

TABLE 3.2-11

INSTRUMENTATION WHICH PROVIDES SURVEILLANCE INFORMATION

Ref. No. (a)	Instrument (b)	Required Operable Instrument Channels	Type and Range	Action	Remarks
1	Reactor Water Level (GE/MAC)	1 2	Recorder Indicator 0 to 60"	(c) (c)	(d) (d)
2	Shroud Water Level	1 1	Recorder Indicator -317" to -17"	(c) (c)	(d) (d)
3	Reactor Pressure	1 2	Recorder Indicator 0 to 1200 psig	(c) (c)	(d) (d)
4	Drywell Pressure	2	Recorder -10 to + 90 psig	(c)	(d)
5	Drywell Temperature	2	Recorder 0 to 500°F	(c)	(d)
6	Suppression Chamber Air Temperature	2	Recorder 0 to 500°F	(c)	(d)
7	Suppression Chamber Water Temperature	2	Recorder 0 to 250°F	(c)	(d)
8	Suppression Chamber Water Level	2 2	Indicator 0 to 300" Recorder 0 to 30"	(c) (c) (e)	(d) (d)
9	Suppression Chamber Pressure	2	Recorder -10 to +90 psig	(c)	(d)
10	Rod Position Information System (RPIS)	1	28 Volt Indicating Lights	(c)	(d)
11	Hydrogen and Oxygen Analyzer	1	Recorder 0 to 52	(c)	(d)
12	Post LOCA Radiation Monitoring System	1	Recorder Indicator 1 to 10 ⁶ R/hr	(c) (c)	(d) (d)
13	Drywell/Suppression Chamber Differential Pressure	2	Recorder -0.5 to + 2.5 psid	(c) (e)	(d)
14	a) Safety/Relief Valve Position Primary Indicator	1	Pressure Switch 4-100 psig	(f)	
	b) Safety/Relief Valve Position Secondary Indicator	1	Temperature element 0-600°F	(f)	

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TABLE 3.2-11 (Continued)

INSTRUMENTATION WHICH PROVIDES SURVEILLANCE INFORMATION

Ref. No. (a)	Instrument (b)	Required Operable Instrument Channels	Type and Range	Action	Remarks
15	Drywell High Range Pressure	2	Recorder 0 to 250 psig	(c)	(d)
16	Drywell High Range Radiation	2 2	Indicator 1 to 10^7 R/Hr Recorder 1 to 10^7 R/Hr	(g) (g)	
17	Main Stack Post-Accident Effluent Monitor	1	Recorder 5×10^{-3} to 1×10^5 $\mu\text{Ci/cc}$	(g)	(h)
18	Reactor Building Vent Plenum Post-Accident Effluent Monitor	1	Recorder 5×10^{-3} to 1×10^5 $\mu\text{Ci/cc}$	(g)	(h)

NOTES FOR TABLE 3.2-11

- a. The column entitled "Ref. No." is only for convenience so that a one-to-one relationship can be established between items in Table 3.2-11 and items in Table 4.2-11
- b. Limiting Conditions for Operation for the Neutron Monitoring System are listed in Table 3.2-7.
- c. From and after the date that one of these parameters is reduced to one indication, continued operation is permissible during the succeeding thirty days unless such instrumentation is sooner made operable.

Continued operation is permissible for seven days from and after the date that one of these parameters is not indicated in the control room. Surveillance of local panels will be substituted for indication in the control room during the seven days.

- d. Drywell and Suppression Chamber Pressure are each recorded on the same recorders. Each output channel has its own recorder.

Drywell and Suppression Chamber air temperature and suppression chamber water temperature are all recorded on the same recorders. Each output channel has its own recorder. Each recorder takes input from several temperature elements.

Hydrogen and Oxygen are indicated on one recorder. The recorder has two pens, one pen for each parameter.

Each channel of the post LOCA radiation monitoring system includes two detectors; one located in the drywell and the other in the suppression chamber. Each detector feeds a signal to a separate log count rate meter. The meter output goes to a two pen recorder. One high radiation level alarm is provided per channel and annunciation of alarm is provided in the control room.

High Range Drywell Pressure and High Range Drywell Radiation are recorded on the same recorders. Each output channel has its own recorder.

- e. In the event that all indications of this parameter is disabled and such indication cannot be restored in six (6) hours, an orderly shutdown shall be initiated and the reactor shall be in a Hot Shutdown condition in six (6) hours and a Cold Shutdown condition in the following eighteen (18) hours.
- f. If either the primary or secondary indication is inoperable, the torus temperature will be monitored at least once per shift to observe any unexplained temperature increase which might be indicative of an open SRV. With both the primary and secondary monitoring channels of two or more SRVs inoperable either restore sufficient inoperable channels such that no more than one SRV has both primary and secondary channels inoperable within 7 days or be in at least hot shutdown within the next 12 hours.

NOTES FOR TABLE 3.2-11 (Continued)

- g. With the plant in the power operation, startup, or hot shutdown condition and with the number of operable channels less than the required operable channels, initiate the preplanned alternate method of monitoring the appropriate parameter within 72 hours and:
 - 1. either restore the inoperable channel(s) to operable status within 7 days of the event, or
 - 2. prepare and submit a special report to the NRC pursuant to Specification 6.9.2 within 14 days following the event outlining the action taken, the cause of the inoperability, and the plans and schedule for restoring the system to operable status.
- h. A channel contains two detectors: one for mid-range noble gas, and one for high range noble gas. Both detectors must be operable to consider the channel operable.

TABLE 4.2-11 (Continued)

CHECK AND CALIBRATION MINIMUM FREQUENCY FOR INSTRUMENTATION
WHICH PROVIDES SURVEILLANCE INFORMATION

Ref. No. (a)	Instrument	Instrument Check Minimum Frequency (b)	Instrument Functional Test Minimum Frequency (d)	Instrument Calibration Minimum Frequency (c)
15	Drywell High Range Pressure	Each Shift	N.A.	Every 6 Months
16	Drywell High Range Radiation	Each Shift	N.A.	Every 18 Months (e)
17	Main Stack Post-Accident Effluent Monitor	N.A.	Every 6 Months	Every 18 Months
18	Reactor Building Vent Plenum Post-Accident Effluent Monitor	N.A.	Every 6 Months	Every 18 Months

Notes for Table 4.2-11

- a. The column entitled "Ref. No." is only for convenience so that a one-to-one relationship can be established between items in Table 4.2-11 and items in Table 3.2-11.
- b. Instrument checks are not required when the instruments are not required to be operable or are tripped. However, if instrument checks are missed, they shall be performed prior to returning the instrument to an operable status.
- c. Calibrations are not required when the instruments are not required to be operable or are tripped. However, if calibrations are missed, they shall be performed prior to returning the instrument to an operable status.
- d. Functional tests are not required when the instruments are not required to be operable or are tripped. However, if functional tests are missed, they shall be performed prior to returning the instrument to an operable status.
- e. Calibration of a drywell high range monitor shall consist of an electronic calibration of the channel, not including the detector, for range decades above 10 R/hr and a one point calibration check of the detector below 10 R/hr with an installed or portable gamma source.

3.2.J.4. Scintillation Detector For Monitoring Radioiodine (Continued)

level reading is indicative of a leak in the nuclear system process barrier in the primary containment. A sample that is continuously drawn from the primary containment is collected on an iodine filter and monitored by a gamma sensitive scintillation detector. Radiation levels are read out by a log rate meter and recorded on a strip chart located in the control room. A high radiation level alarm and a failure alarm are also provided and are annunciated in the control room. Also, a high-low flow alarm is annunciated in the control room.

5. GM Tubes for Monitoring Noble Gases

A set of GM tubes contained in an instrument rack are used to monitor the release of noble gases in the drywell and torus. A high radiation level reading is indicative of a leak in the nuclear system process barrier in the primary containment. A sample that's continuously drawn from the primary containment is passed through a shielded sample chamber which contains the beta sensitive GM tubes. Radiation levels are read out by a log rate meter and recorded on a strip chart located in the control room. A high radiation level alarm and failure alarm are provided and are annunciated in the control room. Also, a high-flow alarm is annunciated in the control room.

K. Instrumentation Which Provides Surveillance Information (Table 3.2-11)

For each parameter monitored, as listed in Table 3.2-11, there are two channels of instrumentation except for the control rod positions indicating system and the Post-Accident Effluent Monitors. By comparing readings between the two channels, a near continuous surveillance of instrument performance is available. Any significant deviation in readings will initiate an early recalibration, thereby maintaining the quality of the instrument readings.

The hydrogen and oxygen analyzing systems consist of two redundant, separate systems and are each capable of analyzing the hydrogen and oxygen content of the drywell-torus simultaneously. They are designed to be completely testable at both the analyzer rack and in the control room. With an oxygen concentration of less than 4% by volume, a flammable mixture with hydrogen is not possible.

L. Instrumentation Which Initiates Disconnection of Offsite Power Sources (Table 3.2-12)

The undervoltage relays shall automatically initiate the disconnection of offsite power sources whenever the voltage setpoint and time delay limits have been exceeded. This action shall provide voltage protection for the emergency power systems by preventing sustained degraded voltage conditions due to the offsite power source and interaction between the offsite and on-site emergency power systems. The undervoltage relays have a time delay characteristic that provides protection against both a loss of voltage and degraded voltage condition and thus minimizes the effect of short duration disturbances without exceeding the maximum time delay, including margin, that is assumed in the FSAR accident analyses.

ADMINISTRATIVE CONTROL

6.15 POST-ACCIDENT SAMPLING AND ANALYSIS

A program shall be established, implemented, and maintained to ensure the capability to obtain and analyze samples of radioactive iodines and particulates in plant gaseous effluents under accident conditions.

The program shall include the following:

- a) Training of personnel,
- b) Procedures for sampling and analysis,
- c) Provisions for maintenance of sampling and analysis equipment.

ENCLOSURE 2 (CONTINUED)

NRC DOCKETS 50-321, 50-366
OPERATING LICENSES DPR-57, NPF-5
EDWIN I. HATCH NUCLEAR PLANT UNITS 1, 2
REQUEST TO AMEND TECHNICAL SPECIFICATIONS-TMI ACTION PLAN ITEMS

The proposed changes to Unit 2 Technical Specifications (Appendix A to Operating License NPF-5) would be incorporated as follows:

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INSTRUMENTATION

POST-ACCIDENT MONITORING INSTRUMENTATION

LIMITING CONDITION FOR OPERATION

3.3.6.4 The post-accident monitoring instrumentation channels shown in Table 3.3.6.4-1 shall be OPERABLE.

APPLICABILITY: CONDITIONS 1, 2, and 3 *

ACTION:

- a. With one or more of the above required post-accident monitoring channels inoperable, either restore the inoperable channel(s) to OPERABLE status within 30 days or be in at least HOT SHUTDOWN within the next 12 hours.
- b. The provisions of Specification 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.3.6.4. Each of the above required post-accident monitoring instrumentation channels shall be demonstrated OPERABLE by performance of the CHANNEL CHECK, CHANNEL FUNCTIONAL TEST, and CHANNEL CALIBRATION operations at the frequencies shown in Table 4.3.6.4-1

* Condition 3 is applicable only to Items 12, 13, and 14 of Table 3.3.6.4-1.

TABLE 3.3.6.4-1

POST-ACCIDENT MONITORING INSTRUMENTATION

<u>INSTRUMENT</u>	<u>MINIMUM CHANNELS OPERABLE</u>
1. Reactor Vessel Pressure (2C32-R605 A, B, C)	2
2. Reactor Vessel Water Level (2B21-R610, 2B21-R615)	2
3. Suppression Chamber Water Level (2T48-R622 A, B)	2
4. Suppression Chamber Water Temperature (2T47-R626, 2T47-R627)	2
5. Suppression Chamber Pressure (2T48-R608, 2T48-R609)	2
6. Drywell Pressure (2T48-R608, 2T48-R609)	2
7. Drywell Temperature (2T47-R626, 2T47-R627)	2
8. Post-LOCA Gamma Radiation (2D11-K622 A, B, C, D)	2
9. Drywell H ₂ -O ₂ Analyzer (2P33-R601 A, B)	2
10. a) Safety/Relief Valve Position Primary Indicator (2B21-N301 A-H and K-M)	(a)
b) Safety/Relief Valve Position Secondary Indicator (2B21-N004 A-H and K-M)	(a)
11. Drywell High Range Pressure (2T48-R601 A, B)	2
12. Drywell High Range Radiation (2D11-K621 A, B, 2T48-R601A, B)	2 (b)
13. Main Stack Post-Accident Effluent Monitor (D11-R631)	1 (b)(c)
14. Reactor Building Vent Plenum Post-Accident Effluent Monitor (2D11-R631)	1 (b)(c)

NOTES FOR TABLE 3.3.6.4-1

- (a) If either the primary or secondary indication is inoperable, the torus temperature will be monitored at least once per shift to observe any unexplained temperature increases which might be indicative of an open SRV. With both the primary and secondary monitoring channels of an SRV inoperable, either verify that the S/RV is closed through monitoring the backup low low set logic position indicators (2B21-N302 A-H and K-M) at least once per shift or restore sufficient inoperable channels such that no more than one SRV has both primary and secondary channels inoperable within 7 days or be in at least hot shutdown within the next 12 hours.
- (b) With the number of operable channels less than required by the minimum channels operable requirements, initiate the preplanned alternate method of monitoring the appropriate parameters within 72 hours and:
- (1) either restore the inoperable channel(s) to operable status within 7 days of the event, or
 - (2) prepare and submit a Special Report to the NRC pursuant to Specification 6.9.2 within 14 days following the event outlining the action taken, the course of the inoperability, and the plans and schedule for restoring the system to operable status.
- (c) A channel contains two detectors: one for mid-range noble gas and one for high range noble gas. Both detectors must be operable to consider the channel operable.

TABLE 4.3.6.4-1

POST-ACCIDENT MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>INSTRUMENT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>CHANNEL CALIPRATION</u>
1. Reactor Vessel Pressure	M	N.A.	Q
2. Reactor Vessel Water Level	M	N.A.	Q
3. Suppression Chamber Water Level	M	N.A.	R
4. Suppression Chamber Water Temperature	M	N.A.	R
5. Suppression Chamber Pressure	M	N.A.	R
6. Drywell Pressure	M	N.A.	Q
7. Drywell Temperature	M	N.A.	R
8. Post-LOCA Gamma Radiation	M	N.A.	R
9. Drywell H ₂ -O ₂ Analyzer	M	N.A.	Q
10. a) Safety/Relief Valve Position Primary Indication	M*	N.A.	R
b) Safety/Relief Valve Position Secondary Indication	M*	N.A.	R
11. Drywell High Range Pressure	M	N.A.	Q
12. Drywell High Range Radiation	M	N.A.	R
13. Main Stack Post-Accident Effluent Monitor	N.A.	SA	R
14. Reactor Building Vent Plenum Post-Accident Effluent Monitor	N.A.	SA	R

* See 4.4.2.1 a

ADMINISTRATIVE CONTROL

6.14 IODINE MONITORING

The licensee shall implement a program which will ensure the capability to accurately determine the airborne iodine concentration in vital areas* under accident conditions. This program shall include the following:

- 1) Training of personnel
- 2) Procedures for monitoring, and
- 3) Provisions for maintenance of sampling and analysis equipment.

6.15 POST-ACCIDENT SAMPLING AND ANALYSIS

A program shall be established, implemented and maintained to ensure the capability to obtain and analyze samples of radioactive iodines and particulates in plant gaseous effluents under accident conditions. The program shall include the following:

- 1) Training of personnel,
- 2) Procedures for sampling and analysis, and
- 3) Provisions for maintenance of sampling and analysis equipment.

* Areas requiring personnel access for establishing hot shutdown condition.

ENCLOSURE 3

NRC DOCKETS 50-321, 50-366
OPERATING LICENSES DPR-57, NPF-5
EDWIN I. HATCH NUCLEAR PLANT UNITS 1, 2
REQUEST TO AMEND TECHNICAL SPECIFICATIONS-TMI ACTION PLAN ITEMS

Pursuant to 10 CFR 50.92, Georgia Power Company has evaluated the attached proposed amendments and has determined that their adoption would not involve a significant hazard. The basis for this determination is as follows:

(a) PROPOSED CHANGE

Add to Units 1 and 2 Technical Specifications limiting conditions for operation and surveillance requirements for the following accident monitoring instruments: (1) drywell high range pressure monitors, (2) drywell high range radiation monitors, (3) Main Stack post-accident effluent monitor, and (4) Reactor Building Vent Plenum post-accident effluent monitors.

BASIS

This change constitutes an additional restriction not presently included in the Technical Specifications. This change does not affect the probability or consequences of an accident or malfunction analyzed in the FSAR. The margin of safety as defined in the basis for any Technical Specification is not affected. The effect of this change is consistent with Item (ii) of the "Examples of Amendments that are Considered Not Likely to Involve Significant Hazards Considerations" listed on page 14,870 of the April 6, 1983, issue of the Federal Register.

(b) PROPOSED CHANGE

Add to the Units 1 and 2 Technical Specifications requirements for an administrative program to ensure the capability to sample and analyze plant gaseous effluent for radioactive iodine and particulate under accident conditions.

BASIS

This change constitutes an additional restriction not presently included in the Technical Specifications. This change does not affect the probability or consequences of an accident or malfunction analyzed in the FSAR. The margin of safety as defined in the basis for any Technical Specification is not affected. The effect of this change is therefore within the acceptance criteria and the change is consistent with Item (ii) of the "Examples of Amendments that are Considered Not Likely to Involve Significant Hazards Considerations" listed on page 14,870 of the April 6, 1983, issue of the Federal Register.

(c) PROPOSED CHANGE

Change bases to reflect the above changes.

BASIS

This is a purely administrative change to the Technical Specifications. This change does not affect the probability or consequences of an accident or malfunction analyzed in the FSAR. The margin of safety as defined in the basis for any Technical Specification is not affected. The effect of this change is therefore within the acceptance criteria and the change is consistent with Item (i) of the "Examples of Amendments that are Considered Not Likely to Involve Significant Hazards Considerations" listed on page 14,870 of the April 6, 1983, issue of the Federal Register.

(d) PROPOSED CHANGE

Change the range of the drywell and suppression chamber pressure recorders from "-5 to +80 psig" to "-10 to +90 psig" in the Unit 1 Technical Specifications (Items 4 and 9 of Table 3.2-11).

BASIS

This change updates the Technical Specifications to reflect modifications to the plant. This is a purely administrative change. This change does not affect the probability or consequences of an accident or malfunction analyzed in the FSAR. The margin of safety as defined in the basis for any Technical Specification is not affected. The effect of this change is therefore within the acceptance criteria and the change is consistent with Item (i) of the "Examples of Amendments that are Considered Not Likely to Involve Significant Hazards Considerations" listed on page 14,870 of the April 6, 1983, issue of the Federal Register.

(e) PROPOSED CHANGE

Change the reference to Section 4.4.2 a in Table 4.3.6.4-1 of the Unit 2 Technical Specifications to Section 4.4.2.1 a.

BASIS

This change achieves consistency in the Technical Specifications. A past revision to Section 4.4.2 was inadvertently not reflected in the above reference. This is a purely administrative change. This change does not affect the probability or consequences of an accident or malfunction analyzed in the FSAR. The margin of safety as defined in the basis for any Technical Specification is not affected. The effect of this change is therefore within the acceptance criteria and the change is consistent with Item (i) of the "Examples of Amendments that are Considered Not Likely to Involve Significant Hazards Considerations" listed on page 14,870 of the April 6, 1983, issue of the Federal Register.

ENCLOSURE 4

NRC DOCKETS 50-321, 50-366
OPERATING LICENSES DPR-57, NPF-5
EDWIN I. HATCH NUCLEAR PLANT UNITS 1, 2
REQUEST TO AMEND TECHNICAL SPECIFICATIONS-TMI ACTION PLAN ITEMS

Pursuant to 10 CFR 170.22, Georgia Power Company has evaluated the attached proposed amendments and has determined that they are a Class III amendment for one unit and a Class I amendment for the other unit. The basis for this determination is as follows:

- (a) The proposed amendments do not required the evaluation of a new safety analysis report or a rewrite of the facility license;
- (b) The proposed amendments do not require the evaluation of several complex issues, involve ACRS review, or require an environmental impact statement;
- (c) The proposed amendments involve a single safety issue, namely the Technical Specification changes necessary to reflect the installation of additional accident monitoring instrumentation.
- (d) The proposed amendments are therefore a Class III amendment for one unit and a Class I amendment for the other unit.