Entergy Nuclear Operations, Inc.
Vermont Yankee
P.O. Box 0250
320 Governor Hunt Road
Vernon, VT 05354
Tel 802 257 7711

December 18, 2008
BVY 08-084

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

References: (a) Letter, VYNPS to USNRC, "Technical Specification Proposed Change No. 273 Instrumentation Technical Specifications," BVY 08-001, dated February 12, 2008

Subject: **Vermont Yankee Nuclear Power Station**
License No. DPR-28 (Docket No. 50-271)
Technical Specifications Proposed Change No. 273, Supplement 5
Response to Request for Additional Information

Dear Sir or Madam,

In Reference (a), Entergy Nuclear Operations Inc. (ENO) submitted a proposed change to the instrumentation sections of the Vermont Yankee Operating License Technical Specifications.

Attachment 1 to this submittal provides ENO's response to questions provided by NRC Staff and discussed with the NRC on a telecom held on December 2, 2008.

This supplement to the original license amendment request does not change the scope or conclusions in the original application, nor does it change ENO's determination of no significant hazards consideration.

There are no new regulatory commitments being made in this letter.

Should you have any questions or require additional information concerning this submittal, please contact Mr. David J. Mannai at (802) 451-3304.

I declare under penalty of perjury, that the foregoing is true and accurate. Executed on December 18, 2008.

Sincerely,

Michael J. Colomb
Site Vice President
Vermont Yankee Nuclear Power Station

Attachments (2)
cc: (next page)

A001
NRR

cc: Mr. Samuel J. Collins (w/o Attachments)
Regional Administrator, Region 1
U.S. Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406-1415

Mr. James S. Kim, Project Manager
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Mail Stop O 8 C2A
Washington, DC 20555

USNRC Resident Inspector
Entergy Nuclear Vermont Yankee, LLC
320 Governor Hunt Road
Vernon, Vermont 05354

Mr. David O'Brien, Commissioner
VT Department of Public Service
112 State Street – Drawer 20
Montpelier, Vermont 05620-2601

Docket 50-271
BVY 08-084

Attachment 1

Technical Specification Proposed Change No. 273, Supplement 5

Vermont Yankee Nuclear Power Station

Response to Request for Additional Information

Technical Specification Proposed Change No.273, Supplement 5
Vermont Yankee Nuclear Power Station
Response to Request For Additional Information

RAI No.1

Explain how Criterion 3 of 10 CFR 50.36(d)(2)(ii) is met if Limiting Condition for Operation (LCO) 3.2.K does not contain requirements for the Loss of Voltage function.

Background: The Bases for proposed LCO 3.2.K, "Degraded Grid Protective System Instrumentation," state "The initiation of the DGs on degradation or loss of offsite power, and subsequent initiation of the ECCS, ensures that the requirements of 10 CFR 50.46 are met." In addition, Updated Final Safety Analysis Report (UFSAR) section 8.5.4, "Safety Evaluation," of the Standby Diesel Generator System, discusses plant response when independent relaying senses the loss of voltage or degraded voltage at each emergency bus. However, neither the current LCO 3.2.K or the proposed LCO 3.2.K have requirements for the loss of offsite power function. The Technical Specifications (TS) list requirements for only the degraded bus voltage function. For comparison purposes, NUREG 1433, "Standard Technical Specifications, General Electric Plants, BWR/4," contains LCO 3.3.8.1, "Loss of Power Instrumentation." LCO 3.3.8.1 contains both the Loss of Voltage and the Degraded Voltage functions.

Criterion 3 of 10 CFR 50.36(d)(2)(ii) states a TS LCO of a nuclear reactor must be established for "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."

Given the discussion in the UFSAR and the Bases for proposed LCO 3.2.K, it is unclear how Criterion 3 of 10 CFR 50.36(d)(2)(ii) is met if LCO 3.2.K does not contain requirements for the Loss of Voltage function.

Response to RAI No.1

The current TSs related to degraded grid protection were added to the TS by License Amendment Number 98. This amendment was limited to the relays associated with protection from a degraded grid condition. While the loss of voltage relays are mentioned in the Bases for 3.2.K/4.2.K, they are not addressed under this section of the TS, because TS section 3.2.K/4.2.K is specific to the degraded grid protective system. The loss of voltage relays are required to detect a loss of voltage on the 4KV Emergency buses and are not credited for degraded grid protection. As such they only need to operate as a function of gross measurement (go/no go). Independent of the degraded grid voltage relays, the loss of voltage relays are considered to be part of the emergency diesel generator circuitry and are therefore required to be operable whenever the diesel is required to be operable. Functional testing of the relays and their associated time delay is required by TS sections 4.10.A.1.a.1 / 4.10.A.1.a.3. Specification 4.10.A.1.a.1 requires that monthly each diesel shall be manually started using the under voltage automatic starting circuit. 4.10.A.1.a.3 requires that once each six months in lieu of TS

Technical Specification Proposed Change No.273, Supplement 5
Vermont Yankee Nuclear Power Station
Response to Request For Additional Information

4.10.A.1.a.1 each diesel shall be manually started using the under voltage automatic starting circuit and loaded to demonstrate that it will reach rated frequency and voltage within specified time limits. This verifies the functioning of the under voltage relays and that their time delay function does not impact the diesel starting times. This testing is discussed in the TS Bases 4.10.A where it states: "The monthly test of the diesel generators are conducted to check for equipment failures and deterioration. The test of the under voltage automatic starting circuits will prove that each diesel will receive a start signal if a loss of voltage should occur on its emergency bus."

RAI No.2

Explain how the ECCS test in proposed Note (a) of Table 4.2.8, in Limiting Condition for Operation (LCO) 3.2.K, produces the coincident LOCA signal that would result in automatic actuation if a degraded voltage condition was present.

Background: The submitted Bases for LCO 3.2.K, "Degraded Grid Protective System Instrumentation," state "If [a] sustained degraded voltage condition occurs coincident with a loss of coolant accident (LOCA), both of the Degraded Bus Voltage - Voltage Trip Function channels will actuate causing the associated 4.16 kV emergency bus to be disconnected from the offsite power source and connected to the DG power source." Proposed Note (a) of Table 4.2.8 in LCO 3.2.K, states, in part, that for the Functional Test, "Trip Function operability is demonstrated during Trip Function Calibration and integrated ECCS tests performed once per Operating Cycle." Proposed Note (a) is similar to Note 10 found in the current Technical Specifications (TS) for Table 4.2.8. However, the Bases discussion for the Functional Test does not discuss if the ECCS test is what produces the coincident LOCA signal that would result in automatic actuation if a degraded voltage condition was present.

10 CFR 50.36(d)(3) states technical specifications will include surveillance requirements which "are requirements relating to test, calibration, or inspection to assure that the necessary quality of systems and components is maintained, that facility operation will be within safety limits, and that the limiting conditions for operation will be met."

It is unclear how the ECCS test mentioned in proposed Note (a) of Table 4.2.8, in LCO 3.2.K, produces the coincident LOCA signal that would result in automatic actuation if a degraded voltage condition was present. This information would be needed to ensure that the Functional Test for the Degraded Grid Protective System Instrumentation satisfies 10 CFR 50.36(d)(3).

Technical Specification Proposed Change No.273, Supplement 5
Vermont Yankee Nuclear Power Station
Response to Request For Additional Information

Response to RAI No.2

During the ECCS test setup, an under voltage condition is simulated to the grid under voltage relays. The ECCS test start is by initiation of test switches simulating a LOCA condition. The under voltage condition combined with the accident initiation signal initiates the separation of the 4KV safety buses from the non-safety buses and subsequent starting of the emergency diesel generators and re-energization of the 4KV safety buses by the emergency diesel generators.

RAI No.3

Explain how the lack of specific applicable modes for the Degraded Grid Protective System Instrumentation functions will still ensure that 10 CFR 50.36(d)(2)(i) is met. In addition, provide specifics on when proposed Note (a) of Table 3.2.8 is applicable. If the functions are not required to be operable with the mode switch in either Hot Shutdown or Refuel with reactor coolant temperature greater than 212°F, explain why.

Background: Table 3.2.8 of Limiting Condition for Operation (LCO) 3.2.K, "Degraded Grid Protective System Instrumentation," has a proposed Note (a) that states Degraded Grid Protective System Instrumentation functions are applicable "when the associated diesel generator is required to be operable." The proposal is ambiguous in that no specific Modes or LCOs are referenced in proposed Note (a). As a result, it is unclear when proposed Note (a) specifically applies.

Current LCO 3.2.K provides more specific information regarding Degraded Grid Protective System Instrumentation function applicability and states "During reactor power operation, the emergency bus under voltage instrumentation shall be operable in accordance with Table 3.2.8." Section 1.0, "Definitions," states "reactor power operation is any operation with the mode switch in the 'Startup/Hot Standby' or 'Run' position with the reactor critical and above 1% rated thermal power."

The current Technical Specifications appear to be deficient in that LCO 3.2.K is not applicable when the diesel generators are required to be operable per LCO 3.5.H.4.a and LCO 3.7.B.1.b. However, this appears to be addressed in Discussion of Change (DOC) M.1. In addition, it is unclear if the Degraded Grid Protective System Instrumentation functions are currently required to be operable, or proposed to be operable, with the mode switch in either Hot Shutdown or Refuel with reactor coolant temperature greater than 212°F. Updated Final Safety Analysis Report (UFSAR) section 8.5.2, "Safety Design Bases," of the Standby Diesel Generator System, states "During a degraded voltage condition concurrent with a LOCA, the Degraded Grid Protection System shall automatically disconnect the safety class electrical buses from the offsite power grid." If the Degraded Grid Protection System Instrumentation functions are required to mitigate the consequences of a LOCA, it is unclear why they would not be required to be

Technical Specification Proposed Change No.273, Supplement 5
Vermont Yankee Nuclear Power Station
Response to Request For Additional Information

operable with the mode switch in either Hot Shutdown or Refuel with reactor coolant temperature greater than 212°F, when there is considerable energy in the reactor core.

For comparison purposes, NUREG 1433, "Standard Technical Specifications, General Electric Plants, BWR/4," contains LCO 3.3.8.1, "Loss of Power Instrumentation," that is similar in intent to LCO 3.2.K. LCO 3.3.8.1 specifically lists Modes of Applicability as Mode 1 (Run), Mode 2 (Refuel with all reactor vessel head closure bolts fully tensioned or Startup/Hot Standby), Mode 3 (Shutdown with reactor coolant temperature greater than [200°F]), and explicitly calls out applicability in other conditions such as "When the associated diesel generator is required to be Operable by LCO 3.8.2, "AC Sources - Shutdown."

10 CFR 50.36(d)(2)(i) states "limiting conditions for operation are the lowest functional capability or performance levels of equipment required for safe operation of the facility.

It is unclear how the lack of specific applicable modes for the Degraded Grid Protective System Instrumentation functions will still ensure that lowest functional capability or performance levels of equipment required for safe operation of the facility are met per 10 CFR 50.36(d)(2)(i).

Response to RAI No.3

The degraded grid protection system is required to be operable whenever the EDGs are required to be operable. EDG operability requirements are identified in specifications 3.5, 3.7 and 3.10. Proposed Note (a) of Table 3.2.8 will be revised to add reference to the specific sections that contain LCOs for applicable to EDG Operability.

A revised Table 3.2.8 is attached.

RAI No.4

Explain how 10 CFR 50.36(d)(3) is met if there is no Surveillance Requirement (SR) for logic testing of the Degraded Grid Protective System Instrumentation.

Background: The submitted Bases for LCO 3.2.K, "Degraded Grid Protective System Instrumentation," discuss the logic of the Degraded Grid Protective System Instrumentation. However, neither the current TS nor the proposed TS contain a SR for logic testing.

For comparison purposes, NUREG 1433, "Standard Technical Specifications, General Electric Plants, BWR/4," contains LCO 3.3.8.1, "Loss of Power Instrumentation," that is similar in intent to LCO 3.2.K. STS LCO 3.3.8.1 contains a

Technical Specification Proposed Change No.273, Supplement 5
Vermont Yankee Nuclear Power Station
Response to Request For Additional Information

SR 3.3.8.1.4 which is to perform a logic system functional test. The logic system functional test demonstrates the operability of the required actuation logic.

10 CFR 50.36(d)(3) states technical specifications will include surveillance requirements which "are requirements relating to test, calibration, or inspection to assure that the necessary quality of systems and components is maintained, that facility operation will be within safety limits, and that the limiting conditions for operation will be met."

It is unclear how 10 CFR 50.36(d)(3) is met if there is no SR for logic testing of the Degraded Grid Protective System Instrumentation.

Response to RAI No.4

The Core Spray relays which provide the signal for accident initiation are tested during the Core Spray Logic test. The relays from the degraded grid relays and the time delay relay and associated logic is tested during the performance of the ECCS test as discussed in the response to RAI No.2. A separate requirement for a logic test would be redundant.

RAI No.5

Explain how proposed Note 3, in Table 3.2.8 of Limiting Condition for Operation (LCO) 3.2.K, provides acceptable actions to be taken for an inoperable Degraded Bus Voltage – Alarm Time Relay, as permitted by 10 CFR 50.36(d)(2)(i).

Background: Table 3.2.8 of LCO 3.2.K, "Degraded Grid Protective System Instrumentation," contains actions to be taken when required channels are inoperable. Proposed actions for trip functions 1.c (Voltage Alarm) and 1.d (Alarm Time Delay) are listed as being found under Note 3. However, Note 3 states, in part, "With one or more required Degraded Bus Voltage - Voltage Alarm Trip Function channels inoperable, take all of the applicable Actions," and does not discuss the Alarm Time Delay function.

10 CFR 50.36(d)(2)(i) states "limiting conditions for operation are the lowest functional capability or performance levels of equipment required for safe operation of the facility. When a limiting condition for operation of a nuclear reactor is not met, the licensee shall shut down the reactor or follow any remedial action permitted by the technical specifications until the condition can be met."

Technical Specification Proposed Change No.273, Supplement 5
Vermont Yankee Nuclear Power Station
Response to Request For Additional Information

It is unclear how proposed Note 3 provides acceptable actions to be taken for an inoperable Degraded Bus Voltage – Alarm Time Relay, as permitted by 10 CFR 50.36(d)(2)(i).

Response to RAI No.5

Note (3) of Table 3.2.8 will be revised to clarify that the note is applicable to both the voltage alarm and time delay trips. This will ensure for consistency with Table 3.2.8.

A revised Table 3.2.8 ACTION Notes is attached.

RAI No.6

Explain how the lack of a specific completion time, associated with the action to increase voltage monitoring in proposed Note 3, in Table 3.2.8 of Limiting Condition for Operation (LCO) 3.2.K, will ensure that appropriate actions are being taken in a timely manner, as permitted by 10 CFR 50.36(d)(2)(i).

Background: Table 3.2.8 of LCO 3.2.K, "Degraded Grid Protective System Instrumentation," contains actions to be taken when required channels are inoperable. Proposed actions for trip functions 1.c (Voltage Alarm) and 1.d (Alarm Time Delay) are listed as being found under Note 3. Note 3 states, in part, "If the Action and associated completion time of Note 3.a or 3.b are not met, initiate increased voltage monitoring of the associated 4.16kV emergency buses)." The action to initiate increased voltage monitoring is vague with regards to completion time. A Request for Additional Information (RAI) regarding this concern was issued by the NRC on July 2, 2008. The August 28, 2008 response contained justification for the increased voltage monitoring and also stated that "VY monitors the 4160V bus voltage twice per shift (every six hours) by logging the voltage reading in the operators rounds as a heightened surveillance." However, the RAI response did not include a proposal to change the TS completion time requirement. As a result, the phrase "increased voltage monitoring" in the proposed TS can still be open to interpretation.

For comparison purposes, NUREG 1433, "Standard Technical Specifications, General Electric Plants, BWR/4," TS 1.3, "Completion Times," contains examples of required actions that are performed on a periodic schedule (i.e. Example 1.3-6 and Example 1.3-7).

10 CFR 50.36(d)(2)(i) states "limiting conditions for operation are the lowest functional capability or performance levels of equipment required for safe operation of the facility. When a limiting condition for operation of a nuclear reactor is not met, the licensee shall shut down the reactor or follow any remedial action permitted by the technical specifications until the condition can be met."

Technical Specification Proposed Change No.273, Supplement 5
Vermont Yankee Nuclear Power Station
Response to Request For Additional Information

It is unclear how the lack of a specific completion time, associated with the action to increased voltage monitoring in proposed Note 3, will ensure that appropriate actions are being taken in a timely manner, as permitted by 10 CFR 50.36(d)(2)(i).

Response to RAI No.6

The requirements of the Table 3.2.8 ACTION Note 3 will be modified to require that the associated actions be initiated immediately and that the voltage monitoring be performed twice per shift.

A revised Table 3.2.8 ACTION Notes is attached.

RAI No.7

Explain how 10 CFR 50.36(d)(3) is met if there are no Surveillance Requirements (SR) proposed for the functions associated with the Degraded Bus Voltage – Voltage Alarm and the Degraded Bus Voltage – Alarm Time Delay, which are found in Limiting Condition for Operation (LCO) 3.2.K.

Background: Table 4.2.8 of LCO 3.2.K, "Degraded Grid Protective System Instrumentation," has proposed SR for the Degraded Bus Voltage – Voltage Function (1.a) and the Degraded Bus Voltage – Time Delay Function (1.b). However, there are no SR proposed for the functions associated with the Degraded Bus Voltage – Voltage Alarm (1.c) and the Degraded Bus Voltage – Alarm Time Delay (1.d).

10 CFR 50.36(d)(3) states technical specifications will include surveillance requirements which "are requirements relating to test, calibration, or inspection to assure that the necessary quality of systems and components is maintained, that facility operation will be within safety limits, and that the limiting conditions for operation will be met."

It is unclear how 10 CFR 50.36(d)(3) is met if there are no SR proposed for the functions associated with the Degraded Bus Voltage – Voltage Alarm and the Degraded Bus Voltage – Alarm Time Delay.

Response to RAI No.7

Surveillance requirements for the voltage alarm and the alarm time delay will be added to Table 4.2.8.

A revised Table 4.2.8 is attached.

Technical Specification Proposed Change No.273, Supplement 5
Vermont Yankee Nuclear Power Station
Response to Request For Additional Information

RAI No.8

Given the Technical Specification (TS) definition of a Logic System Functional Test (LSFT), explain how the LSFT in proposed specifications 4.2.A.2 and 4.2.L.2 requires an automatic actuation test of the High Pressure Coolant Injection (HPCI) and Reactor Core Isolation Cooling (RCIC) Systems so that 10 CFR 50.36(c)(3) will continue to be met.

Background: The TS currently contain Surveillance Requirement (SR) 4.5.E.1.a and SR 4.5.G.1.a which are tests associated with the HPCI and the RCIC Systems. SR 4.5.E.1.a states "A simulated automatic actuation test of the HPCI System shall be performed during each refueling outage," and SR 4.5.G.1.a states "A simulated automatic actuation test of the RCIC System shall be performed during each refueling outage."

The License Amendment Request (LAR) proposes to delete SR 4.5.E.1.a and SR 4.5.G.1.a. The reasoning is found in Discussion of Change (DOC) A.1 which states "The safety evaluation for VY TS Amendment 216 states that a simulated automatic actuation test is part of the Logic System Functional Test (LSFT). Current Technical Specifications (CTS) 4.5.E.1.a and 4.5.G.1.a require simulated automatic actuation tests for the HPCI and RCIC Systems respectively. Proposed Specification 4.2.A.2 requires an LSFT for ECCS instrumentation Trip Functions, which includes all HPCI System Trip Functions. Proposed Specification 4.2.L.2 requires an LSFT for RCIC System instrumentation Trip Functions. Since proposed Specifications 4.2.A.2 and 4.2.L.2 provide LSFT requirements for the HPCI and RCIC Systems, the requirements of CTS 4.5.E.1.a and 4.5.G.1.a are redundant and these specifications are being deleted. In addition, supporting language in the TS 4.5 Bases is also being deleted. Since no testing requirements are being changed or deleted, this change does not involve a technical change and is considered administrative."

The discussion found in DOC A.1 however, is inconsistent with the definition of a LSFT found in TS Section 1.0, "Definitions." The TS definition states "A logic system functional test shall be a test of all logic components required for operability of a logic circuit, from as close to the sensor as practicable up to, but not including, the actuated device, to verify operability. The logic system functional test may be performed by means of any series of sequential, overlapping, or total system steps so that the entire logic system is tested." The LSFT does not include the actuated device. As a result, actuation of HPCI and RCIC is not covered in the TS definition of a LSFT, and therefore the LSFT in proposed Specifications 4.2.A.2 and 4.2.L.2 do not provide requirements for the actuation of HPCI and RCIC Systems. The only requirement that covers actuation of the HPCI and RCIC systems is found in current SRs 4.5.E.1.a and 4.5.G.1.a.

Technical Specification Proposed Change No.273, Supplement 5
Vermont Yankee Nuclear Power Station
Response to Request For Additional Information

For comparison purposes, NUREG 1433, Revision 3.0, "Standard Technical Specifications, General Electric Plants, BWR/4," contains Limiting Condition for Operation (LCO) 3.5.1, "ECCS Operating." LCO 3.5.1 contains SR 3.5.1.10 to "Verify each ECCS injection/spray subsystem actuates on an actual or simulated automatic initiation signal." The Bases for SR 3.5.1.10 state, in part, "This Surveillance verifies that, with a required system initiation signal (actual or simulated), the automatic initiation logic of HPCI, CS, and LPCI will cause the systems or subsystems to operate as designed, including actuation of the system throughout its emergency operating sequence, automatic pump startup and actuation of all automatic valves to their required positions. The LOGIC SYSTEM FUNCTIONAL TEST performed in LCO 3.3.5.1 overlaps this Surveillance to provide complete testing of the assumed safety function." The STS definition of a LSFT is similar to the VY definition.

10 CFR 50.36(c)(3) states technical specifications will include surveillance requirements which "are requirements relating to test, calibration, or inspection to assure that the necessary quality of systems and components is maintained, that facility operation will be within safety limits, and that the limiting conditions for operation will be met."

Given the TS definition of a LSFT, it is unclear how the LSFT in proposed specifications 4.2.A.2 and 4.2.L.2 requires an automatic actuation test of the HPCI and RCIC Systems so that 10 CFR 50.36(c)(3) will continue to be met.

Response to RAI No.8

Upon further review, Entergy agrees that the proposed changes that eliminated CTS SR 4.5.E.1.a and SR 4.5.G.1.a are not covered by the existing LSFT and therefore withdraws the proposed changes. These SRs will be retained.

Docket 50-271
BVY 08-084

Attachment 2

Technical Specification Proposed Change No. 273, Supplement 5

Vermont Yankee Nuclear Power Station

Revised Technical Specification Pages

Table 3.2.8 (page 1 of 1)
Degraded Grid Protective System Instrumentation

TRIP FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER BUS	ACTIONS WHEN REQUIRED CHANNELS ARE INOPERABLE	TRIP SETTING
1. Degraded Bus Voltage				
a. Voltage Trip (b)	(a)	2	Note 1	≥ 3660 volts and ≤ 3740 volts
b. Time Delay Trip (b)	(a)	1	Note 2	≥ 9 seconds and ≤ 11 seconds
c. Voltage Alarm (c)	(a)	2	Note 3	≥ 3660 volts and ≤ 3740 volts
d. Alarm Time Delay (c)	(a)	1	Note 3	≥ 9 seconds and ≤ 11 seconds

(a) When the associated diesel generator is required to be operable per specifications 3.5, 3.7 and 3.10.

(b) LOCA condition.

(c) Non-LOCA condition.

Table 3.2.8 ACTION Notes

1. With one or more required Degraded Bus Voltage - Voltage Trip Function channels inoperable:

   a. Place any inoperable channel in trip within 1 hour.

   If the Action and associated completion time of Note 1.a are not met, immediately declare the associated diesel generator inoperable.

2. With one or more required Degraded Bus Voltage - Time Delay Trip Function channels inoperable:

   a. Restore any inoperable channel to operable status within 1 hour.

   If the Action and associated completion time of Note 2.a are not met, immediately declare the associated diesel generator inoperable.

3. With one or more required Degraded Bus Voltage - Voltage Alarm and/or Alarm Time Delay Trip Function channels inoperable, take all of the applicable Actions in Notes 3.a and 3.b:

   a. With one or more buses with alarm capability not maintained, restore alarm capability within 1 hour; and

   b. Restore any inoperable channel to operable status within 24 hours.

   If the Action and associated completion time of Note 3.a or 3.b are not met, immediately initiate increased voltage monitoring of the associated 4.16kV emergency bus(es) to twice per shift.

Table 4.2.8 (page 1 of 1)
Degraded Grid Protective System Instrumentation
Tests and Frequencies

TRIP FUNCTION	FUNCTIONAL TEST	CALIBRATION
1. Degraded Bus Voltage		
a. Voltage Trip	(a)	Once/Operating Cycle
b. Time Delay Trip	(a)	Once/Operating Cycle
c. Voltage Alarm	(a)	Once/Operating Cycle
d. Alarm Time Delay	(a)	Once/Operating Cycle

(a) Separate Functional Tests are not required for this Trip Function. Trip Function operability is demonstrated during Trip Function Calibration and integrated ECCS tests performed once per Operating Cycle.