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REFERENCE

MCGUIRE NUCLEAR STATION
SELECTED LICENSEE COMMITMENTS
MANUAL (SLC)

Page 2 of 3

Date: 04/11/02

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☐ Yes ☒ No

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SELECTED LICENSEE COMMITMENT MANUAL	NA	020 04/04/02	MADM-03A	V1	V1	V1	V1	V1	V1	V1	V1	V1	V1	V2	V8	V1	V2	V1	56
LOEP	NA	020 04/04/02																	
SLC 16.11.2	NA	023 04/04/02																	

REMARKS: PLEASE UPDATE YOUR MANUAL ACCORDINGLY

H B BARRON, JR.
VICE PRESIDENT
MCGUIRE NUCLEAR STATION

BY:

P T VU MG01RC PTV/CMK

EB

A001

April 4, 2002

MEMORANDUM

To: All Holders of McGuire Nuclear Station Selected Licensee Commitments (SLC)
Manual

Subject: McGuire SLC Manual Update
SLC 16.11.2 – Radioactive Liquid Effluent Monitoring Instrumentation

Please revise your copy of the SLC manual as follows:

REMOVE

Entire SLC LOAS
Entire SLC 16.11.2

INSERT

Entire SLC LOAS, Rev. 20
Entire SLC 16.11.2, Rev. 23

Please call me if you have any questions.

A handwritten signature in black ink, appearing to read 'P.T. Vu', with a long horizontal flourish extending to the right.

P.T. Vu
Regulatory Compliance, x 4302

SLC LIST OF AFFECTED SECTIONS

SECTION	REVISION NUMBER	DATE
16.1	REVISION 0	12/14/99
16.2	REVISION 0	12/14/99
16.3	REVISION 0	12/14/99
16.4	Not Issued	
16.5.1	REVISION 0	12/14/99
16.5.2	REVISION 0	12/14/99
16.5.3	REVISION 0	12/14/99
16.5.4	REVISION 7	09/14/00
16.5.5	REVISION 0	12/14/99
16.5.6	REVISION 0	12/14/99
16.5.7	REVISION 0	12/14/99
16.5.8	REVISION 0	12/14/99
16.5.9	REVISION 0	12/14/99
16.5.10	REVISION 0	12/14/99
16.6.1	REVISION 0	12/14/99
16.6.2	REVISION 0	12/14/99
16.6.3	REVISION 0	12/14/99
16.7.1	REVISION 0	12/14/99
16.7.2	REVISION 16	9/26/01
16.7.3	REVISION 0	12/14/99
16.7.4	REVISION 1	4/11/00
16.7.5	REVISION 0	12/14/99
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16.7.9	REVISION 0	12/14/99
16.7.10	REVISION 0	12/14/99
16.8.1	REVISION 2	4/11/00
16.8.2	REVISION 0	12/14/99
16.8.3	REVISION 2	4/11/00
16.9.1	REVISION 18	12/4/01
16.9.2	REVISION 5	5/24/00
16.9.3	REVISION 0	12/14/99
16.9.4	REVISION 1	03/02/00
16.9.5	REVISION 0	12/14/99
16.9.6	REVISION 0	12/14/99
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16.9.9	REVISION 13	2/26/01
16.9.10	REVISION 13	2/26/01
16.9.11	REVISION 22	2/25/02
16.9.12	REVISION 13	2/26/01
16.9.13	REVISION 13	2/26/01
16.9.14	REVISION 22	2/25/02
16.9.15	REVISION 4	6/20/00
16.9.16	REVISION 19	12/03/01
16.9.17	REVISION 0	12/14/99

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16.9.18	REVISION 0	12/14/99
16.9.19	REVISION 0	12/14/99
16.9.20	REVISION 8	11/30/00
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16.9.22	REVISION 0	12/14/99
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16.9.24	REVISION 20	1/17/02
16.10.1	REVISION 0	12/14/99
16.11.1	REVISION 9	2/1/01
16.11.2	REVISION 23	4/4/02
16.11.3	REVISION 0	12/14/99
16.11.4	REVISION 0	12/14/99
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16.11.11	REVISION 0	12/14/99
16.11.12	REVISION 0	12/14/99
16.11.13	REVISION 0	12/14/99
16.11.14	REVISION 21	1/17/02
16.11.15	REVISION 21	1/17/02
16.11.16	REVISION 1	4/11/00
16.11.17	REVISION 1	4/11/00
16.11.18	REVISION 0	12/14/99
16.11.19	REVISION 0	12/14/99
16.11.20	REVISION 0	12/14/99
16.12.1	REVISION 0	12/14/99
16.12.2	REVISION 0	12/14/99
16.13.1	REVISION 0	12/14/99
16.13.2	REVISION 0	12/14/99
16.13.3	REVISION 0	12/14/99
16.14.1	REVISION 0	12/14/99

16.11 RADIOLOGICAL EFFLUENT CONTROLS

16.11.2 Radioactive Liquid Effluent Monitoring Instrumentation

COMMITMENT The radioactive liquid effluent monitoring instrumentation channels shown in Table 16.11.2-1 shall be OPERABLE with their Alarm/Trip Setpoints set to ensure that the limits of SLC 16.11.1 are not exceeded.

AND

The Alarm/Trip Setpoints of these channels shall be determined and adjusted in accordance with the methodology and parameters in the OFFSITE DOSE CALCULATION MANUAL (ODCM).

APPLICABILITY At all times.

REMEDIAL ACTIONS

-----NOTE-----
Separate Condition entry is allowed for each Function.

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more radioactive liquid effluent monitoring channels Alarm/Trip setpoint less conservative than required.	A.1 Suspend the release of radioactive liquid effluents monitored by the affected channel.	Immediately
	<u>OR</u>	
	A.2 Declare the channel inoperable.	Immediately
	<u>OR</u>	
	A.3 Adjust setpoint to within limit.	Immediately
B. One or more radioactive liquid effluent monitoring instrument channels inoperable.	B.1 Enter the Remedial Action specified in Table 16.11.2-1 for the channel(s).	Immediately

(continued)

REMEDIAL ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
C. One channel inoperable.	C.1.1 Analyze two independent samples per TR 16.11.1.1.	Prior to initiating a release
	<u>AND</u>	
	C.1.2 Perform independent verification of the discharge line valving.	Prior to initiating a release
	<u>AND</u>	
	C.1.3.1 Perform independent verification of manual portion of the computer input for the release rate calculations performed by computer.	Prior to initiating a release
	<u>OR</u>	
	C.1.3.2 Perform independent verification of entire release rate calculations for calculations performed manually.	Prior to initiating a release
	<u>AND</u>	
	C.1.4 Restore channel to OPERABLE status.	14 days
	<u>OR</u>	
	C.2 Suspend the release of radioactive effluents via this pathway.	Immediately

(continued)

REMEDIAL ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
D. One channel inoperable.	D.1 Perform an analysis of grab samples for radioactivity at a lower limit of detection per Table 16.11.1-1.	Once per 12 hours during releases when secondary specific activity is $> 0.01 \mu\text{Ci/gm DOSE EQUIVALENT I-131}$
	<u>AND</u> D.2 Restore the channel to OPERABLE status.	<u>AND</u> Once per 24 hours during releases when secondary specific activity is $\leq 0.01 \mu\text{Ci/gm DOSE EQUIVALENT I-131}$ 30 days
E. One or more channels inoperable.	E.1 Perform an analysis of grab samples for radioactivity at a lower limit of detection per Table 16.11.1-1.	Once per 12 hours during releases
	<u>AND</u> E.2 Restore the channel to OPERABLE status.	30 days

(continued)

REMEDIAL ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
F. One or more flow rate measurement channels inoperable.	F.1 -----NOTE----- Pump performance curves generated in place may be used to estimate flow. ----- Estimate the flow rate of the release.	Once per 4 hours during releases
	<u>AND</u> F.2 Restore the channel to OPERABLE status.	30 days
G. RC minimum flow interlock inoperable.	G.1 Verify that the number of pumps providing dilution is greater than or equal to the number of pumps required.	Once per 4 hours during releases
	<u>AND</u> G.2 Restore the channel to OPERABLE status.	30 days
H. Required Action and associated Completion Time of Condition C, D, E, F, or G not met.	H.1 Explain why the inoperability was not corrected within the specified Completion Time in the Annual Radioactive Effluent Release Report.	In the next scheduled Annual Radioactive Effluent Release Report

TESTING REQUIREMENTS

-----NOTE-----
Refer to Table 16.11.2-1 to determine which TRs apply for each Radioactive Liquid Effluent Monitoring channel.

TEST	FREQUENCY
TR 16.11.2.1 Perform CHANNEL CHECK.	24 hours
TR 16.11.2.2 -----NOTE----- The CHANNEL CHECK shall consist of verifying indication of flow. ----- Perform CHANNEL CHECK.	Every 24 hours during periods of release
TR 16.11.2.3 Perform SOURCE CHECK.	Prior to each release
TR 16.11.2.4 Perform SOURCE CHECK.	31 days
TR 16.11.2.5 -----NOTES----- 1. For Instrument 1, the COT shall also demonstrate that automatic isolation of the pathway occurs if the instrument indicates measured levels above the Alarm/Trip Setpoint. 2. For Instruments 1 and 2, the COT shall also demonstrate that control room alarm annunciation occurs if the instrument indicates measured levels above the Alarm/Trip Setpoint; circuit failure and, a downscale failure. ----- Perform CHANNEL OPERATIONAL TEST.	92 days
TR 16.11.2.6 Perform a CHANNEL CALIBRATION.	18 months

(continued)

TESTING REQUIREMENTS (continued)

TEST	FREQUENCY
<p>TR 16.11.2.7 -----NOTE-----</p> <p>The initial CHANNEL CALIBRATION shall be performed using standards certified by the National Institute of Standards and Technology (NIST) or using standards obtained from suppliers that participate in measurement assurance activities with NIST. These standards shall permit calibrating the system over its intended range of energy and measurement range. For subsequent CHANNEL CALIBRATION, sources that have been related to the initial calibration shall be used.</p> <p>-----</p> <p>Perform a CHANNEL CALIBRATION.</p>	<p>24 months</p>

TABLE 16.11.2-1

RADIOACTIVE LIQUID EFFLUENT MONITORING INSTRUMENTATION

INSTRUMENT	MINIMUM CHANNELS OPERABLE	REMEDIAL ACTION	TESTING REQUIREMENTS
1. Radioactivity Monitors Providing Alarm And Automatic Termination of Release			
a. Waste Liquid Effluent Line (EMF-49)	1 per station	A, C, H	TR 16.11.2.1 TR 16.11.2.3 TR 16.11.2.5 TR 16.11.2.7
b. EMF-49 Minimum Flow Device	1 per station	C, H	TR 16.11.2.5 TR 16.11.2.7
c. Containment Ventilation Unit Condensate Line (EMF-44)	1	A, E, H	TR 16.11.2.1 TR 16.11.2.4 TR 16.11.2.5 TR 16.11.2.7
d. EMF-44 Minimum Flow Device	1	E, H	TR 16.11.2.5 TR 16.11.2.7
2. Radioactivity Monitors Providing Alarm But Not Automatic Termination of Release			
a. Conventional Waste Water Treatment Line or Turbine Building Sump to RC (EMF-31)	1	A, D, H	TR 16.11.2.1 TR 16.11.2.4 TR 16.11.2.5 TR 16.11.2.7
b. EMF-31 Minimum Flow Device	1	D, H	TR 16.11.2.5 TR 16.11.2.7
3. Continuous Composite Samplers			
a. Containment Ventilation Unit Condensate Line	1	E, H	TR 16.11.2.2 TR 16.11.2.5 TR 16.11.2.6
b. Conventional Waste Water Treatment Line	1 per station	E, H	TR 16.11.2.2 TR 16.11.2.5 TR 16.11.2.6
c. Turbine Building Sump to RC	1	E, H	TR 16.11.2.2 TR 16.11.2.6
(Continued)			

4. Flow Rate Measurement Devices			
a. Waste Liquid Effluent Line	1 per station	F, H	TR 16.11.2.2 TR 16.11.2.5 TR 16.11.2.6
b. Containment Ventilation Unit Condensate Line	1	F, H	TR 16.11.2.2 TR 16.11.2.5 TR 16.11.2.6
c. Conventional Waste Water Treatment Line	1 per station	F, H	TR 16.11.2.2 TR 16.11.2.5 TR 16.11.2.6
d. Turbine Building Sump to RC	1	F, H	TR 16.11.2.2 TR 16.11.2.6
5. RC Minimum Flow Interlock (1)	1 per station	G, H	TR 16.11.2.5

NOTES:

1. Minimum flow dilution is assured by an interlock which terminates waste liquid release if the number of RC pumps running falls below the number of pumps required for dilution. The required number of RC pumps for dilution is determined per station procedures.

BASES

The radioactive liquid effluent instrumentation is provided to monitor and control, as applicable, the releases of radioactive materials in liquid effluents during actual or potential releases of liquid effluents. The Alarm/Trip Setpoints of these instruments shall be calculated and adjusted in accordance with the methodology and parameters in the ODCM to ensure that the Alarm/Trip will occur prior to exceeding the limits stated in SLC 16.11.1. The OPERABILITY and use of this instrumentation is consistent with the requirements of General Design Criteria 60, 63, and 64 of Appendix A to 10 CFR Part 50. The Turbine Building Sump to RC Discharge Flow Measurement and Sampler Devices are for monitoring only and do not alarm or have any controls that require a quarterly COT.

REFERENCES

1. McGuire Nuclear Station Offsite Dose Calculation Manual (ODCM)
2. 10 CFR Part 50, Appendix A