05-1052/4;D-2	Stroke Time (Exercise, Loss of Power)	3 Month	2032	
1580270	CV	2.5	3	В	AO	с	Ö	M05-1052/4;C-2	Stroke Time (Exercise, Loss of Power)	3 Month	2032	
15X029A	CV	1.5	3	6	AO	C	0	M05-1052/4;D-6	Stroke Time (Exercise, Loss of Power)	3 Month	2032	
15X0298	CV	1.5	3	В	AO	С	0	M05-1052/4;D-2	Stroke Time (Exercise, Loss of Power)	3 Month	2032	
1sx029c	cv	1.5	3	B	AO	C	0	M05-1052/4;8-2	Stroke Time (Exercise, Loss of Power)	3 Month	2032	





PUMP AND VALVE TESTING PROGRAM PLAN

TABLE II -- VALVES

EQUIPMENT	1			CATE-	ACTU-	POSIT	ION	P&ID/SHEET;	REQUIRED TESTS		RELIEF	COLD SHUTDOW
NUMBER	TYPE	SIZE	CLASS	GORY	ATOR	NORMAL	TEST	coordinates	(Additional Tests Satisfied)	FREQUENCY	REQUEST.	JUSTIFICATIO
1sx033	CV	2	3	8	AO	С	0	M05-10,2/4;C-6	Stroke Time (Exercise, Loss of Power)	3 Month	2032	
15X037	CV	1.5	3	в	AO	С	0	M05-1052/4;B-6	Stroke Time (Exercise, Loss of Power)	3 Month	2032	
15X041A	CV	2	3	в	AO	С	0	M05-1052/3;C-2	Stroke Time (Exercise, Loss of Power)	3 Month	2032	
15X0418	CV	2	3	В	AO	с	0	M05-1052/3;B-2	Stroke Time (Exercise, Loss of Power)	3 Month	2032	
15X062A	В	14	3	8	MO	с	0	M05-1052/1;8-4	Stroke Time (Exercise) Position Indication	Cold Shutdown 2 Year		Ref 1
1SX062B	В	14	3	8	мо	Ċ	0	M05-1052/2;8-4	Stroke Time (Exercise) Position Indication	Cold Shutdown 2 Year		Ref 1
15X063A	В	8	3	8	мо	с	0	M05-1052/1;C-2	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
15X0638	В	8	3	B	мо	С	0	M05-1052/2;C-2	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
15X071A	G	3	3	B	мо	C	С	M05-1052/5;F-7	Stroke Time (Exercise) Position Indication	Refueling 2 Year	2009	
1SX0718	G	3	3	В	мо	с	C	M05-1052/5;F-3	Stroke Time (Exercise) Position Indication	Refueling 2 Year	2009	
15X073A	G	3	3	B	MO	с	0,0	M05-1052/5;F-6	Stroke Time (Exercise) Position Indication	Refueling 2 Year	2009	
15×0738	G	3	3	В	MO	с	0,0	M05-1052/5;F-2	Stroke Time (Exercise) Position Indication	Refueling 2 Year	2009	
15X074A	G	3	3	B	мә	c	с	M05-1052/5;E-7	Stroke Time (Exercise) Position Indication	Refueling 2 Yerr	2009	
1SX0748	G	3	3	В	MO	с	C	M05-1052/5;E-3	Stroke Time (Exercise) Position Indication	Refueling 2 Year	2009	





PUMP AND VALVE TESTING PROGRAM PLAN

TABLE II -- VALVES

EQUIPMENT				CATE-	ACTU-	POSIT		P&ID/SHEET;	REQUIRED TESTS		RELIEF	COLD SHUTDOW
NUMBER	TYPE	SIZE	CLASS	GORY	ATOR	NORMAL	TEST	coordinates	(Additional Tests Satisfied)	FREQUENCY	REQUEST	JUSTIFICATIO
15X076A	G	3	3	8	MO	С	0,0	M05-1052/5;D-7	Stroke Time (Exercise) Position Indication	Refueling 2 Year	2009	
1SX0768	G	3	3	8	(_MO	c	0,0	M05-1052/5;D-3	Stroke Time (Exercise) Position Indication	Refueling 2 Year	2009	
15X0'J2A	G	3	3	B	мо	0	С	M05-1052/1;D-1	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
1sx0828	Ġ	3	3	B	MD	0	С	M05-1052/2;D-1	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
15X088A	G	3	2	A	MO	0	С	M05-1052/5;C-8	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 2 Year 2 Year	2011,2034	
15X088B	G	3	2	A	МО	0	С	M05-1052/5;C-4	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 2 Year 2 Year	2011,2034	
1SX089A	G	3	2	A	MO	C	с	M05-1052/5;C-7	Stroke Time (Exercise) Lesk Rate Position Indication	3 Month 2 Year 2 Year	2011,2034	
15X089B	G	3	2	A	MO	0	с	M05-1052/5;C-3	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 2 Year 2 Year	2011,2034	
15X096A	G	3	2	A	MO	0	с	M05-1052/5;C-5	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 2 Year 2 Year	2011,2034	
1SX0968	G	3	2	A	мо	0	c	M05-1052/5;C-2	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 2 Year 2 Year	2011,2034	
15X097A	G	3	2	A	MO	0	C	M05-1052/5;C-5	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 2 Year 2 Year	2011,2034	







PUMP AND VALVE TESTING PROGRAM PLAN TABLE II--VALVES

EQUIPMENT	1			CATE-	ACTU-	POSIT	NOT	P&ID/SHEET;	REQUIRED TESTS		RELIEF	COLD SHUTDOWN
NUMBER	TYPE	SIZE	CLASS	GORY	ATOR	NORMAI	TEST	coordinates	(Additional Tests Satisfied)	FREQUENCY	REQUEST	JUSTIFICATIO
15X097B	G	3	2	A	MC	0	С	M05-1052/5;C-1	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 2 Year 2 Year	2011,2034	
15X105A	G.	3	3	ß	MO	c	с	M05-1052/5;D-7	Stroke Time (Exercise) Position Indication	Refueling 2 Year	2009	
15X105B	G	3	3	В	MO	с	С	M05-1052/5;D-3	Stroke Time (Exercise) Position Indication	Refueling 2 Year	2009	
15X107A	G	3	3	B	мо	C	0,0	M05-1052/5;D-7	Stroke Time (Exercise) Position Indication	Refueling 2 Year	2009	
1sx1078	G	3	3	В	MO	C	0,0	M05-1052/5;D-3	Stroke Time (Exercise) Position Indication	Refueling 2 Year	2009	
1sx153A	R	0.75x1	3	C		С	0	M05-1052/1;8-6	Bench	5 Year		
15×1538	R	0.75x1	3	С.	1	C	0	M05-1052/2;8-6	Bench	5 Year		
1SX157A	R	0.75x1	3	С		C	0	M05-1052/5;C-6	Bench	5 Year		
15X157B	R	0.75×1	3	Ċ		с	0	M05-1052/5;C-2	Bench	5 Year		
15X169C	R	0.75x1	3	с	1	C	0	M05-1052/3;D-2	Bench	5 Year		
15X173A	G	10	3	8	MO	с	0,0	M05-1052/1;D-2	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
15X1738	G	10	3	В	MO	с	0,0	M05-1052/2;D-2	Stroke Time (Exercise) Position Indication	3 Month 2 Year		
15X181A	CV	2.5	3	В	AO	C	0	M05-1052/1;F-1	Stroke Time (Exercise, Loss of Power)	3 Month	2032	
1SX1818	cv	2.5	3	В	AO	с	0	M05-1052/2;F-1	Stroke Time (Exercise, Loss of Power)	3 Month	2032	
1SX185A	CV	2.5	3	B	AO	C	0	M05-1052/1;E-1	Stroke Time (Exercise, Loss of Power)	3 Month	2032	1





PUMP AND VALVE TESTING PROGRAM PLAN

TABLE II -- VALVES

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EQUIPMENT				CATE-	ACTU-	POSIT	ION	P&ID/SHEET;	REQUIRED TESTS		RELIEF	COLD SHUTDOW
NUMBER	TYPE	SIZE	CLASS	GORY	ATOR	NORMAL	TEST	coordinates	(Additional Tests Satisfied)	FREQUENCY	REQUEST	JUSTIFICATIO
15X1858	CV	2.5	3	В	AO	· C	0	M05-1052/2;E-1	Stroke Time ("xercise, Loss of Power)	3 Month	2032	
15X189	CV.	2.5	3	в	AO	с	0	M05-1052/2;8-4	Stroke Time (Exercise, Loss of Power)	3 Month	2032	
15X193A	CV	1,5	3	8	AO	С	0	M05-1052/1;B-7	Stroke Time (Exercise, Loss of Power)	3 Month	2032	
15X1938	cv	1.5	3	B	AO	С	0	M05-1052/2;B-4	Stroke Time (Exercise, Loss of Power)	3 Month	2032	
1sx197	CV	2	3	8	AO	C	0	M05-1052/1;8-4	Stroke 'ime (Exercise, Loss of Power)	3 Month	2032	
15X208A	R	4x5	3	с		С	0	M05-1052/1;D-1	Bench	5 Year		
15X208B	R	4x6	3	C		Ċ	0	M05-1052/2;D-1	Bench	5 Year		
15X209	EV	1.5	3	В	AO	C	0	M05-1052/2;A-1	Stroke Time (Exercise, Loss of Power)	3 Month	2032	
1VG0568	EFC	0.75	2	A/C		0	С	M10-9105/4	Exercise Position Indication Leak Rate	Cold Shutdown 2 Year 3 Year ***	2011	Ref 2
1vG057B	EFC	0.75	2	A/C		e	C	M10-9105/10	Exercise Position Indication Leak Rate	Cold Shutdown 2 Year 3 Year ***	2011	Ref 2
1VP004A	G	10	2	A	MO	0	c	M05-1109/2;D-3	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 2 Year 18 Month	2011,2034	
1VP0048	G	10	2	A	мо	0	c	M10-9105/4	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 2 Year 18 Month	2011,2034	
1VP005A	G	10	2	A	MO	0	с	M10-9105/10	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 2 Year 18 Month	2011,2034	
1VP0058	G	10	2	A	MO	0	c	M05-1109/3;D-2	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 2 Year 18 Month	2011,2034	

*** Tested by ILRT during alternate refueling outages



PUMP AND VALVE TESTING PROGRAM PLAN

TABLE II -- VALVES

EQUIPMENT				CATE-	ACTU-	POSIT	ION	P&ID/SHEET;	REQUIRED TESTS		RELIEF	COLD SHUTDOW
NUMBER	TYPE	SIZE	CLASS	GORY	ATOR	NORMAL	TEST	coordinates	(Additional Tests Satisfied)	FREQUENCY	REQUEST	JUSTIFICATIO
1VP014A	G	10	2	A	MO	0	С	M05-1109/2;E-3	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 2 Year 18 Month	2011,2034	
1VP0148	G	10	2	Ă	MO	0	с	M05-1109/3;E-3	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 2 Year 18 Month	2011,2034	
1VPO15A	G	10	2	A	MO	0	с	M05-1109/2;E-2	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 2 Year 18 Month	2011,2034	
1VP0158	G	10	2	A	MO	0	C	M05-1109/3;E-2	Stroke Time (Exercise) Leak Rate Position Indication	3 Month 2 Year 18 Month	2011,2034	
1VP023A	R	0.75x1	2	A/C		с	0,0	M05-1109/2;D-3	Leak Rate Bench	2 Year 5 Year	2011,2034	
1VP0238	R	0.75x1	2	A/C		C	0,0	M05-1109/3;D-3	Leak Rate Bench	2 Year 5 Year	2011,2034	
1VP027A	R	0.75x1	2	A/C		с	0,0	M05-1109/2;F-3	Leak Rate Bench	2 Year 5 Year	2011,2034	
1VP0278	R	0.75x1	2	A/C		C	0,0	M05-1109/3;F-3	Leak Rate Bench	2 Year 5 Year	2011,2034	
1V0001A	В	24	2	B-P	AO	C	C	M05-1110/2;C-8	Position Indication	2 Year		
1V00018	8	24	2	B-P	AO	с	C	M05-1110/2;C-7	Position Indication	2 Year		
1VQ002	B	24	2	В		C	С	M05-1110/2;C-6	Position Indication Stroke Time (Exercise, Loss of Power)	2 Year 3 Month		
10003	В	36	2	B	AO	c	С	M05-1110/2;C-5	Position Indication Stroke Time (Exercise, Loss of Power)	2 Year 3 Month	2032	





PUMP AND VALVE TESTING PROGRAM PLAN TABLE II--VALVES

EQUIPMENT				CATE-	ACTU-	POSIT	ION	P&ID/SHEET;	REQUIRED TESTS		RELIEF	COLD SHUTDOW
NUMBER	TYPE	SIZE	CLASS	GORY	ATOR	NORMAL	TEST	coordinates	(Additional Tests Satisfied)	FREQUENCY	REQUEST	JUSTIFICATIO
1VQ004A	8	36	2	A	AO	C	C	M05-1110/2;D-4	Stroke Time (Exercise, Loss of Power) Leak Rate Position Indication	Cold Shutdown 2 Year 18 Month	2032 2011,2034	Ref 6
1VQ004B	ß	36	2	A	AO	с	С	M05-1110/2;D-5	Position Indication Leak Rate Stroke Time (Exercise, Loss of Power)	18 Month 2 Year Cold Shutdown	2011,2034 2032	Ref 6
1/0005	В	10	2	8	AO	c	С	M05-1110/2;D-6	Position Indication Stroke Time (Exercise, Loss of Power)	2 Year 3 Month	2032	
1V0006A	GL	4	2	A	MO	C	c	M05-1110/2;C-4	Position Indication Leak Rate Stroke Time (Exercise)	18 Month 2 Year Cold Shutdown	2011	Ref 5
1VQ006B	GL	4	2	A	MO	С	С	M05-1110/2;C-4	Leak Rate Position Indication Stroke Time (Exercise)	2 Year 18 Month Cold Shutdown	2011,2034	Ref 5
1vR001A	6	36	2	A	AO	с	С	M05-1111/1;E-2	Stroke Time (Exercise, Loss of Power) Leak Rate Position Indication	Cold Shutdown 2 Year 18 Month	2032 2011,2034	Ref 6
1VR0018	ß	36	2	A	AO	С	С	M05-1111/1;E-1	Position Indication Stroke Time (Exercise, Loss of Power) Leak Rate	18 Month Cold Shutdown 2 Year	2032 2011,2034	Ref &
1VR002A	GL	4	Z	A	MO	C	C.	M05-1111/1;E-2	Stroke Time (Exercise) Leak Rate Position Indication	Cold Shutdown 2 Year 18 Month	2011,2034	Ref 5
1VR0028	GL	4	2	A	MO	с	с	M05-1111/1;E-1	Leak Rate Position Indication Stroke Time (Exercise)	2 Year 18 Month Cold Shutdown	2011,2034	Ref 5
TVR006A	B	12	2	A	AO	0	c	M05-1111/5;E-3	Leak Rate Position Indication Stroke Time (Exercise, Loss of Power)	2 Year 18 Month 3 Month	2011,2034	





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ILLINOIS POWER COMPANY CLINTON POWER STATION

PUMP AND VALVE TESTING PROGRAM PLAN

TABLE II -- VALVES

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EQUIPMENT NUMBER		SIZE		CATE-	ACTU- ATOR	POSITION		P&ID/SHEET;	REQUIRED TESTS		RELIEF	COLD SHUTDOWN
	TYPE		CLASS			NORMAL	TEST	coordinates	(Additional Tests Satisfied)	FREQUENCY	REQUEST	JUSTIFICATION
1VR0068	8	12	2	A	AO	0	C	M05-1111/5;E-2	Stroke Time (Exercise, Loss of Power) Position Indication Leak Rate	3 Month 18 Month 2 Year	2032 2011,2034	
1VR007A	В	12	2	A	AO	0	C	M05-1111/5;8-7	Position Indication Leak Rate Stroke Time (Exercise, Loss of Power)	18 Month 2 Year 3 Month	2011,2034 2032	
1VR007B	В	12	2	A	AO	0	С	M05-1111/5;B-7	Position Indication Stroke Time (Exercise, Loss of Power) Leak Rate	18 Month 3 Month 2 Year	2032 2011,2034	
1VR016A	EFC	0.75	2	A/C		0	с	M10-9111/5	Exercise Position Indication Leak Rate	Coid Shutdown 2 Year 3 Year ***	2011	Ref 2
1VR0168	EFC	0.75	2	A/C		0	С	M10-9111/5	Leak Rate Position Indication Exercise	3 Year *** 2 Year Cold Shutdown	2011	Ref 2
1VR018A	EFC	0.75	2	A/C		0	c	M10-9111/5	Leak Rate Exercise Position Indication	3 Year *** Cold Shutdown 2 Year	2011	Ref 2
1980188	EFC	0.75	2	A/C		0	с	M10-9111/5	Leak Rate Exercise Position Indication	3 Year *** Cold Shutdown 2 Year	2011	Ref 2
1VR035	ZWAY	0.75	2	A	so	0	С	M10-9111/19	Leak Rate Position Indication Stroke Time (Exercise, Loss of Power)	2 Year 18 Month 3 Month	2011,2034 2013	
1vR036	ZWAY	0.75	2	A	SO	0	c	M10-9111/19	Position Indication Leak Rate Stroke Time (Exercise, Loss of Power)	18 Month 2 Year 3 Month	2011,2034 2013	
1VR040	ZWAY	0,75	2	Ą	so	0	C	M10-9111/19	Leak Rate Position Indication Stroke Time (Exercise, Loss of Power)	2 Year 18 Month 3 Month	2011,2034	

*** Tested by ILRT during alternate refueling outages





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ILLINOIS POWER COMPANY CLINTON POWER STATION

PUMP AND VALVE TESTING PROGRAM PLAN TABLE II--VALVES

EQUIPMENT NUMBER		SIZE	CLASS	CATE- GORY		- POSITION		P&ID/SHEET;	REQUIRED TESTS		RELIEF	COLD SHUTDOWN
	TYPE					NORMAL		coordinates	(Additional Tests Satisfied)	FREQUENCY	REQUEST	JUSTIFICATIO
1VR041	ZWAY	0.75	2	A	S0	0	C	M10-9111/19	Stroke Time (Exercise, Loss of Power) Position Indication Leak Rate	3 Month 18 Month 2 Year	2013 2011,2034	
1W0001A	G	6	2	A	MO	0	С	M05-1117/19;E-5	Stroke Time (Exercise) Leak Rate Position Indication	Cold Shutdown 2 Year 18 Month	2011,2034	Ref 1
1W00018	G	6	2	A	MO	0	c	M05-1117/19;E-6	Stroke Time (Exercise) Position Indication Leak Rate	Cold Shutdown 18 Month 2 Year	2011,2034	Ref 1
1W0002A	G	6	2	A	MO	0	c	M05-1117/19;F-5	Position Indication Leak Rate Stroke Time (Exercise)	18 Month 2 Year Cold Shutdown	2011,2034	Ref 1
1w00028	G	6	2	A	MO	O	C	M05-1117/19;F-6	Leak Rate Stroke Time (Exercise) Position Indication	2 Year Cold Shutdown 18 Month	2011,2034	Ref 1
1W0551A	G	4	2	B	мо	0	с	M05-1117/26;E-7	Stroke Time (Exercise) Position Indication	Cold Shutdown 2 Year		Ref 1
1W05518	G	4	2	B	MO	0	С	M05-1117/26;E-7	Stroke Time (Exercise) Position Indication	Cold Shutdown 2 Year		Ref 1
1W0552A	G	4	3	В	MO	0	с	M05-1117/26;D-7	Position Indication Stroke Time (Exercise)	2 Year Cold Shutdown		Ref 1
1w05528	G	4	2	В	мо	C	с	M05-1117/26;D-7	Position Indication Stroke Time (Exercise)	2 Year Cold Shutdown		Ref 1
1W0570A	R	0.75x	1 2	с		C	0	M05-1117/26;E-7	Bench	5 Year		
1w05708	R	0.75x	1 2	С	1	C.	0	M05-1117/26;D-7	Bench	5 Year		
1₩X019	P	2	2	A	0A	0	c	M05-1089/2;F-6	Position Indication Leak Rate Stroke Time (Exercise, Loss of Power)	18 Month 2 Year 3 Month	2011,2034 2013	1-12







PUMP AND VALVE TESTING PROGRAM PLAN

TABLE II--VALVES

EQUIPMENT NUMBER	TWAT				POSITION NORMAL TEST		P&ID/SHEET; coordinates	REQUIRED TESTS (Additional Tests Satisfied)	FREQUENCY	RELIEF	COLD SHUTDOWN
1WX020	P	2	2	A	 0			Stroke Time (Exercise, Loss of Power) Leak Rate Position Indication		2013 2011,2034	