



FOR YOUR EYES ONLY

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QUADREX CORPORATION
1700 DOW AVENUE
DALLAS, TEXAS 75201
408 760-4000
FAX 760-4000
TELEX 352081

October 2, 1981
LS-81-105

Mr. A. F. Bournia
U. S. Nuclear Regulatory Commission
Phillips Building
7920 Norfolk Avenue
Bethesda, Maryland 20014



Dear Mr. Bournia:

Enclosed are three copies of missing pages from the LaSalle County Station Environmental Qualification program attachment delivered to your offices yesterday. These pages were in final typing at the time our delivery courier had to leave for his flight out of San Francisco, and these pages could not be reproduced quickly enough.

Please incorporate the following Component Application Statement pages into our previous submittal:

- (1) M.5-1.2a APO8E, APO9E
- (2) M.5-1.99ad E12-F093
- (3) M.5-1.99ae E12-F094
- (4) M.5-1.99af E12-F312A, B
- (5) M.5-1.99bi HG002A,B
- (6) M.5-1.99c VQ068
- (7) M.5-2.26c E22-N001A,B; E22-N0022A, B
- (8) M.5-2.34A B21-N027

With these eight pages, the submittal is now complete. Thank you for your understanding.

Sincerely,

Loren Stanley
Loren Stanley
Group Manager
Consulting Engineering

bjk

cc: Mr. L. O. Del George, CECO
Mr. Brent Shelton, CECO (with attachments)

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TABLE M.5-1 (Cont.)

m) COMPONENT APPLICATION STATEMENT

Component AP08E, AP09E

These Gould /ITE model 7.5 HK-500 medium voltage switchgear components are located in the reactor building in environmental zone H4A. Hence, these components are exposed to a harsh environment for the Instrument Line Break Event Outside Containment and high radiation from the LOCA Inside Containment (see Section 4.4, page 4-32, of Quadrex Report QUAD-1-81-852). The impact of component failure is considered only for these events.

(a) Component Function

These components provide power to the recirculation system pump motors.

(b) Effect of Component Failure

Failure of these components will cause loss of the recirculation system. Failure of these components has no affect in achieving the six safety objectives as described in Quadrex Report QUAD-1-81-852.

(c) Impact on Other Systems

No other component or systems are affected by these components. These components have no electrical interface with other components of this system or any other systems.

(d) Operator Action

This device is not required when the harsh environment caused by the Instrument Line Break or LOCA exists. Therefore no operator action is required to achieve any of the six safety objectives.

TABLE M.5-1 (Cont.)

m) COMPONENT APPLICATION STATEMENT

Component E12-F093

This motor operated valve is located in RHR cubicles in environmental zone H6. Hence, this component is exposed to a harsh environment for the Instrument Line Break Event Outside Containment and high radiation from the LOCA Event Inside Containment (see Section 4.4, page 4-32 of Quadrex Report QUAD-1-81-852). The impact of component failure is considered only for these events.

(a) Component Function

This motor operated valve is required for emergency makeup water crosstie.

(b) Effect of Component Failure

Failure of this component may disable emergency makeup function for RHR but this function is not required for core coverage nor residual heat removal. No failure mechanism at the valve can cause the valve to change position from open or close because the motor control centers are not at the same location as the valves.

Failure of this valve operator has no affect in achieving the six safety objectives as described in Quadrex Report QUAD-1-81-852.

(c) Impact on Other Systems

No other systems are affected by failure of this valve motor operator. This valve has no electrical interface with components on this system or any other systems.

(d) Operator Action

This device is not required when the harsh environment caused by the Instrument Line Break or LOCA event exists. Therefore, no operator action is required to achieve any of the six safety objectives.

References:

P&ID: M-96, Sheet 4, Zone F-4

Schematic: 1E-1-4220CG

TABLE M.5-1 (Cont.)

m) COMPONENT APPLICATION STATEMENT

Component E12-F094

This motor operated valve is located in RHR cubicles in environmental zone H6. Hence, this component is exposed to a harsh environment only for the Instrument Line Break Event Outside Containment and high radiation from the LOCA Event Inside Containment (see Section 4.4, page 4-32, of Quadrex Report QUAD-1-81-852). The impact of component failure is considered only for these events.

(a) Component Function

This motor operated valve is required for emergency makeup water crosstie.

(b) Effect of Component Failure

Failure of this component may disable emergency makeup function of RHR but this function is not required for core coverage nor residual heat removal. No failure mechanism at the valve can cause the valve to change position from open or close because the motor control centers are not at the same location as the valves.

Failure of this valve operator has no affect in achieving the six safety objectives as described in Quadrex Report QUAD-1-91-852.

(c) Impact on Other Systems

No other systems are affected by failure of this valve motor operator. This valve has no electrical interface with other components on this system or any other systems.

(d) Operator Action

This device is not required when the harsh environment caused by the Instrument Line Break or LOCA Event exists. Therefore, no operator action is required to achieve any of the six safety objectives.

References:

P&ID: M-96

Schematic: 1E-1-4220CG

TABLE M.5-1 (Cont.)

m) COMPONENT APPLICATION STATEMENT

Component E12-F312A, B

These motor operated valves are located in RHR cubicle in environmental zone H6. Hence, these components are exposed to a harsh environment for the Instrument Line Break Event Outside Containment and high radiation from the LOCA Event Inside Containment (see Section 4.4, page 4-32, of Quadrex Report QUAD-1-81-852). The impact of component failure is considered only for these events.

(a) Component Function

These motor operated valves are required for H₂ recombiner cooling water.

(b) Effect of Component Failure

Failure of these valves may disable H₂ recombiner cooling but does not affect any modes in RHR system. No failure mechanism at the valve can cause the valves to change position from open or close because the motor control centers are not at the same location as the valves.

Failure of these valve operators has no affect in achieving the six safety objectives as described in Quadrex Report QUAD-1-81-852.

(c) Impact on Other Systems

No other systems are affected by failure of this valve motor operator. These valves have no electrical interface with other components on this system or any other systems.

(d) Operator Action

These devices are not required when the harsh environment caused by the Instrument Line Break exists. They perform their function before they are affected by the LOCA radiation harsh environment. Therefore, no operator action is required to achieve any of the six safety objectives.

References:

P&ID: M-96, Sheets 1 and 2, Zone E2

Schematic: 1E-1-4220CK

TABLE M.5-1 (Cont.)

m) COMPONENT APPLICATION STATEMENT

Component HG002A, B

These motor operated valves are located in the Reactor Building in environmental zone H4A. Hence, these components are exposed to a harsh environment for the Instrument Line Break Event Outside Containment and high radiation from the LOCA Event Inside Containment (see Section 4.4, page 4-32, of Quadrex Report QUAD-1-81-852). The impact of component failure is considered only for these events.

(a) Component Function

These motor operated outboard valves are required for H₂ recombiner inlet.

(b) Effect of Component Failure

Failure of these components under worst condition could prevent opening of the valves and flow to the H₂ recombiner. No failure mechanism at the valves can cause the valves to change position from open or close because the motor control centers are not at the same location as the valves.

Failure of these valve operators have no affect in achieving the six safety objectives as described in Quadrex Report QUAD-1-81-852.

(c) Impact on Other Systems

No other component or system is affected by failure of these components. These valves have no electrical interface with other components.

(d) Operator Action

These devices are not required when the harsh environment caused by the Instrument Line Break exists. These devices perform their function before they are affected by the LOCA radiation. Therefore, no operator action is required to achieve any of the six safety objectives.

References:

P&ID: M-130, Sheet 1, Zones F7 and E7

Schematic: 1E-1-4103AB, AC

TABLE M.5-1 (Cont.)

m) COMPONENT APPLICATION STATEMENT

Component VQ-068

This motor operated valve is located in the Reactor Building in environmental zone H4A. Hence, this component is exposed to a harsh environment for the Instrument Line Break Event Outside Containment and high radiation from the LOCA Event Inside Containment (see Section 4.4, page 4-32, of Quadrex Report QUAD-1-81-852). The impact of component failure is considered only for these events.

(a) Component Function

This motor operated valve is required for drywell vent line isolation. This valve provides bypass for motor operated valve VQ036.

(b) Effect of Component Failure

Failure of this component may prevent Primary Containment Isolation but it is backed up by redundant valves. Operation of this system is not required to meet the six safety objectives as described in Quadrex Report QUAD-1-81-852.

No failure mechanism at the valve can cause the valve to change position from open or close because the motor control centers are not at the same location as the valves.

(c) Impact on Other Systems

No other systems are affected by failure of this valve motor operator. This valve has no electrical interface with other components of any other systems.

(d) Operator Action

This device is not required when the harsh environment caused by the Instrument Line Break exists. It performs its function before it is affected by the LOCA radiation harsh environment. Therefore, no operator action is required to achieve any of the six safety objectives.

TABLE M.5-2 (Cont.)

m) COMPONENT APPLICATION STATEMENT

Component E22-N001A, B; E22-N002A, B

The Magnetrol 751 water level components are located in environmental zone H7. Hence, these components are exposed to a harsh environment only for the Line Break Event Outside Containment (see Section 4.4, page 4-32, of Quadrex Report QUAD-1-81-852). The impact of component failure is considered only for this event.

(a) Component Function

These components sense water levels in the condensate storage tank and the suppression pool, and align the HPSC suppression pool pump suction valve.

(b) Effect of Component Failure

The loss of these components due to the Line Break Event Outside Containment will not preclude achieving the six safety objectives, namely safe shutdown, containment isolation, core coverage, RHR, containment integrity and effluent control (see Section 4.4, page 4-32, of Quadrex Report QUAD-1-81-852).

Failure of these components for this event will only affect the automatic alignment of the HPSC suppression pool pump suction valve. Suction will still be available from the CST. The manual alignment of the valve will not be affected by the level switches, and other ECCS systems are available.

(c) Impact on Other Systems

The sole function of these components is to provide water level signals for alignment of the suppression pool pump suction valve. No other systems are affected by their failure.

(d) Operator Action

Failure of these components in the worst case could result in the loss of HPSC inventory. However, ADS is available as a backup and would automatically provide adequate inventory makeup. Therefore, no operator action is required to meet the six safety objectives.

References:

Schematic: 1E-1-4222AC

FCD: FSAR Figure 7.3-6, Zone H-7

TABLE M.5-2 (Cont.)

m) COMPONENT APPLICATION STATEMENT

Component B21-N027

The Rosemount 1151 component is located in the Reactor Building in environmental zone H4A. Hence this component is exposed to a harsh environment for the Instrument Line Break Event Outside Containment and high radiation from the LOCA Inside Containment (see Section 4.4, page 4-32, of Quadrex Report QUAD-1-81-852). The impact of component failure is considered only for these events.

(a) Component Function

This component senses reactor vessel water level and provides reactor vessel water level (shutdown range) information to a level indicator located in the main control room.

(b) Effect of Component Failure

The loss of this component due to the Instrument Line Break Event Outside Containment or the LOCA will not preclude achieving the six safety objectives, namely safe shutdown, containment isolation core coverage, RHR, containment integrity and effluent control (see Section 4.4, page 4-32, of Quadrex Report QUAD-1-81-852).

Failure of this component for this event will affect the reactor vessel level shutdown range indication in the control room however it will not have any effect on operator actions or other mitigation.

(c) Impact on Other Systems

The sole function of this component is to provide a reactor vessel water level signal to an indicator located in the main control room. This signal has no impact on the nuclear boiler system operation. No other systems are affected by this failure.

(d) Operator Action

No operator action is required for this event. Operation procedures direct the operator that any anomalous indication should be ignored. The operator has many diverse indications of water level. All six safety objectives are met.

References:

P&ID: M-93, Sheet 4

Schematic: 1E-1-4220AG