



AUG 17 2011

10 CFR 50.90  
L-2011-046

U. S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, DC 20555-0001

Re: Turkey Point Units 3 and 4  
Docket Nos. 50-250 and 50-251  
License Amendment Request No. 214  
Accident Monitoring Instrumentation Technical Specification Changes  
Regarding High Range-Noble Gas Effluent Monitors-Main Steam Lines  
Accident Monitoring Instrumentation

In accordance with the provisions of 10 CFR 50.90, and 50.91(a)(1) of Title 10 of the Code of Federal Regulations (10 CFR), Florida Power and Light Company (FPL) hereby submits an application for amendment to Renewed Facility Operating License DPR-31 for Turkey Point Unit 3 and DPR-41 for Turkey Point Unit 4. The application proposes changes to Technical Specifications (TS) Limiting Condition for Operation (LCO) of TS 3.3.3.3, Tables 3.3-5, Accident Monitoring Instrumentation, High Range-Noble Gas Effluent Monitors, Main Steam Lines, Instrument 19d, and conforming changes to TS 4.3.3.3, Table 4.3-4, Accident Monitoring Instrumentation Surveillance Requirements, Instrument 19d.

The Main Steam Lines (MSL) High Range Noble Gas Effluent Monitor, RAD-6426, is used in post-accident monitoring in response to the requirements of Regulatory Guide 1.97, Revision 3. As a Category 2, Type E instrument, RAD-6426 does not meet any of the 10 CFR 50.36(c)(2)(ii) screening criteria for inclusion in the Technical Specifications Post Accident Monitoring Table. The proposed changes would relocate the technical specification and surveillance requirements for this instrument to the Updated Safety Analysis Report (UFSAR) and related procedures.

Attachment 1 provides the proposed changes and the supporting justification including the Determination of No Significant Hazards and Environmental Considerations. Attachment 2 contains TS page mark-ups showing the proposed TS changes. Attachment 3 contains the retyped TS pages.

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The Plant Nuclear Safety Committee has reviewed the proposed amendment. In accordance with 10 CFR 50.91(b)(1), copies of the proposed amendment are being forwarded to the State Designee for the State of Florida.

FPL requests approval of this application by June 2012. Implementation by FPL will be within 60 days of license amendment issuance by the NRC.

Please contact Mr. Robert J. Tomonto at 305-246-7327 if there are any questions about this license amendment application.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on August 17<sup>th</sup>, 2011.

Very truly yours,



Michael Kiley  
Vice President  
Turkey Point Nuclear Plant

Attachments: 1) Evaluation of Proposed Technical Specification Changes  
2) Marked-up Technical Specification Pages  
3) Retyped Technical Specification Pages

cc: Regional Administrator, Region II, USNRC  
Senior Resident Inspector, USNRC, Turkey Point Plant  
Mr. W. A. Passetti, Florida Department of Health

L-2011-046

Attachment 1

Florida Power and Light Company  
Turkey Point Units 3 and 4  
Renewed Facility Operating License Nos. DPR-31 and DPR-41  
Docket Nos. 50-250 and 50-251  
License Amendment Request No. 214  
Technical Specification Changes Regarding High Range-Noble Gas Effluent  
Monitors-Main Steam Lines Accident Monitoring Instrumentation

Evaluation of Proposed Changes

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2. Description of Proposed Changes
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## **1.0 Introduction**

In accordance with the provisions of 10 CFR 50.90, and 50.91(a)(1) of Title 10 of the Code of Federal Regulations (10 CFR), Florida Power and Light Company (FPL) hereby submits an application for amendment to Renewed Facility Operating License DPR-31 for Turkey Point Unit 3 and DPR-41 for Turkey Point Unit 4. The application proposes changes to Technical Specifications (TS) Limiting Condition for Operation (LCO) and Surveillance Requirements (SR) of TS 3.3.3.3, Tables 3.3-5, Accident Monitoring Instrumentation, Instrument 19d, High Range-Noble Gas Effluent Monitors, Main Steam Lines, and conforming changes to TS 4.3.3.3, Table 4.3-4, Accident Monitoring Instrumentation Surveillance Requirements, Instrument 19d.

## **2.0 Description of Proposed Changes**

The proposed TS changes for Turkey Point Units 3 and 4 are as follows:

- TS 3.3.3.3, Table 3.3-5, Instrument 19d would be removed from TS and relocated to Turkey Point Updated Final Safety Analysis Report (UFSAR) and related procedures. Changes to the relocated requirements will be controlled by the provisions of 10 CFR 50.59 to determine if prior NRC approval is required.
- TS, 4.3.3.3, Table 4.3-4, Instrument 19d would be removed from TS and relocated to UFSAR and related procedures. Changes to the relocated requirements will be controlled by the provisions of 10 CFR 50.59 to determine if prior NRC approval is required.

Attachment 2 contains TS page mark-ups showing the proposed TS changes. Attachment 3 contains the retyped TS pages.

## **3.0 Background**

The Main Steam High-Range Noble Gas Effluent Monitor (RAD-6426) was installed at Turkey Point in 1981 as a result of actions required following the accident at TMI. RAD-6426 is used in post-accident monitoring in response to the requirements of Regulatory Guide 1.97, Revision 3. Monitor RAD-6426 is identified as Type E (Effluent Release Monitoring), Category 2 Variable (instrumentation designated for indicating system operating status).

In early 2010, RAD-6426 began to exhibit increased failures. As a result of the failures, and because of the obsolescence of the equipment, the replacement of the monitor became a station priority. In the process of researching the design basis for a replacement monitor, no calculation or documentation could be located that correlated indication at the monitor to main steam line noble gas concentration, as required by commitments to the NRC. An evaluation of this

condition determined that the fraction of noble gases transported to the detector is negligible; thus, the existing main steam line monitor sample system is not reliable and could not be prudently used in the design of the replacement monitor. RAD-6426 was declared inoperable and in compliance with the Action Statement for Technical Specification 3.3.3.3, preplanned alternative methods of monitoring were initiated.

License Event Report (LER) 2010-004-000 and its Supplement 1 reported the details of the inoperable monitor pursuant to 10 CFR 50.73. The inability of this monitor to detect significant releases of noble gas activity from the Main Steam Safety Valves (MSSVs) and the Atmospheric Dump Valves (ADVs) as required for this Type E, Category 2 Variable resulted in a failure to provide steam line radiation monitoring and a failure to meet previously committed regulatory requirements.

The existing RAD-6426 monitor uses a single detector to monitor a condensed sample, combined from each steam line. The replacement monitor design will place a detector adjacent to each of the main steam lines, similar to the design used by other Pressurized Water Reactors. Technical Specifications describe RAD-6426 channel requirements as one channel, rather than one channel per steam line. Rather than revising the channel description to one channel per steam line, it is proposed that the technical and surveillance requirements for RAD-6426 be relocated from the Technical Specifications to the Turkey Point UFSAR and related procedures.

#### **4.0 Regulatory and Technical Analysis**

The Turkey Point TS 3.3.3.3, Table 3.3-5, provides requirements for Post Accident Monitoring Instrumentation channels. Each individual post accident monitoring parameter has a specific purpose; however, the general purpose for all accident monitoring instrumentation is to ensure sufficient information is available following an accident to allow an operator to verify the response of automatic safety systems and to take preplanned manual actions to accomplish a safe shutdown of the plant.

The NRC position on application of the screening criteria to post-accident monitoring instrumentation is documented in a letter dated May 9, 1988 from T.E. Murley (NRC) to W.S. Wilgus (B&W Owners Group). The screening criteria were later incorporated into 10 CFR 50.36(c)(2)(ii). The NRC position taken was that the post-accident monitoring instrumentation table list should contain, on a plant specific basis, all Regulatory Guide 1.97 Type A and all Category 1 plant instruments specified in the plant's Safety Evaluation (SE) on Regulatory Guide 1.97 plant instruments.

The Nuclear Regulatory Commission (NRC) published a final rule revision to 10 CFR 50.36 which codified criteria for determining the required content of Technical Specifications, stating that "Licensees covered by the rule may voluntarily use the criteria [specified in the rule change] to propose the relocation of existing technical specifications that do not meet any of the criteria from the facility license to licensee-controlled documents." The screening criteria to determine if a condition must be included in the Technical Specifications as a Limiting Condition for Operation are provided in 10 CFR 50.36(c)(2)(ii).

As revised, the 10 CFR 50.36 (c)(2)(ii) criteria require:

"A technical specification limiting condition for operation of a nuclear reactor must be established for each item meeting one or more of the following criteria:

(A) Criterion 1. Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary.

(B) Criterion 2. A process variable, design feature, or operating restriction that is an initial condition of a design basis accident or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.

(C) Criterion 3. A structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a design basis accident or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.

(D) Criterion 4. A structure, system, or component which operating experience or probabilistic risk assessment has shown to be significant to public health and safety."

Additionally, the NRC approved Standard Technical Specifications (STS) for Westinghouse Plants, NUREG-1431, Rev. 3, Table 3.3.3-1 [Post Accident Monitoring (PAM) Instrumentation], contains the following reviewer's note:

"Table 3.3.3-1 shall be amended for each unit as necessary to list:

1. All Regulatory Guide 1.97, Type A instruments and
2. All Regulatory Guide 1.97, Category 1, non-Type A instruments in accordance with the unit's Regulatory guide 1.97, Safety Evaluation report."

According to the NUREG-1431, Rev. 3, Section 3.3.3 Bases:

“The primary purpose of the PAM instrumentation is to display unit variables that provide information required by control room operators during accident situations. This information provides the necessary support for the operators to take manual actions for which no automatic control is provided and that are required for safety systems to accomplish their safety functions for Design Basis Accidents... The instruments required to be OPERABLE by this LCO include two classes of parameters identified during unit specific implementation of Regulatory Guide 1.97 as a Type A and Category 1 variables.”

A review of the Updated Final Safety Analysis Report (UFSAR) and the NRC Regulatory Guide 1.97 SE for Turkey Point indicates that this position can be applied to the MSLs High Range Noble Gas Effluent Monitor, RAD-6426.

The function of RAD-6426 is to “detect and measure concentrations of noble gas fission products in plant gaseous effluents during and following an accident and to provide the plant operator and emergency planning agencies with information on plant releases of noble gases.” RAD-6426 is not included in the current Probabilistic Risk Assessment (PRA), and is not a Maintenance Rule risk-significant component. This monitor is identified, in the unit-specific implementation of Regulatory Guide 1.97, Revision 3, as a Type E (Effluent Release Monitoring), Category 2 Variable (instrumentation designated for indicating system operating status).

The scope of this submittal is focused on relocating the technical and surveillance requirements of RAD-6426 to UFSAR and related procedures. The NRC position can be applied to additional instruments in the Turkey Point Accident Monitoring Instrumentation TS LCO 3.3.3.3, Table 3.3-5. FPL will prepare and submit in a separate submittal any additional TS changes resulting from the application of this position.

**10 CFR 50.36 (c) (2) (ii) Criteria Evaluation:**

(A) RAD-6426 is not used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary. This instrument does not satisfy Criterion 1.

(B) RAD-6426 is not a process variable, design feature, or operating restriction that is an initial condition of a design basis accident or transient analysis that either assumes the failure of, or presents a challenge to, the integrity of a fission product barrier. This instrument does not satisfy Criterion 2.

(C) RAD-6426 is not a structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a design basis accident

or transient that either assumes the failure of, or presents a challenge to, the integrity of a fission product barrier. This instrument does not satisfy Criterion 3.

(D) RAD-6426 is not a structure, system, or component which operating experience or probabilistic risk assessment has shown to be significant to public health and safety. This instrument does not satisfy Criterion 4.

Since the 10 CFR 50.36 (c)(2)(ii) criteria have not been met for inclusion in the Technical Specifications as a LCO, and because removal of the monitor from the Accident Monitoring Instrumentation TS table is consistent with NUREG-1431, Westinghouse Standard Technical Specifications, FPL proposes to relocate the RAD-6426 technical specifications and surveillance requirements contained in TS 3.3.3.3, Table 3.3-5, and 4.3.3.3, Table 4.3-4 for Instrument 19d to the UFSAR and related procedures.

The operability of the monitor will continue to be determined by performance of procedures for channel checks, functional testing and channel calibration on a frequency equivalent to the current specification and surveillance requirements, as applicable to the new design.

Following NRC approval of this proposed license amendment, changes to the relocated requirements will be controlled by the provisions of 10 CFR 50.59 to determine if prior NRC approval is required.

## **5.0 Safety Analyses Impact**

Operability of RAD-6426 is not credited in the prevention or mitigation of any design basis accident. The function of the monitor is to measure and display high-range noble gas activity in the main steam lines, in order to quantify releases from the MSSVs and ADVs during and following a design basis accident.

Since RAD-6426 does not meet any of the 10 CFR 50.36 (c)(2)(ii) criteria for inclusion in the Technical Specifications as a LCO, and because removal of the monitor from the Technical Specification Accident Monitoring Table is consistent with NUREG-1431, the technical specification and surveillance requirements of the monitor can be relocated from Technical Specifications to the UFSAR and related procedures, with no adverse impact on safety.

Based on the above, it is determined that RAD-6426 can be relocated from Technical Specifications to the UFSAR and related procedures, with no adverse impact to nuclear or public safety, to plant safety, or to the environment.



## **6.0 No Significant Hazards Consideration Determination**

The Nuclear Regulatory Commission has provided standards in 10 CFR 50.92 for determining whether a request for amendment involves a no significant hazards consideration. The regulation states that no significant hazards considerations are involved if the operation of the facility in accordance with the proposed amendment would not (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in the margin of safety.

FPL has evaluated the proposed Technical Specification (TS) changes to determine if a significant hazard is present. The No Significant Hazards Consideration evaluation required by 10 CFR 50.92 is provided below.

### **1. The proposed amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated.**

The Main Steam Line High-Range Noble Gas Effluent monitor is not an event initiator, nor is it credited in the mitigation of any event. Thus, the initiating conditions and assumptions for accidents described in the Updated Final Safety Analysis Report (UFSAR) remain as analyzed. The function of the Main Steam Line High-Range Noble Gas Effluent monitor is to detect and quantify noble gas volumetric activity released from the Main Steam Safety Valves and/or the Atmospheric Dump Valves during and following an accident. The Main Steam Line monitors are used in the Emergency Plan to determine event action levels. The use of the monitors in the Off-Normal Operating Procedures, in the Emergency Operating Procedures, and Emergency Plan Implementing Procedures (to determine if a release is in progress) will not change. Relocation of the technical specification and surveillance requirements to the UFSAR and related procedures does not impact the accident analyses in any manner.

Based on the above, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

### **2. The proposed amendment does not create the possibility of a new or different kind of accident from any previously evaluated.**

The function of the Main Steam Line High-Range Noble Gas Effluent monitor is to detect and quantify noble gas volumetric activity released from the Main Steam Safety Valves and/or the Atmospheric Dump Valves during and following an accident. This function will not change as a result of the proposed TS changes. Procedural use of the monitor function, surveillance or calibration frequency of the monitor to determine operability will not change as a result of

the proposed relocation of the technical specification and surveillance requirements to the UFSAR and related procedures.

Based on the above, the proposed change does not create the possibility of a new or different kind of accident from any previously evaluated.

**3. The proposed amendment does not involve a significant reduction in a margin of safety.**

The function of the Main Steam Line High-Range Noble Gas Effluent monitor is to detect and quantify noble gas volumetric activity released from the Main Steam Safety Valves and/or the Atmospheric Dump Valves during and following an accident. The relocation of the technical specification and surveillance requirements of this monitor to the UFSAR and related procedures does not affect the manner in which any safety limits, limiting safety system settings, or limiting conditions for operation are determined. The safety analyses are not affected by the proposed TS changes. The proposed changes do not result in plant operation outside of design bases, because the function and surveillance of the monitor for operability remain unchanged.

Based on the above, operation in accordance with the proposed amendment would not involve a significant reduction in a margin of safety.

In summary, FPL concludes that the proposed amendment does not involve a significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and, accordingly, a finding of "no significant hazards consideration" is justified.

**7.0 Environmental Consideration Determination**

10 CFR 51.22(c)(9) provides criteria for identification of licensing and regulatory actions eligible for categorical exclusion from performing an environmental assessment. A proposed amendment to an operating license for a facility requires no environmental assessment if operation of the facility in accordance with the proposed amendment would not:

- (i) involve a significant hazards consideration,
- (ii) result in a significant change in the types or significant increase in the amounts of any effluents that may be released offsite, and
- (iii) result in a significant increase in individual or cumulative occupational radiation exposure.

The relocation of the Technical Specification and Surveillance Requirements of the Main Steam Line High-Range Noble Gas Effluent monitor to the UFSAR and related procedures, involves no significant hazards consideration.

- There is no change in the types, or increase in the amounts of effluents that may be released offsite. Releases from the Main Steam Safety Valves and/or the Atmospheric Dump Valves are a result of valve operation in response to plant conditions. This monitor is a passive device that monitors releases, but has no impact on controlling the release.
- There is no significant increase in individual or cumulative occupational radiation exposure. Relocation of the technical specification and surveillance requirements to the UFSAR and related procedures does not change surveillance or calibration frequencies. There is no impact on occupational radiation exposure.

Accordingly, the proposed TS changes meet the categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental assessment or environmental impact statement is required.

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Attachment 2

Florida Power and Light Company  
Turkey Point Units 3 and 4  
Renewed Facility Operating License Nos. DPR-31 and DPR-41  
Docket Nos. 50-250 and 50-251  
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Technical Specification Changes Regarding High Range-Noble Gas Effluent  
Monitors-Main Steam Lines Accident Monitoring Instrumentation

Marked-up Technical Specification Pages

TURKEY POINT - UNITS 3 & 4

3/4 3-43

AMENDMENT NOS.

AND

TABLE 3.3-5 (Continued)

ACCIDENT MONITORING INSTRUMENTATION

<u>INSTRUMENT</u>	<u>TOTAL NO. OF CHANNELS</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>APPLI-CABLE MODES</u>	<u>ACTIONS</u>
14. In Core Thermocouples (Core Exit Thermocouples)	4/core quadrant	2/core quadrant	1, 2, 3	31, 32
15. Containment High Range Area Radiation	2	1	1, 2, 3	34
16. Reactor Vessel Level Monitoring System	2(1)	1(1)	1, 2, 3	37, 38
17. Neutron Flux, Backup NIS (Wide Range)	2	1	1, 2, 3	31, 32
18. DELETED				
19. High Range-Noble Gas Effluent Monitors				
a. Plant Vent Exhaust	1	1	ALL	34
b. Unit 3-Spent Fuel Pit Exhaust	1	1	ALL	34
c. Condenser Air Ejectors	1	1	1, 2, 3	34
d. Main Steam Lines	1	1	1, 2, 3	34
20. RWST Water Level	2	1	1, 2, 3	31, 32
21. Steam Generator Water Level (Narrow Range)	2/stm. Gen.	1/stm. Gen.	1, 2, 3	31, 32
22. Containment Isolation Valve Position Indication*	1/valve	1/valve	1, 2, 3	39

DELETED

TABLE NOTATIONS

1. A channel is eight sensors in a probe. A channel is OPERABLE if a minimum of four sensors are OPERABLE.
  2. Inputs to this instrument are from instrument items 3, 4, 5 and 14 of this Table.
- \* Applicable for containment isolation valve position indication designated as post-accident monitoring instrumentation (containment isolation valves which receive containment isolation Phase A, Phase B, or containment ventilation isolation signals).

TABLE 4.3-4

ACCIDENT MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>INSTRUMENT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>
1. Containment Pressure (Wide Range)	M	R
2. Containment Pressure (Narrow Range)	M	R
3. Reactor Coolant Outlet Temperature - T <sub>HOT</sub> (Wide Range)	M	R
4. Reactor Coolant Inlet Temperature - T <sub>COLD</sub> (Wide Range)	M	R
5. Reactor Coolant Pressure - Wide Range	M	R
6. Pressurizer Water Level	M	R
7. Auxiliary Feedwater Flow Rate	M	R
8. Reactor Coolant System Subcooling Margin Monitor	M	R
9. PORV Position Indicator (Primary Detector)	M	R
10. PORV Block Valve Position Indicator	M	R
11. Safety Valve Position Indicator (Primary Detector)	M	R
12. Containment Water Level (Narrow Range)	M	R
13. Containment Water Level (Wide Range)	M	R
14. In Core Thermocouples (Core Exit Thermocouples)	M	R
15. Containment - High Range Area Radiation Monitor	M	R*
16. Reactor Vessel Level Monitoring System	M	R
17. Neutron Flux, Backup NIS (Wide Range)	M	R
18. DELETED		
19. High Range - Noble Gas Effluent Monitors		
a. Plant Vent Exhaust	M	R
b. Unit 3 - Spent Fuel Pit Exhaust	M	R
c. Condenser Air Ejectors	M	R
d. Main Steam Lines	M	R
20. RWST Water Level	M	R
21. Steam Generator Water Level (Narrow Range)	M	R
22. Containment Isolation Valve Position Indication	M	R

\*Acceptable criteria for calibration are provided in Table II.F.1-3 of NUREG-0737.

DELETED

L-2011-046, Attachment 2, Marked Up Technical Specification Pages

L-2011-046

Attachment 3

Florida Power and Light Company  
Turkey Point Units 3 and 4  
Renewed Facility Operating License Nos. DPR-31 and DPR-41  
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Steam Lines Accident Monitoring Instrumentation

Retyped Technical Specification Pages

TURKEY POINT – UNITS 3 & 4

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AMENDMENT NOS. AND

TABLE 3.3-5 (Continued)

ACCIDENT MONITORING INSTRUMENTATION

<u>INSTRUMENT</u>	<u>TOTAL NO. OF CHANNELS</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>APPLI-CABLE MODES</u>	<u>ACTIONS</u>
14. In Core Thermocouples (Core Exit Thermocouples)	4/core quadrant	2/core quadrant	1, 2, 3	31, 32
15. Containment High Range Area Radiation	2	1	1, 2, 3	34
16. Reactor Vessel Level Monitoring System	2(1)	1(1)	1, 2, 3	37, 38
17. Neutron Flux, Backup NIS (Wide Range)	2	1	1, 2, 3	31, 32
18. DELETED				
19. High Range-Noble Gas Effluent Monitors				
a. Plant Vent Exhaust	1	1	ALL	34
b. Unit 3-Spent Fuel Pit Exhaust	1	1	ALL	34
c. Condenser Air Ejectors	1	1	1, 2, 3	34
20. RWST Water Level	2	1	1, 2, 3	31, 32
21. Steam Generator Water Level (Narrow Range)	2/stm. Gen.	1/stm. Gen.	1, 2, 3	31, 32
22. Containment Isolation Valve Position Indication*	1/valve	1/valve	1, 2, 3	39

TABLE NOTATIONS

1. A channel is eight sensors in a probe. A channel is OPERABLE if a minimum of four sensors are OPERABLE.
  2. Inputs to this instrument are from instrument items 3, 4, 5 and 14 of this Table.
- \* Applicable for containment isolation valve position indication designated as post-accident monitoring instrumentation (containment isolation valves which receive containment isolation Phase A, Phase B, or containment ventilation isolation signals).



TABLE 4.3-4

ACCIDENT MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>INSTRUMENT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>
1. Containment Pressure (Wide Range)	M	R
2. Containment Pressure (Narrow Range)	M	R
3. Reactor Coolant Outlet Temperature - T <sub>HOT</sub> (Wide Range)	M	R
4. Reactor Coolant Inlet Temperature - T <sub>COLD</sub> (Wide Range)	M	R
5. Reactor Coolant Pressure - Wide Range	M	R
6. Pressurizer Water Level	M	R
7. Auxiliary Feedwater Flow Rate	M	R
8. Reactor Coolant System Subcooling Margin Monitor	M	R
9. PORV Position Indicator (Primary Detector)	M	R
10. PORV Block Valve Position Indicator	M	R
11. Safety Valve Position Indicator (Primary Detector)	M	R
12. Containment Water Level (Narrow Range)	M	R
13. Containment Water Level (Wide Range)	M	R
14. In Core Thermocouples (Core Exit Thermocouples)	M	R
15. Containment - High Range Area Radiation Monitor	M	R*
16. Reactor Vessel Level Monitoring System	M	R
17. Neutron Flux Backup NIS (Wide Range)	M	R
18. DELETED		
19. High Range - Noble Gas Effluent Monitors		
a. Plant Vent Exhaust	M	R
b. Unit 3 - Spent Fuel Pit Exhaust	M	R
c. Condenser Air Ejectors	M	R
20. RWST Water Level	M	R
21. Steam Generator Water Level (Narrow Range)	M	R
22. Containment Isolation Valve Position Indication	M	R

\*Acceptable criteria for calibration are provided in Table II.F.1-3 of NUREG-0737.