PRIORITY Normal DISPOSITION OF THE OF THE TRANSMITTAL SIGN OTHERWISE IDENTIFIED	ATURE UNLES										ate:		1/11 ransm	nittal :	 #:	טם	K112	4400	31	
<ol> <li>1) 01749 L C GIBBY - MG01VP</li> <li>2) 01820 J R ELKINS- EC081</li> <li>3) 02388 BOB SCHOMAKER LYNCHBG, VA</li> <li>4) 02532 RESIDENT NRC INSPECTOR MG01VP</li> <li>5) 02546 WC LIBRARY - MG01WC</li> <li>6) 03044 MCG DOC CNTRL MISC MAN MG05DM</li> <li>7) 03614 MCG OPS PROCEDURE GP MG010P</li> <li>8) 03743 MCG QA TEC SUP MNT QC MG01MM</li> <li>9) 03744 OPS TRNG MGR. MG030T</li> <li>10) 03759 U S NUC REG WASHINGTON, DC</li> <li>11) 03796 SCIENTECH DUNEDIN, FL</li> </ol>			MCG	Duke Ener UMENT TRA REFE UIRE NUCLEAR	RENO STAT	CE	AL I	FOR	M	QA OT	CON HER /	DITIO CKN R OTHE VLEDG Duke McGu DCRi 1322	N OWLE ER ACK E RECE Energ	DGEN NOWLI IPT BY IV O2DN ers Fei	IENT EDGEM RETUR		QUIRE	D, PLE	ASE	— No
<ol> <li>12) 04698 D E BORTZ EC08G</li> <li>13) 04809 MCG PLANT ENG. LIBR. MG05SE</li> <li>14) 05262 J L FREEZE MG01IE</li> <li>15) 05606 J C MORTON MG01EP</li> </ol>				INICAL SPECIFIC																
				Page 2	of 3					Da										
DOCUMENT NO	QA COND	REV #	DATE	DISTR CODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TOTAL
TS & TSB MEMORANDUM TSB 3.5.2 TSB LIST OF EFFECTIVE SECTIONS	NA NA NA	08/2 116 08/ 108 08/	/23/11	MADM-04B	V1	V1	V1	V1	V1	X	V1	V1	V3	V1	V1	V1	V1	V1	V1	34

REMARKS: PLEASE UPDATE ACCORDINGLY

**REPRO: 3 HOLE PUNCH** 

R T REPKO

VICE PRESIDENT

MCGUIRE NUCLEAR STATION

BY:

B C BEAVER MG01RC BCB/TLC

AOOI

#### August 23, 2011

#### MEMORANDUM

To: All McGuire Nuclear Station Technical Specification (TS) and Tech Spec Bases (TSB) Manual Holders Subject: McGuire TSB Updates

#### REMOVE

#### INSERT

#### **TS Bases Manual**

TSB LOES (Revision 107) TSB 3.5.2 (entire section) (Revision 115)

TSB LOES (Revision 108) TSB 3.5.2 (entire section) (Revision 116)

# Revision numbers may skip numbers due to Regulatory Compliance Filing System.

Please call me if you have questions.

Boine Beaver

Bonnie Beaver Regulatory Compliance 875-4180

# McGuire Nuclear Station Technical Specification Bases LOES

# TS Bases are revised by section

Page Number	Revision	<b>Revision Date</b>
	BASES	
	(Revised per section)	
i	Revision 87	8/15/07
ii	Revision 87	8/15/07
iii	Revision 87	8/15/07
B 2.1.1	Revision 51	01/14/04
B 2.1.2	Revision 109	9/20/10
B 3.0	Revision 81	3/29/07
B 3.1.1	Revision 115	3/29/11
B 3.1.2	Revision 115	3/29/11
B 3.1.3	Revision 10	9/22/00
B 3.1.4	Revision 115	3/29/11
B 3.1.5	Revision 115	3/29/11
B 3.1.6	Revision 115	3/29/11
B 3.1.7	Revision 58	06/23/04
B 3.1.8	Revision 115	3/29/11
B 3.2.1	Revision 115	3/29/11
B 3.2.2	Revision 115	3/29/11
B 3.2.3	Revision 115	3/29/11
B 3.2.4	Revision 115	3/29/11
B 3.3.1	Revision 115	3/29/11
B 3.3.2	Revision 115	3/29/11
B 3.3.3	Revision 115	3/29/11
B 3.3.4	Revision 115	3/29/11
B 3.3.5	Revision 115	3/29/11
B 3.3.6	Not Used - Revision 87	6/29/06
B 3.4.1	Revision 115	3/29/11
B 3.4.2	Revision 0	9/30/98
B 3.4.3	Revision 115	3/29/11
B 3.4.4	Revision 115	3/29/11
B 3.4.5	Revision 115	3/29/11

Page Number	Amendment	<b>Revision Date</b>
B 3.4.6	Revision 115	3/29/11
B 3.4.7	Revision 115	3/29/11
B 3.4.8	Revision 115	3/29/11
B 3.4.9	Revision 115	3/29/11
B 3.4.10	Revision 102	8/17/09
B 3.4.11	Revision 115	3/29/11
B 3.4.12	Revision 115	3/29/11
B 3.4.13	Revision 115	3/29/11
B 3.4.14	Revision 115	3/29/11
B 3.4.15	Revision 115	3/29/11
B 3.4.16	Revision 115	3/29/11
B 3.4.17	Revision 115	3/29/11
B 3.4.18	Revision 86	6/25/07
B 3.5.1	Revision 115	3/29/11
B 3.5.2	Revision 116	8/18/11
B 3.5.3	Revision 57	4/29/04
B 3.5.4	Revision 115	3/29/11
B 3.5.5	Revision 115	3/29/11
B 3.6.1	Revision 53	2/17/04
B 3.6.2	Revision 115	3/29/11
B 3.6.3	Revision 115	3/29/11
B 3.6.4	Revision 115	3/29/11
B 3.6.5	Revision 115	3/29/11
B 3.6.6	Revision 115	3/29/11
B 3.6.7	Not Used - Revision 63	4/4/05
B 3.6.8	Revision 115	3/29/11
B 3.6.9	Revision 115	3/29/11
B 3.6.10	Revision 115	3/29/11
B 3.6.11	Revision 115	3/29/11
B 3.6.12	Revision 115	3/29/11
B 3.6.13	Revision 115	3/29/11
B 3.6.14	Revision 115	3/29/11
B 3.6.15	Revision 115	3/29/11

Page Number	Amendment	<b>Revision Date</b>
B 3.6.16	Revision 115	3/29/11
B 3.7.1	Revision 102	8/17/09
B 3.7.2	Revision 105	2/22/10
B 3.7.3	Revision 102	8/17/09
B 3.7.4	Revision 115	3/29/11
B 3.7.5	Revision 115	3/29/11
B 3.7.6	Revision 115	3/29/11
B 3.7.7	Revision 115	3/29/11
B 3.7.8	Revision 115	3/29/11
B 3.7.9	Revision 115	3/29/11
B 3.7.10	Revision 115	3/29/11
B 3.7.11	Revision 115	3/29/11
B 3.7.12	Revision 115	3/29/11
B 3.7.13	Revision 115	3/29/11
B 3.7.14	Revision 115	3/29/11
B 3.7.15	Revision 66	6/30/05
B 3.7.16	Revision 115	3/29/11
B 3.8.1	Revision 115	3/29/11
B 3.8.2	Revision 92	1/28/08
B 3.8.3	Revision 115	3/29/11
B 3.8.4	Revision 115	3/29/11
B 3.8.5	Revision 41	7/29/03
B 3.8.6	Revision 115	3/29/11
B 3.8.7	Revision 115	3/29/11
B 3.8.8	Revision 115	3/29/11
B 3.8.9	Revision 115	3/29/11
B 3.8.10	Revision 115	3/29/11
B 3.9.1	Revision 115	3/29/11
B 3.9.2	Revision 115	3/29/11
B 3.9.3	Revision 115	3/29/11
B 3.9.4	Revision 115	3/29/11
B 3.9.5	Revision 115	3/29/11
B 3.9.6	Revision 115	3/29/11
B 3.9.7	Revision 115	3/29/11
uire Units 1 and 2	Page 3	Dovisi

# B 3.5 EMERGENCY CORE COOLING SYSTEMS (ECCS)

# B 3.5.2 ECCS-Operating

#### BASES

		-
BACKGROUND	The function of the ECCS is to provide core cooling and negative reactivity to ensure that the reactor core is protected after any of the following accidents:	
	a. Loss of coolant accident (LOCA), coolant leakage greater than the capability of the normal charging system;	
	b. Rod ejection accident;	
	<ul> <li>Loss of secondary coolant accident, including uncontrolled steam or feedwater release; and</li> </ul>	
	d. Steam generator tube rupture (SGTR).	
	The addition of negative reactivity is designed primarily for the loss of secondary coolant accident where primary cooldown could add enough positive reactivity to achieve criticality and return to significant power.	
	There are three phases of ECCS operation: injection, cold leg recirculation, and hot leg recirculation. In the injection phase, water is taken from the refueling water storage tank (RWST) and injected into the Reactor Coolant System (RCS) through the cold legs. When sufficient water is removed from the RWST to ensure that enough boron has been added to maintain the reactor subcritical and the containment sumps have enough water to supply the required net positive suction head to the ECCS pumps, suction is switched to the containment sump for cold leg recirculation. When the core decay heat has decreased to a level low enough to be successfully removed without direct RHR pump injection flow, the RHR cold leg injection path is realigned to discharge to the auxiliary containment spray header. After approximately 7 hours, part of the ECCS flow is shifted to the hot leg recirculation phase to provide a backflush which, for a cold leg break, would reduce the boiling in the top of the core and prevent excessive boron concentration.	

The ECCS consists of three separate subsystems: centrifugal charging (high head), safety injection (SI) (intermediate head), and residual heat removal (RHR) (low head). Each subsystem consists of two redundant, 100% capacity trains. The ECCS accumulators and the RWST are also part of the ECCS, but are not considered part of an ECCS flow path as described by this LCO.

#### BASES

#### BACKGROUND (continued)

The ECCS flow paths consist of piping, valves, heat exchangers, and pumps such that water from the RWST can be injected into the RCS following the accidents described in this LCO. The major components of each subsystem are the centrifugal charging pumps, the RHR pumps, heat exchangers, and the SI pumps. Each of the three subsystems consists of two 100% capacity trains that are interconnected and redundant such that either train is capable of supplying 100% of the flow required to mitigate the accident consequences. This interconnecting and redundant subsystem design provides the operators with the ability to utilize components from opposite trains to achieve the required 100% flow to the core.

During the injection phase of LOCA recovery, a suction header supplies water from the RWST to the ECCS pumps. Mostly separate piping supplies each subsystem and each train within the subsystem. The discharge from the centrifugal charging pumps combines, then divides again into four supply lines, each of which feeds the injection line to one RCS cold leg. The discharge from the SI and RHR pumps divides and feeds an injection line to each of the RCS cold legs. Throttle valves in the SI lines are set to balance the flow to the RCS. This balance ensures sufficient flow to the core to meet the analysis assumptions following a LOCA in one of the RCS cold legs. The flow split from the RHR lines cannot be adjusted. Although much of the two ECCS trains are composed of completely separate piping, certain areas are shared between trains. The most important of these are 1) where both trains flow through a single physical pipe, and 2) at the injection connections to the RCS cold legs. Since each train must supply sufficient flow to the RCS to be considered 100% capacity, credit is taken in the safety analyses for flow to three intact cold legs. Any configuration which, when combined with a single active failure, prevents the flow from either ECCS pump in a given train from reaching all four cold legs injection points on that train is unanalyzed and might render both trains of that ECCS subsystem inoperable.

For LOCAs that are too small to depressurize the RCS below the shutoff head of the SI pumps, the centrifugal charging pumps supply water until the RCS pressure decreases below the SI pump shutoff head. During this period, the steam generators are used to provide part of the core cooling function.

During the recirculation phase of LOCA recovery, RHR pump suction is transferred to the containment sump. The RHR pumps then supply the other ECCS pumps. Initially, recirculation is through the same paths as the injection phase. Subsequently, for large LOCAs, the recirculation phase includes injection into both the hot and cold legs.

#### BASES

#### BACKGROUND (continued)

The high and intermediate head subsystems of the ECCS also functions to supply borated water to the reactor core following increased heat removal events, such as a main steam line break (MSLB). The limiting design conditions occur when the moderator temperature coefficient is highly negative, such as at the end of each cycle.

During low temperature conditions in the RCS, limitations are placed on the maximum number of ECCS pumps that may be OPERABLE. Refer to the Bases for LCO 3.4.12, "Low Temperature Overpressure Protection (LTOP) System," for the basis of these requirements.

The ECCS subsystems are actuated upon receipt of an SI signal. The actuation of safeguard loads is accomplished in a programmed time sequence. If offsite power is available, the safeguard loads start immediately in the programmed sequence. If offsite power is not available, the Engineered Safety Feature (ESF) buses shed normal operating loads and are connected to the emergency diesel generators (EDGs). Safeguard loads are then actuated in the programmed time sequence. The time delay associated with diesel starting, sequenced loading, and pump starting determines the time required before pumped flow is available to the core following a safety injection actuation.

The active ECCS components, along with the passive accumulators and the RWST covered in LCO 3.5.1, "Accumulators," and LCO 3.5.4, "Refueling Water Storage Tank (RWST)," provide the cooling water necessary to meet GDC 35 (Ref. 1).

APPLICABLE The LCO helps to ensure that the following acceptance criteria for the SAFETY ANALYSES ECCS, established by 10 CFR 50.46 (Ref. 2), will be met following a small break LOCA and there is a high level of probability that the criteria are met following a large break LOCA:

- a. Maximum fuel element cladding temperature is  $\leq$  2200°F;
- b. Maximum cladding oxidation is  $\leq 0.17$  times the total cladding thickness before oxidation;
- c. Maximum hydrogen generation from a zirconium water reaction is ≤ 0.01 times the hypothetical amount generated if all of the metal in the cladding cylinders surrounding the fuel, excluding the cladding surrounding the plenum volume, were to react;

#### BASES

# APPLICABLE SAFETY ANALYSES (continued)

- d. Core is maintained in a coolable geometry; and
- e. Adequate long term core cooling capability is maintained.

The LCO also limits the potential for a post trip return to power following an MSLB event and ensures that containment pressure and temperature limits are met.

Each ECCS subsystem is taken credit for in a large break LOCA event at full power (Refs. 3 and 4). This event has the greatest potential to challenge the limits on runout flow set by the manufacturer of the ECCS pumps. It also sets the maximum response time for their actuation. Direct flow from the centrifugal charging pumps and SI pumps is credited in a small break LOCA event. The RHR pumps are also credited, for larger small break LOCAs, as the means of supplying suction to these higher head ECCS pumps after the switch to sump recirculation. This event establishes the flow and discharge head at the design point for the centrifugal charging pumps. The MSLB analysis also credits the SI and centrifugal charging pumps. Although some ECCS flow is necessary to mitigate a SGTR event, a single failure disabling one ECCS train is not the limiting single failure for this transient. The SGTR analysis primary to secondary break flow is increased by the availability of both centrifugal charging and SI trains. Therefore, the SGTR analysis is penalized by assuming both ECCS trains are operable as required by the LCO. The OPERABILITY requirements for the ECCS are based on the following LOCA analysis assumptions:

- a. A large break LOCA event, with loss of offsite power and a single failure disabling one ECCS train; and
- b. A small break LOCA event, with a loss of offsite power and a single failure disabling one ECCS train.

During the blowdown stage of a LOCA, the RCS depressurizes as primary coolant is ejected through the break into the containment. The nuclear reaction is terminated either by moderator voiding during large breaks or control rod insertion for small breaks. Following depressurization, emergency cooling water is injected into the cold legs, flows into the downcomer, fills the lower plenum, and refloods the core.

The effects on containment mass and energy releases are accounted for in appropriate analyses (Ref. 3). The LCO ensures that an ECCS train will deliver sufficient water to match boiloff rates soon enough to minimize the consequences of the core being uncovered following a large LOCA.

# APPLICABLE SAFETY ANALYSES (continued)

It also ensures that the centrifugal charging and SI pumps will deliver sufficient water and boron during a small LOCA to maintain core subcriticality. For smaller LOCAs, the centrifugal charging pump delivers sufficient fluid to maintain RCS inventory. For a small break LOCA, the steam generators continue to serve as the heat sink, providing part of the required core cooling.

The ECCS trains satisfy Criterion 3 of 10 CFR 50.36 (Ref. 5).

LCO In MODES 1, 2, and 3, two independent (and redundant) ECCS trains are required to ensure that sufficient ECCS flow is available, assuming a single failure affecting either train. Additionally, individual components within the ECCS trains may be called upon to mitigate the consequences of other transients and accidents.

In MODES 1, 2, and 3, an ECCS train consists of a centrifugal charging subsystem, an SI subsystem, and an RHR subsystem. Each train includes the piping, instruments, and controls to ensure an OPERABLE flow path capable of taking suction from the RWST upon an SI signal and automatically transferring suction to the containment sump.

During an event requiring ECCS actuation, a flow path is required to provide an abundant supply of water from the RWST to the RCS via the ECCS pumps and their respective supply headers to each of the four cold leg injection nozzles. In the long term, this flow path may be switched to take its supply from the containment sump and to supply its flow to the RCS hot and cold legs. The flow path for each train must maintain its designed independence to ensure that no single failure can disable both ECCS trains.

APPLICABILITY In MODES 1, 2, and 3, the ECCS OPERABILITY requirements for the limiting Design Basis Accident, a large break LOCA, are based on full power operation. Although reduced power would not require the same level of performance, the accident analysis does not provide for reduced cooling requirements in the lower MODES. The centrifugal charging pump performance is based on a small break LOCA, which establishes the pump performance curve and has less dependence on power. The SI pump performance requirements are based on a small break LOCA. For both of these types of pumps, the large break LOCA analysis depends only on the flow value at containment pressure, not on the shape of the flow versus pressure curve at higher pressures. MODE 2 and MODE 3 requirements are bounded by the MODE 1 analysis.

#### APPLICABILITY (continued)

This LCO is only applicable in MODE 3 and above. Below MODE 3, the SI signal setpoint is manually bypassed by operator control, and system functional requirements are relaxed as described in LCO 3.5.3, "ECCS—Shutdown."

As indicated in the Note, the flow path may be isolated for 2 hours in MODE 3, under controlled conditions, to perform pressure isolation valve testing per SR 3.4.14.1. The flow path is readily restorable from the control room.

In MODES 5 and 6, plant conditions are such that the probability of an event requiring ECCS injection is extremely low. Core cooling requirements in MODE 5 are addressed by LCO 3.4.7, "RCS Loops— MODE 5, Loops Filled," and LCO 3.4.8, "RCS Loops—MODE 5, Loops Not Filled." MODE 6 core cooling requirements are addressed by LCO 3.9.5, "Residual Heat Removal (RHR) and Coolant Circulation— High Water Level," and LCO 3.9.6, "Residual Heat Removal (RHR) and Coolant Circulation—Low Water Level."

# ACTIONS

# <u>A.1</u>

With one or more trains inoperable and at least 100% of the ECCS flow equivalent to a single OPERABLE ECCS train available, the inoperable components must be returned to OPERABLE status within 72 hours. The 72 hour Completion Time is based on an NRC reliability evaluation (Ref. 6) and is a reasonable time for repair of many ECCS components.

An ECCS train is inoperable if it is not capable of delivering design flow to the RCS. Individual components are inoperable if they are not capable of performing their design function or supporting systems are not available.

The LCO requires the OPERABILITY of a number of independent subsystems. Due to the redundancy of trains and the diversity of subsystems, the inoperability of one component in a train does not render the ECCS incapable of performing its function. Neither does the inoperability of two different components, each in a different train, necessarily result in a loss of function for the ECCS. The intent of this Condition is to maintain a combination of equipment such that 100% of the ECCS flow equivalent to a single OPERABLE ECCS train remains available. This allows increased flexibility in plant operations under circumstances when components in opposite trains are inoperable.

# ACTIONS (continued)

An event accompanied by a loss of offsite power and the failure of an EDG can disable one ECCS train until power is restored. A reliability analysis (Ref. 6) has shown that the impact of having one full ECCS train inoperable is sufficiently small to justify continued operation for 72 hours.

Reference 7 describes situations in which one component, such as an RHR crossover valve, can disable both ECCS trains. With one or more component(s) inoperable such that 100% of the flow equivalent to a single OPERABLE ECCS train is not available, the facility is in a condition outside the accident analysis. Therefore, LCO 3.0.3 must be immediately entered.

#### B.1 and B.2

If the inoperable trains cannot be returned to OPERABLE status within the associated Completion Time, the plant must be brought to a MODE in which the LCO does not apply. To achieve this status, the plant must be brought to MODE 3 within 6 hours and MODE 4 within 12 hours. The allowed Completion Times are reasonable, based on operating experience, to reach the required plant conditions from full power conditions in an orderly manner and without challenging plant systems.

# SURVEILLANCE <u>S</u>REQUIREMENTS

# <u>SR 3.5.2.1</u>

Verification of proper valve position ensures that the flow path from the ECCS pumps to the RCS is maintained. Misalignment of these valves could render both ECCS trains inoperable. Securing these valves using the power disconnect switches in the correct position ensures that they cannot change position as a result of an active failure or be inadvertently misaligned. These valves are of the type, described in Reference 7, that can disable the function of both ECCS trains and invalidate the accident analyses. The Surveillance Frequency is based on operating experience, equipment reliability, and plant risk and is controlled under the Surveillance Frequency Control Program.

# <u>SR. 3.5.2.2</u>

Verifying the correct alignment for manual, power operated, and automatic valves in the ECCS flow paths provides assurance that the proper flow paths will exist for ECCS operation. This SR does not apply to valves that are locked, sealed, or otherwise secured in position, since these were verified to be in the correct position prior to locking, sealing,



# SURVEILLANCE REQUIREMENTS (continued)

or securing. A valve that receives an actuation signal is allowed to be in a nonaccident position provided the valve will automatically reposition within the proper stroke time. This Surveillance does not require any testing or valve manipulation. Rather, it involves verification that those valves capable of being mispositioned are in the correct position. The Surveillance Frequency is based on operating experience, equipment reliability, and plant risk and is controlled under the Surveillance Frequency Control Program.

# <u>SR 3.5.2.3</u>

ECCS piping is verified to be water-filled by venting to remove gas from accessible locations susceptible to gas accumulation. Alternative means may be used to verify water-filled conditions (e.g., ultrasonic testing or high point sightglass observation). Maintaining the ECCS pumps and piping full of water ensures that the system will perform properly, injecting its full capacity into the RCS upon demand. This will also prevent water hammer, pump cavitation, and pumping of noncondensible gas (e.g., air, nitrogen, or hydrogen) into the reactor vessel following an SI signal or during shutdown cooling. The Surveillance Frequency is based on operating experience, equipment reliability, and plant risk and is controlled under the Surveillance Frequency Control Program.

# <u>SR 3.5.2.4</u>

Periodic surveillance testing of ECCS pumps to detect gross degradation caused by impeller structural damage or other hydraulic component problems is required by the ASME OM Code. This type of testing may be accomplished by measuring the pump developed head at only one point of the pump characteristic curve. This verifies both that the measured performance is within an acceptable tolerance of the original pump baseline performance and that the performance at the test flow is greater than or equal to the performance assumed in the plant safety analysis. SRs are specified in the Inservice Testing Program, which encompasses the ASME OM Code. The ASME Code provides the activities and Frequencies necessary to satisfy the requirements.

#### SURVEILLANCE REQUIREMENTS (continued)

SR 3.5.2.5 and SR 3.5.2.6

These Surveillances demonstrate that each automatic ECCS valve actuates to the required position on an actual or simulated SI signal and that each ECCS pump starts on receipt of an actual or simulated SI signal. This Surveillance is not required for valves that are locked, sealed, or otherwise secured in the required position under administrative controls. The Surveillance Frequency is based on operating experience, equipment reliability, and plant risk and is controlled under the Surveillance Frequency Control Program.

#### <u>SR 3.5.2.7</u>

The position of throttle valves in the flow path on an SI signal is necessary for proper ECCS performance. These valves have mechanical locks to ensure proper positioning for restricted flow to a ruptured cold leg, ensuring that the other cold legs receive at least the required minimum flow. The Surveillance Frequency is based on operating experience, equipment reliability, and plant risk and is controlled under the Surveillance Frequency Control Program.

#### SR 3.5.2.8

Periodic inspections of the ECCS containment sump strainer assembly (consisting of modular tophats, grating, plenums and waterboxes) and the associated enclosure (the stainless steel structure surrounding the strainer assembly located inside the crane wall) ensure they are unrestricted and stay in proper operating condition. Inspections will consist of a visual examination of the exterior surfaces of the strainer assembly and interior and exterior surfaces of the enclosure for any evidence of debris, structural distress, or abnormal corrosion. The intent of the surveillance is to ensure the absence of any condition which could adversely affect strainer functionality. Surveillance performance will not require removal of any tophat modules, but the strainer assembly exterior shall be visually inspected. This inspection will necessarily entail opening the top of the enclosure to allow access for inspection of the strainers, and to verify cleanliness of the enclosure interior space. A detailed inspection of the enclosure and exterior strainer assembly surfaces is required to establish a high confidence that no adverse conditions are present. The Surveillance Frequency is based on operating experience, equipment reliability, and plant risk and is controlled under the Surveillance Frequency Control Program.



McGuire Units 1 and 2

	/		
• :			

- REFERENCES 1. 10 CFR 50, Appendix A, GDC 35.
  - 2. 10 CFR 50.46.
  - 3. UFSAR, Section 6.2.1.
  - 4. UFSAR, Chapter 15.
  - 5. 10 CFR 50.36, Technical Specifications, (c)(2)(ii).
  - 6. NRC Memorandum to V. Stello, Jr., from R.L. Baer, "Recommended Interim Revisions to LCOs for ECCS Components," December 1, 1975.
  - 7. IE Information Notice No. 87-01.

7

			10 CFR 50.59 Screen	· · · · · · · · · · · · · · · · · · ·
1			McGuire Nuclear Station	Unit(s):1 & 2
			ation Surveillance Requirem	
Bases 3.5.	2.3 to clarify ECCS	piping is t	o be maintained full of water	(not just the ECCS discharge piping)

CONCLUSIONS	
	NO
Does the activity require a 10 CFR 50.59 Evaluation:	NO

[	PREPAREI	R SIGNOFF	
Screen Preparer	Meyer, Bryan D	Date:	07/19/2011
Notes for Preparer	Signature		· · · · · · · · · · · · · · · · · · ·

	REVIEWER	SIGNOFF
Screen Reviewer	Vanpelt, Harry E	Date: 07/19/2011
Notes for Reviewer	Signature	

	APPROVER S	DIGNUFF		
Screen Approver	Robertson, Jeffrey N	Date:	07/19/2011	
Notes for Approver S	Signature			

[	10 CFR 50.59 Screen
A/R Number:	00364576
	The following A/Rs are related to this activity (provided For Information Only)

Ref Type	Number:	Activity Title	Туре
AR	00299015	UFSAR Chapter 6 Update for ECCS & NS valve stroke time data	5SCR
requirements			

1