UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

Application of SOUTHERN CALIFORNIA EDISON COMPANY, ET AL. for a Class 103 License to Acquire, Possess, and Use a Utilization Facility as Part of Unit No. 2 of the San Onofre Nuclear Generating Station	)	Docket No. 50-361 Amendment Application No. 110

SOUTHERN CALIFORNIA EDISON COMPANY, ET AL. pursuant to 10 CFR 50.90, hereby submit Amendment Application No. 110.

This amendment application consists of Proposed Technical Specification Change No. NPF-10-357 to Facility Operating License No. NPF-10. Proposed Technical Specification Change No. NPF-10-357 is a request to delete references to the Movable In-Core Detector System (MICDS) in Technical Specifications 3.3.3.2, "In-Core Detectors, Limiting Condition for Operation," and 3/4.8.4, "Electrical Equipment Protection Devices" (Table 3.8-1, "Containment Penetration Conductor Overcurrent Protective Devices").

Subscribed on this 15th day of August, 1991.

Respectfully submitted,

SOUTHERN CALIFORNIA EDISON COMPANY

By: H E Morgan
H. E. Morgan
Vice President and Site Manager

State of California
County of San Diego

On August 15, 1991 before me, Linda L. Rulon, personally appeared H. E. Morgan, personally known to me to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Signature Linda L. Rulon

OFFICIAL SEAL
LINDA L. RULON
Notary Public-California
ORANGE COUNTY
My Comm. Exp. Mar. 4, 1992

James A. Beoletto
Attorney for Southern
California Edison Company

By: James A. Beoletto

UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

Application of SOUTHERN CALIFORNIA EDISON COMPANY, ET AL. for a Class 103 License to Acquire, Possess, and Use a Utilization Facility as Part of Unit No. 3 of the San Onofre Nuclear Generating Station	))))))	Docket No. 50-362 Amendment Application No. 94

SOUTHERN CALIFORNIA EDISON COMPANY, ET AL. pursuant to 10 CFR 50.90, hereby submit Amendment Application No. 110.

This amendment application consists of Proposed Technical Specification Change No. NPF-15-357 to Facility Operating License No. NPF-15. Proposed Technical Specification Change No. NPF-15-357 is a request to delete references to the Movable In-Core Detector System (MICDS) in Technical Specifications 3.3.3.2, "Incore Detectors, Limiting Condition for Operation," and 3/4.8.4," Electrical Equipment Protection Devices" (Table 3.8-1, "Containment Penetration Conductor Overcurrent Protective Devices").

Subscribed on this 15th day of August, 1991.

Respectfully submitted,

SOUTHERN CALIFORNIA EDISON COMPANY

By: H E Morgan
H. E. Morgan
Vice President and Site Manager

State of California
County of San Diego

On August 15, 1991 before me, Linda L. Rulon, personally appeared H. E. Morgan, personally known to me to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Signature Linda L. Rulon

OFFICIAL SEAL
LINDA L. RULON
Notary Public-California
ORANGE COUNTY
My Comm. Exp. Mar. 4, 1992

James A. Beoletto
Attorney for Southern
California Edison Company

By: James A. Beoletto

Enclosure 1

DESCRIPTION AND SAFETY ANALYSIS
PROPOSED CHANGE NPF-10/15-357

This is a request to revise Technical Specifications (TS) 3.3.3.2, "In-Core Detectors, Limiting Condition for Operation," and 3/4.8.4, "Electrical Equipment Protection Devices."

Existing Specifications:

Unit 2: See Attachment "A"
Unit 3: See Attachment "B"

Proposed Specifications:

Unit 2: See Attachment "C"
Unit 3: See Attachment "D"

DESCRIPTION

PCN - 357 would delete reference to the Movable In-Core Detector System (MICDS) from TS 3.3.3.2, "In-Core Detectors, Limiting Condition for Operation" and TS 3/4.8.4, "Electrical Equipment Protection Devices" (Table 3.8-1, "Containment Penetration Conductor Overcurrent Protective Devices"). Deletion of the reference to the MICDS from the definition of OPERABLE in-core detectors in TS 3.3.3.2 requires that any mapping of neutron flux in the core will be performed by the Fixed In-Core Detection System (FICDS). The FICDS will remain intact and capable of performing the required mapping in accordance with TS 3.3.3.2

Limiting Condition for Operation of In-Core Detectors

The proposed change to TS 3.3.3.2 narrows the definition of OPERABLE in-core detectors by excluding the MICDS as an alternate means to map the neutron flux in the reactor core.

Containment Penetration Conductor Overcurrent Protective Devices

The MICDS listing will be deleted from TS 3/4.8.4 (Table 3.8-1).

Bases

PCN - 357 will not revise the Bases for TS 3.3.3.2 or TS 3/4.8.4.

Basis for and Acceptability of Request

The proposed change will make the Technical Specifications consistent with the removal of the MICDS equipment. Following a pressure boundary leak through the MICDS guide tubes, two Temporary Facility Modifications (TFMs) for SONGS Units 2 and 3 were used to remove the MICDS guide tubes and install pressure caps and room temperature vulcanizing (RTV) plugs on the In-Core Instrumentation (ICI) calibration tubes. The TFMs effectively eliminated 56 potential Reactor Coolant System (RCS) coolant leakage paths by capping the ICI calibration tubes. The modifications did not reduce protection of the containment penetrations or the integrity of the RCS. The benefit of sealing RCS coolant leak paths clearly outweighs any benefit of leaving the MICDS installed. Reactor vessel integrity is enhanced by the elimination of potential coolant leakage paths.

A design change will make permanent the modifications made by the TFMs and will permanently remove the remaining MICDS hardware. Removal of the MICDS reduces man-rem exposure and critical path time involved in maintenance around the reactor head lift rig area during each refueling outage. The reduction of components in the reactor head lift area will provide for a safer working environment. As determined in the Safety Analysis below, there will not be any reduction in a margin of safety.

BACKGROUND

The MICDS was designed to provide a cross calibration of the fixed in-core detectors. The movable drive system consists of two drive machines, two rotary transfer assemblies, two drive cables with detectors, and the interconnecting guide tubes. Each drive machine has the capability to access one-half (28) of the ICI detectors. The movable flux detectors were designed to be inserted into any of the 56 ICI calibration tubes.

As reflected in the attached Figure 1, MICDS pathways consist of 2 upper guide tube assemblies that extend from the drive machines to the rotary transfer assemblies; 56 guide tubes that extend from the rotary transfer assemblies to the lower guide tube assemblies; and 56 lower guide tube assemblies that extend from the guide tubes to the ICI calibration tubes. As reflected in the attached Figure 2, the ICI calibration tubes and the fixed in-core detectors are components of the in-core detector assembly. Each calibration tube mates to the end of a lower guide tube assembly with a quick-disconnect fitting.

The MICDS was designed to accept RCS fluid leakage from the In-Core Monitoring System. A failure of this leak-off system caused major contamination to the reactor head at Waterford 3, which prompted the licensee to submit a technical specification amendment and obtain approval from the NRC to remove the MICDS from the plant.

Similar failures have occurred at both San Onofre Unit 2 and Unit 3, which necessitated initiation of two TFMs that implemented 1) the removal of some of the associated tubing and 2) the installation of a pressure cap and an RTV plug on each ICI calibration tube.

1) The TFM for Unit 2 has removed both the guide tubes and the lower guide tube assemblies. The TFM for Unit 3 has removed only the lower guide tube assemblies. The remaining Unit 3 guide tubes will be removed during the next Unit 3 refueling outage.

2) The TFMs installed a vendor supplied pressure cap and a high temperature RTV plug on each of the ICI calibration tubes. The installation of the pressure caps eliminated potential RCS coolant leakage paths by capping the ICI calibration tubes. The vendor supplied pressure caps are designed to seal the calibration tube against system pressure if the pressure boundary of the fixed in-core detector is internally breached. The pressure caps are normally placed on each calibration tube during shipping and then removed when the fixed in-core detector is installed. The TFMs re-installed the pressure cap onto each ICI calibration tube.

   The TFMs also provided for insertion of an RTV plug into the ICI calibration tube. The RTV plug provides additional protection to preclude leakage. In the event that a ICI calibration tube develops a leak, the RTV plug will be pressed against the pressure cap to enhance the sealing function.

   In order to permanently alleviate potential RCS coolant leakage paths, the fixed in-core detectors with pressure caps will be replaced with new, fixed in-core detectors with calibration tubes that are seal-welded internally within the instrument heads. The schedule for replacing the fixed in-core detectors is subject to detector depletion characteristics. In the interim, during each refueling outage the pressure caps and RTV plugs will be inspected for leakage, and, if necessary, any leakage will be re-plugged and the pressure cap "o" ring will be replaced.

The FICDS has been used to satisfy the OPERABILITY requirements of TS 3.3.3.2. Since the MICDS has never been used during plant operation and will not be used in the future, it is prudent to remove the equipment associated with the MICDS.

DISCUSSION

Limiting Condition for Operation of the In-Core Detection System

PCN - 357 would delete reference to the Movable In-Core Detector System (MICDS) from TS 3.3.3.2, "In-Core Detectors, Limiting Condition for Operation." Deletion of the reference to the MICDS from the definition of OPERABLE in-core detectors in TS 3.3.3.2 requires that any mapping of neutron flux in the core will be performed by the Fixed In-Core Detection System (FICDS). The FICDS will remain intact and capable of performing the required mapping in accordance with TS 3.3.3.2.

The proposed change to TS 3.3.3.2 narrows the definition of OPERABLE in-core detectors by excluding the MICDS as an alternate means to map the neutron flux in the reactor core. PCN - 357 will not revise the Bases for TS 3.3.3.2.

This change is being requested to support a plant design change to remove the equipment associated with the MICDS. This design change will make permanent the temporary modifications which partially removed some of the associated tubing and installed pressure caps on the ICI calibration tubes. Depending upon detector depletion characteristics, this design change will remove the fixed in-core detectors with pressure caps and replace them with new, fixed in-core detectors with calibration tubes that are seal-welded internally. This design change will also remove the remaining MICDS hardware that includes the two drive machines, the two rotary transfer assemblies, the two drive cables with detectors, the upper guide tube assemblies, and the remaining guide tubes for Unit 3.

The MICDS is included in Technical Specification 3.3.3.2 only as an alternate method of in-core neutron detection. The MICDS is **not** required for the in-core detection system to be OPERABLE. The Limiting Condition for Operation (LCO) has two conditions which must be met to establish in-core detection system OPERABILITY. These two conditions do not distinguish whether the FICDS or the MICDS is to be utilized. The FICDS has been exclusively utilized. The protection provided by the FICDS of the integrity of the RCS is not diminished by removing the MICDS. In addition, since the wording of TS 3.3.3.2 uses the disjunctive "or," the OPERABILITY requirement is satisfied by the FICDS.

The benefit of sealing an RCS coolant leak path clearly outweighs any benefit of leaving the MICDS installed. Reactor vessel integrity is enhanced by the elimination of potential coolant leakage paths.

Removal of the MICDS reduces man-rem exposure and critical path time involved in maintenance around the reactor head area during each refueling outage. The reduction of components in the reactor head lift area will provide for a safer working environment. As determined in the Safety Analysis below, there will not be any reduction in a margin of safety.

Containment Penetration Conductor Overcurrent Protective Devices

PCN - 357 would delete the MICDS listing from TS 3/4.8.4, "Electrical Equipment Protection Devices" (Table 3.8-1, "Containment Penetration Conductor Overcurrent Protective Devices"). PCN - 357 will not revise the Bases for TS 3/4.8.4.

Over-current protection to the containment cable penetration remains assured. Outside containment the appropriate MICDS cables will be disconnected from the power source, tagged, and abandoned in place. The cables will not be disturbed at the containment penetration. Inside containment the 120 VAC power supply cables to the MICDS drive machine will be disconnected, tagged, coiled at their respective junction boxes and abandoned. All associated MICDS wiring will be disconnected and removed from the reactor head region. Since the MICDS power sources will be disconnected, overcurrent incidents will not occur.

The modifications will not reduce protection of the containment penetrations. As determined in the Safety Analysis below, there will not be any reduction in a margin of safety.

SAFETY ANALYSIS

The proposed change described above shall be deemed to involve a significant hazards consideration if there is a positive finding in any one of the following areas:

1. Will operation of the facility in accordance with this proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?

   Response: No

   OPERABILITY of the movable in-core detectors is not required for any accidents previously evaluated. Removal of the MICDS will not impact any current accident analyses. The addition of pressure caps and the RTV plugs decreased the probability of a loss of coolant inventory because each cap is a passive mechanical device designed to withstand normal operating pressures and temperatures. The removal of hardware or the addition of pressure caps and the RTV plugs will not change any of the current accident analysis. The current accident analyses assume a 2" line break inside containment. In the unlikely event that the ICI calibration tube is breached and the pressure cap fails, this accident scenario is bounded by the analysis. In the event of a common mode failure where all 56 calibration tubes fail, the 2" line break is still bounding. The 56 calibration tubes have a total flow area of .887 square inches verses the 3.14 square inches for the 2" pipe. The modifications associated with the proposed change will not reduce protection of the containment penetrations or the long-term integrity of the RCS. All assumptions and results for previously evaluated accidents remain unchanged by the proposed amendment. Therefore, deletion of the MICDS will not involve a significant increase in the probability or consequences of any accident previously evaluated.

2. Will operation of the facility in accordance with this proposed change create the possibility of a new or different kind of accident from any accident previously evaluated?

   Response: No

   OPERABILITY of the MICDS is not required for any accidents previously evaluated. Removal of the MICDS will not change any current accident analyses. The pressure caps and RTV plugs are a passive restraint and act as another fission product barrier. There are no new accident scenarios associated with this modification. Any accident associated with this modification is bounded by current accident analyses. Therefore, deleting the

MICDS will not create the possibility of a new or different kind of accident.

3. Will operation of the facility in accordance with this proposed change involve a significant reduction in a margin of safety?

Response: No

The proposed change narrows the definition of OPERABLE in-core detectors by excluding the MICDS as an alternate means to map the neutron flux in the core. Since the MICDS has been unavailable, the accurate representation of the spatial neutron flux distribution in the reactor core is best provided by the fixed in-core detectors. Except for start-up testing, the fixed detectors have always been used and have always been reliable. Thus, OPERABILITY remains unchanged by the proposed amendment.

The In-Core Detectors Limiting Condition for Operation has two conditions which must be met to establish in-core detection system OPERABILITY. These two conditions do not distinguish whether the FICDS or the MICDS is to be utilized. The FICDS satisfies these conditions without the MICDS being available. The proposed change does not affect any of the assumptions or results of the safety analyses, does not diminish the protection provided by the LCO, and does not change the Bases. Therefore, operations of the facility in accordance with this proposed change will not involve a significant reduction in a margin of safety.

Safety and Significant Hazards Determination

Based on the above Safety analysis, it is concluded that: 1) the proposed change does not constitute a significant hazards consideration as defined by 10 CFR 50.92; 2) there is reasonable assurance that the health and safety of the public will not be endangered by the proposed change; and 3) this action will not result in a condition which significantly alters the impact of the station on the environment as described in the NRC Final Environmental Statement.

ATTACHMENT "A"

EXISTING SPECIFICATIONS

UNIT 2

INSTRUMENTATION

INCORE DETECTORS

LIMITING CONDITION FOR OPERATION

3.3.3.2 The incore detection system shall be OPERABLE with:

a. At least 75% of all incore detector locations, and

b. A minimum of two quadrant symmetric incore detector locations per core quadrant.

An OPERABLE incore detector location shall consist of a fuel assembly containing a fixed detector string with a minimum of four OPERABLE rhodium detectors or an OPERABLE movable incore detector capable of mapping the location.

APPLICABILITY: When the incore detection system is used for monitoring:

a. AZIMUTHAL POWER TILT,

b. Radial Peaking Factors,

c. Local Power Density,

d. DNB Margin.

ACTION:

With the incore detection system inoperable, do not use the system for the above applicable monitoring or calibration functions. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.3.3.2 The incore detection system shall be demonstrated OPERABLE:

a. By performance of a CHANNEL CHECK within 24 hours prior to its use if 7 or more days have elasped since the previous check and at least once per 7 days thereafter when required for monitoring the AZIMUTHAL POWER TILT, radial peaking factors, local power density or DNB margin:

b. At least once per 18 months by performance of a CHANNEL CALIBRATION operation which exempts the neutron detectors but includes all electronic components. The neutron detectors shall be calibrated prior to installation in the reactor core.

TABLE 3.8-1

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICES

Primary Device Number	Backup Device Number	Service Description
2BA04 (2BA04-B)	2BLP0802	CEDM Cooling Supply Fan E-403B (Enclosure Heater)
2BA04 (2BA04-C)	2BLP0814	Standby Containment Normal Cooling Fan E-393 (Enclosure Heater)
2BA04 (2BA04-D)	2BLP0826	Containmnt Normal Cooling Fan E-394 (Enclosure Heater)
2BA04 (2BA04-E)	2BLP0828	Containment Normal Cooling Fan E-397
2BA08	2BLP0803	Movable Incore Detector Drive Package W330A
2BA11	2BLP0905	Cont. Structure Electric Heater E-467
2BA25	2BLP0910	Cont. Cooling Unit E-393 Circ. Water Outlet HV-9940FB
2BA26	2BLP0911	Cont. Cooling Unit E-394 Circ. Water Outlet HV-9940EB
2BA27	2BLP0912	Cont. Cooling Unit E-397 Circ. Water Outlet HV-9940DB
2BA31	2BLP0913	Cont. Cooling Unit E-393 Circ. Water Outlet HV-9940FC
2BA32	2BLP0914	Cont. Cooling Unit E-394 Circ. Water Inlet HV-9940EC
2BA33	2BLP0915	Cont. Cooling Unit E-397 Circ. Water Inlet HV-9940DC
2BA36	2BLP0808	RCP 1A Oil Lift Pump 1A1 P-260
2BA37	2BLP0809	RCP 1B Oil Lift Pump 1B1 P-264
2BA38	2BLP0810	RCP 2B Oil Lift Pump 2B1 P-262
2BA39	2BLP0901	Reactor Coolant Drain Pump (W) P-023
2BA40	2BLP0811	RCP 2A Oil Lift Pump 2A1 P-266
2BA41	2BLP0817	RCP 1A Anti Rev. Rotation Device Lube Pump 1 P-399
2BA42	2BLP0818	RCP 2B Anti Rev. Rotation Device Lube Pump 1 P-401
2BA43	2BLP0819	RCP 1B Anti Rev. Rotation Device Lube Pump 1 P-403
2BA44	2BLP0820	RCP 2A Anti Rev. Rotation Device Lube Pump 1 P-405
2BA45	2BLP0902	Reactor Cavity Cooling Fan A-319
2BA46	2BLP0903	Standby Reactor Cavity Cooling Fan A-321

ATTACHMENT "B"

EXISTING SPECIFICATIONS

UNIT 3

INSTRUMENTATION

INCORE DETECTORS

LIMITING CONDITION FOR OPERATION

3.3.3.2 The incore detection system shall be OPERABLE with:

a. At least 75% of all incore detector locations, and

b. A minimum of two quadrant symmetric incore detector locations per core quadrant.

An OPERABLE incore detector location shall consist of a fuel assembly containing a fixed detector string with a minimum of four OPERABLE rhodium detectors or an OPERABLE movable incore detector capable of mapping the location.

APPLICABILITY: When the incore detection system is used for monitoring:

a. AZIMUTHAL POWER TILT,

b. Radial Peaking Factors,

c. Local Power Density,

d. DNB Margin.

ACTION:

With the incore detection system inoperable, do not use the system for the above applicable monitoring or calibration functions. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.3.3.2 The incore detection system shall be demonstrated OPERABLE:

a. By performance of a CHANNEL CHECK within 24 hours prior to its use if 7 or more days have elapsed since the previous check and at least once per 7 days thereafter when required for monitoring the AZIMUTHAL POWER TILT, radial peaking factors, local power density or DNB margin:

b. At least once per 18 months by performance of a CHANNEL CALIBRATION operation which exempts the neutron detectors but includes all electronic components. The neutron detectors shall be calibrated prior to installation in the reactor core.

TABLE 3.8-1

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICES

Primary Device Number	Backup Device Number	Service Description
3BA04 (3BA04-B)	3BLP0802	CEDM Cooling Supply Fan E-403B (Enclosure Heater)
3BA04 (3BA04-C)	3BLP0814	Standby Containment Normal Cooling Fan E-393 (Enclosure Heater)
3BA04 (3BA04-D)	3BLP0826	Containmnt Normal Cooling Fan E-394 (Enclosure Heater)
3BA04 (3BA04-E)	3BLP0828	Containment Normal Cooling Fan E-397
3BA08	3BLP0803	Movable Incore Detector Drive Package W338A
3BA11	3BLP0905	Cont. Structure Electric Heater E-467
3BA25	3BLP0910	Cont. Cooling Unit E-393 Circ. Water Outlet HV-9940FB
3BA26	3BLP0911	Cont. Cooling Unit E-394 Circ. Water Outlet HV-9940EB
3BA27	3BLP0912	Cont. Cooling Unit E-397 Circ. Water Outlet HV-9940DB
3BA31	3BLP0913	Cont. Cooling Unit E-393 Circ. Water Outlet HV-9940FC
3BA32	3BLP0914	Cont. Cooling Unit E-394 Circ. Water Inlet HV-9940EC
3BA33	3BLP0915	Cont. Cooling Unit E-397 Circ. Water Inlet HV-9940DC
3BA36	3BLP0808	RCP 1A Oil Lift Pump 1A1 P-260
3BA37	3BLP0809	RCP 1B Oil Lift Pump 1B1 P-264
3BA38	3BLP0810	RCP 3B Oil Lift Pump 3B1 P-262
3BA39	3BLP0901	Reactor Coolant Drain Pump (W) P-023
3BA40	3BLP0811	RCP 2A Oil Lift Pump 2A1 P-266
3BA41	3BLP0817	RCP 1A Anti Rev. Rotation Device Lube Pump 1 P-399
3BA42	3BLP0818	RCP 3B Anti Rev. Rotation Device Lube Pump 1 P-401
3BA43	3BLP0819	RCP 1B Anti Rev. Rotation Device Lube Pump 1 P-403
3BA44	3BLP0820	RCP 2A Anti Rev. Rotation Device Lube Pump 1 P-405
3BA45	3BLP0902	Reactor Cavity Cooling Fan A-319
3BA46	3BLP0903	Standby Reactor Cavity Cooling Fan A-321

ATTACHMENT "C"

PROPOSED SPECIFICATIONS

UNIT 2

INSTRUMENTATION

INCORE DETECTORS

LIMITING CONDITION FOR OPERATION

3.3.3.2 The incore detection system shall be OPERABLE with:

a. At least 75% of all incore detector locations, and

b. A minimum of two quadrant symmetric incore detector locations per core quadrant.

An OPERABLE incore detector location shall consist of a fuel assembly containing a fixed detector string with a minimum of four OPERABLE rhodium detectors ~~or an OPERABLE movable incore detector capable of mapping the location.~~

APPLICABILITY: When the incore detection system is used for monitoring:

a. AZIMUTHAL POWER TILT,

b. Radial Peaking Factors,

c. Local Power Density,

d. DNB Margin.

ACTION:

With the incore detection system inoperable, do not use the system for the above applicable monitoring or calibration functions. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.3.3.2 The incore detection system shall be demonstrated OPERABLE:

a. By performance of a CHANNEL CHECK within 24 hours prior to its use if 7 or more days have elasped since the previous check and at least once per 7 days thereafter when required for monitoring the AZIMUTHAL POWER TILT, radial peaking factors, local power density or DNB margin:

b. At least once per 18 months by performance of a CHANNEL CALIBRATION operation which exempts the neutron detectors but includes all electronic components. The neutron detectors shall be calibrated prior to installation in the reactor core.

TABLE 3.8-1

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICES

Primary Device Number	Backup Device Number	Service Description
2BA04 (2BA04-B)	2BLP0802	CEDM Cooling Supply Fan E-403B (Enclosure Heater)
2BA04 (2BA04-C)	2BLP0814	Standby Containment Normal Cooling Fan E-393 (Enclosure Heater)
2BA04 (2BA04-D)	2BLP0826	Containmnt Normal Cooling Fan E-394 (Enclosure Heater)
2BA04 (2BA04-E)	2BLP0828	Containment Normal Cooling Fan E-397
~~2BA08~~	~~2BLP0803~~	~~Movable Incore Detector Drive Package W338A~~
2BA11	2BLP0905	Cont. Structure Electric Heater E-467
2BA25	2BLP0910	Cont. Cooling Unit E-393 Circ. Water Outlet HV-9940FB
2BA26	2BLP0911	Cont. Cooling Unit E-394 Circ. Water Outlet HV-9940EB
2BA27	2BLP0912	Cont. Cooling Unit E-397 Circ. Water Outlet HV-9940DB
2BA31	2BLP0913	Cont. Cooling Unit E-393 Circ. Water Outlet HV-9940FC
2BA32	2BLP0914	Cont. Cooling Unit E-394 Circ. Water Inlet HV-9940EC
2BA33	2BLP0915	Cont. Cooling Unit E-397 Circ. Water Inlet HV-9940DC
2BA36	2BLP0808	RCP 1A Oil Lift Pump 1A1 P-260
2BA37	2BLP0809	RCP 1B Oil Lift Pump 1B1 P-264
2BA38	2BLP0810	RCP 2B Oil Lift Pump 2B1 P-262
2BA39	2BLP0901	Reactor Coolant Drain Pump (W) P-023
2BA40	2BLP0811	RCP 2A Oil Lift Pump 2A1 P-266
2BA41	2BLP0817	RCP 1A Anti Rev. Rotation Device Lube Pump 1 P-399
2BA42	2BLP0818	RCP 2B Anti Rev. Rotation Device Lube Pump 1 P-401
2BA43	2BLP0819	RCP 1B Anti Rev. Rotation Device Lube Pump 1 P-403
2BA44	2BLP0820	RCP 2A Anti Rev. Rotation Device Lube Pump 1 P-405
2BA45	2BLP0902	Reactor Cavity Cooling Fan A-319
2BA46	2BLP0903	Standby Reactor Cavity Cooling Fan A-321

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AMENDMENT NO. 15

ATTACHMENT "D"

PROPOSED SPECIFICATIONS

UNIT 3

INSTRUMENTATION

INCORE DETECTORS

LIMITING CONDITION FOR OPERATION

3.3.3.2 The incore detection system shall be OPERABLE with:

a. At least 75% of all incore detector locations, and

b. A minimum of two quadrant symmetric incore detector locations per core quadrant.

An OPERABLE incore detector location shall consist of a fuel assembly containing a fixed detector string with a minimum of four OPERABLE rhodium detectors. ~~or an OPERABLE movable incore detector capable of mapping the location.~~ 1

APPLICABILITY: When the incore detection system is used for monitoring:

a. AZIMUTHAL POWER TILT,

b. Radial Peaking Factors,

c. Local Power Density,

d. DNB Margin.

ACTION:

With the incore detection system inoperable, do not use the system for the above applicable monitoring or calibration functions. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.3.3.2 The incore detection system shall be demonstrated OPERABLE:

a. By performance of a CHANNEL CHECK within 24 hours prior to its use if 7 or more days have elapsed since the previous check and at least once per 7 days thereafter when required for monitoring the AZIMUTHAL POWER TILT, radial peaking factors, local power density or DNB margin:

b. At least once per 18 months by performance of a CHANNEL CALIBRATION operation which exempts the neutron detectors but includes all electronic components. The neutron detectors shall be calibrated prior to installation in the reactor core.

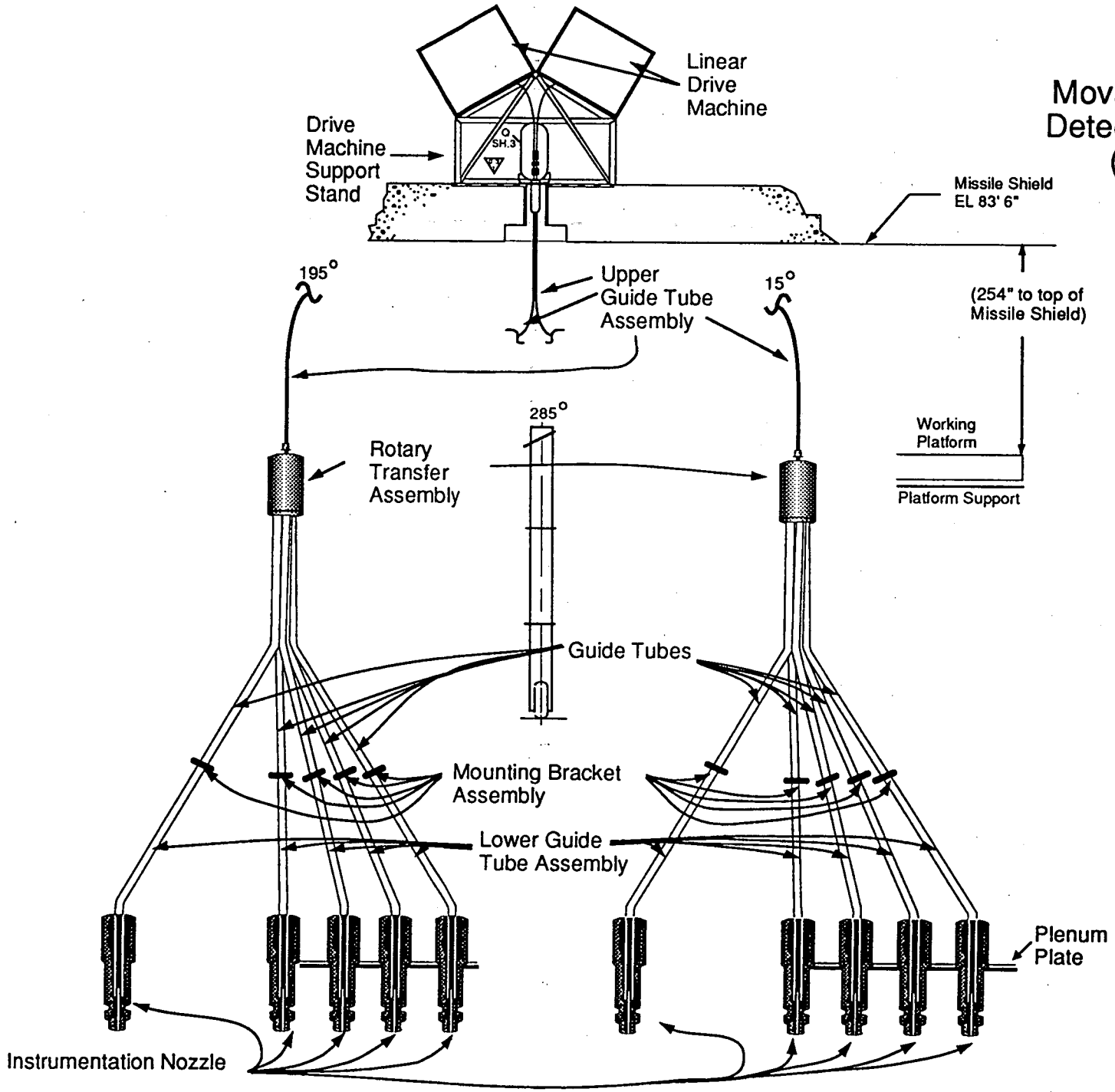
TABLE 3.8-1

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICES

Primary Device Number	Backup Device Number	Service Description
3BA04 (3BA04-B)	3BLP0802	CEDM Cooling Supply Fan E-403B (Enclosure Heater)
3BA04 (3BA04-C)	3BLP0814	Standby Containment Normal Cooling Fan E-393 (Enclosure Heater)
3BA04 (3BA04-D)	3BLP0826	Containmnt Normal Cooling Fan E-394 (Enclosure Heater)
3BA04 (3BA04-E)	3BLP0828	Containment Normal Cooling Fan E-397
~~3BA08~~	~~3BLP0803~~	~~Movable Incore Detector Drive Package W338A~~
3BA11	3BLP0905	Cont. Structure Electric Heater E-467
3BA25	3BLP0910	Cont. Cooling Unit E-393 Circ. Water Outlet HV-9940FB
3BA26	3BLP0911	Cont. Cooling Unit E-394 Circ. Water Outlet HV-9940EB
3BA27	3BLP0912	Cont. Cooling Unit E-397 Circ. Water Outlet HV-9940DB
3BA31	3BLP0913	Cont. Cooling Unit E-393 Circ. Water Outlet HV-9940FC
3BA32	3BLP0914	Cont. Cooling Unit E-394 Circ. Water Inlet HV-9940EC
3BA33	3BLP0915	Cont. Cooling Unit E-397 Circ. Water Inlet HV-9940DC
3BA36	3BLP0808	RCP 1A Oil Lift Pump 1A1 P-260
3BA37	3BLP0809	RCP 1B Oil Lift Pump 1B1 P-264
3BA38	3BLP0810	RCP 3B Oil Lift Pump 3B1 P-262
3BA39	3BLP0901	Reactor Coolant Drain Pump (W) P-023
3BA40	3BLP0811	RCP 2A Oil Lift Pump 2A1 P-266
3BA41	3BLP0817	RCP 1A Anti Rev. Rotation Device Lube Pump 1 P-399
3BA42	3BLP0818	RCP 3B Anti Rev. Rotation Device Lube Pump 1 P-401
3BA43	3BLP0819	RCP 1B Anti Rev. Rotation Device Lube Pump 1 P-403
3BA44	3BLP0020	RCP 2A Anti Rev. Rotation Device Lube Pump 1 P-405
3BA45	3BLP0902	Reactor Cavity Cooling Fan A-319
3BA46	3BLP0903	Standby Reactor Cavity Cooling Fan A-321

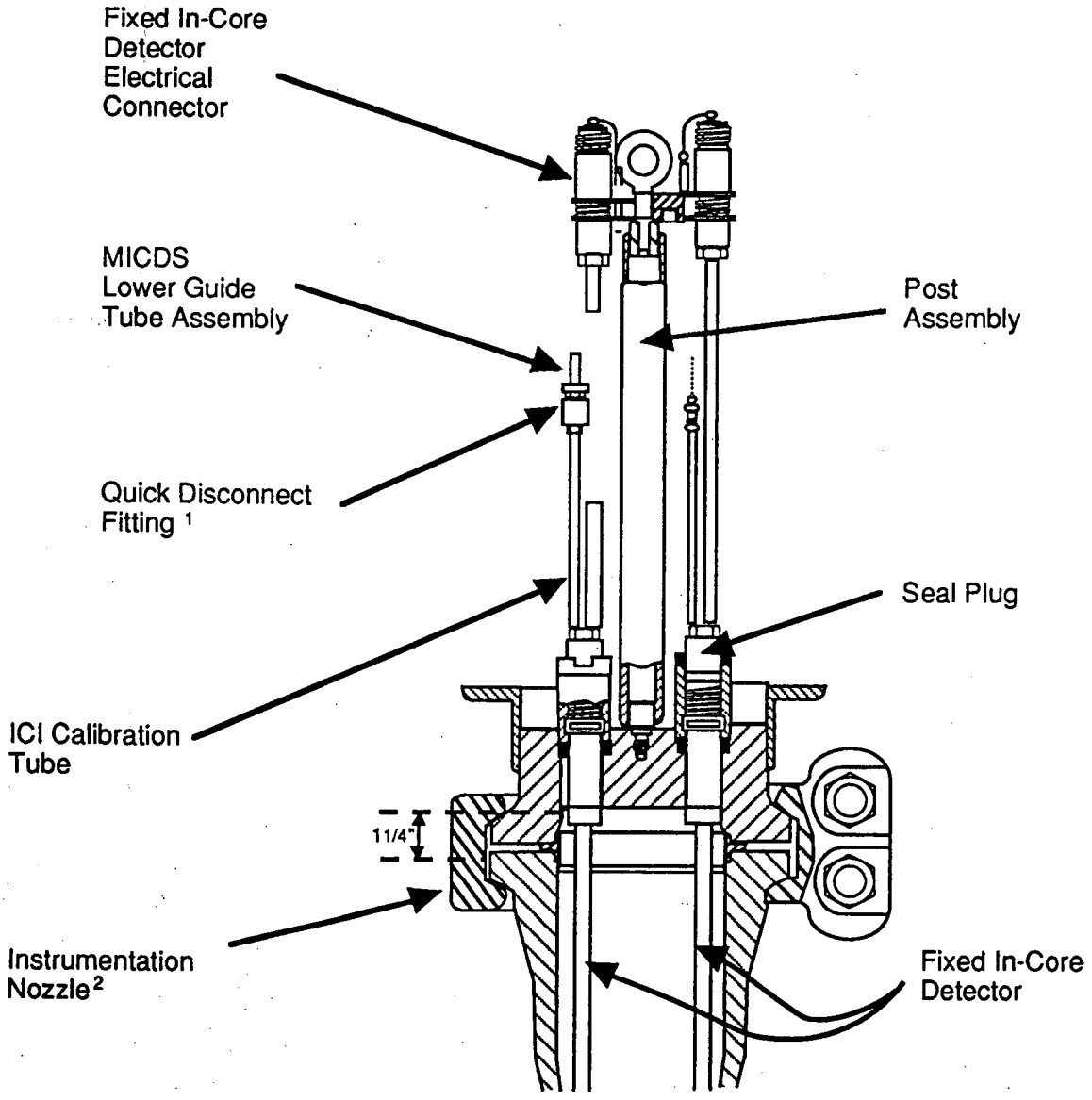
Figure 1

Movable In-Core Detection System (MICDS)



Movable In-Core Instrumentation

Figure 2
In-Core Detector Assembly



[1] The Quick Disconnect Fitting has been replaced with a pressure cap and an RTV plug.

[2] Each Instrumentation Nozzle is capable of allowing the penetration of a maximum of six In-Core detectors.