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RBG-46474

August 31, 2005

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

SUBJECT: License Amendment Request  
Corrections to Loss of Power Instrumentation Requirements  
River Bend Station, Unit 1  
Docket No. 50-458  
License No. NPF-47

REFERENCES: Letter RBC-46160 from USNRC to Mr. John R, McGaha of Entergy  
Operations, Inc., "Amendment No. 81 to Facility Operating License No.  
NPF-47 (TAC No. M88314) dated July 20, 1995.

Dear Sir or Madam:

Pursuant to 10 CFR 50.90, Entergy Operations, Inc. (Entergy) hereby requests the following exigent amendment for River Bend Station, Unit 1 (RBS). Entergy proposes to revise the Technical Specifications (TS) to correct certain requirements for the Loss of Power (LOP) instrumentation that were erroneously introduced by Amendment 81 (referenced above). The proposed amendment revises TS Table 3.3.8.1-1, to correct the number of Required Channels per Division for the LOP time delay functions and deletes the requirement to perform SR 3.3.8.1.2, the monthly Channel Functional Test, on certain LOP time delay functions. The proposed changes will achieve conformity with the current RBS design basis and regulatory standards.

The proposed change has been evaluated in accordance with 10 CFR 50.91(a)(1) using criteria in 10 CFR 50.92(c) and it has been determined that this change involves no significant hazards consideration. The basis for this determination is included in the attached submittal.

The proposed change does not include any new commitments.

Entergy requests approval of this amendment by September 15, 2005, on an exigent basis in accordance with 10 CFR 50.91, paragraph (a)(6). This request meets the criteria of 10 CFR 50.91 (a)(6) because time does not permit the NRC to publish a *Federal Register* notice allowing 30 days for prior public comment and the requested amendment involves no significant hazards considerations. In accordance with 10 CFR 50.91(a)(6)(vi), the exigency could not be avoided by Entergy as further discussed in Attachment 1 of this submittal.

A001

Entergy informed the NRC staff of the potential need for an exigent amendment in a teleconference held on August 24, 2005.

If you have any questions or require additional information, please contact Ron Byrd at 601-368-5792.

I declare under penalty of perjury that the foregoing is true and correct. Executed on August 31, 2005.

Sincerely,



Paul D. Hinnenkamp  
Vice President, Operations  
River Bend Station, Unit 1

PHD/RWB

Attachments:

1. Analysis of Proposed Technical Specification Change
2. Proposed Technical Specification Changes (mark-up)

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**Attachment 1**

**RBG-46474**

**Analysis of Proposed Technical Specification Change**

## 1.0 DESCRIPTION

This letter is a request to amend Operating License(s) NPF-47 for River Bend Station, Unit 1 (RBS).

The proposed changes will revise the Technical Specifications (TS) to correct certain requirements for the Loss of Power (LOP) instrumentation that were erroneously introduced by Amendment 81 (Reference 1). Amendment 81 approved the RBS conversion to the Improved Technical Specification format. This proposed amendment revises TS Table 3.3.8.1-1, to correct the number of Required Channels per Division for the LOP time delay functions and deletes the requirement to perform SR 3.3.8.1.2, the monthly Channel Functional Test, on certain LOP time delay functions.

Entergy requests approval of this amendment by September 15, 2005, on an exigent basis in accordance with 10 CFR 50.91, paragraph (a)(6). This request meets the criteria of 10 CFR 50.91 (a)(6) because time does not permit the NRC to publish a *Federal Register* notice allowing 30 days for prior public comment and the requested amendment involves no significant hazards considerations. In accordance with 10 CFR 50.91(a)(6)(vi), the exigency could not be avoided by Entergy.

Entergy previously believed that the NRC Safety Evaluation for Amendment 81 substantiated the conclusion that a monthly Channel Functional Test was not required for the LOP time delay functions and attempted to rectify the TS discrepancy with a TS Bases change in 1997. On August 16, 2005, Entergy reconsidered the nature of the discrepancy and determined that a TS change was needed to correct the TS. The applicable TS Surveillance Requirements were therefore considered to be not met.

Entergy determined that per SR 3.0.3, a 31 day delay period was allowed to complete the missed surveillance. Therefore the surveillance must be performed by September 16, 2005 or the Limiting Condition for Operation (LCO) must be declared not met. The LCO associated Required Actions require all three Diesel Generators (DGs) to be declared inoperable resulting in a TS required plant shutdown. Entergy began developing a test procedure to test the time delay functions on-line. However, such a test would require the temporary lifting of circuit leads that creates the potential for an inadvertent transient.

## 2.0 PROPOSED CHANGE

TS Table 3.3.8.1-1 lists the LOP Instrument functions required to be OPERABLE by LCO 3.3.8.1, LOP Instrumentation. The Table also includes the required number of channels per division for each function, the Surveillance Requirements, and Allowable Values for each instrument function.

Item 1 of Table 3.3.8.1-1 pertains to the requirements for Division 1 and Division 2 emergency bus undervoltage protection functions. There are three time delay functions included:

<u>Function</u>	<u>Required Channels per Division</u>	<u>Surveillance Requirements</u>
b. Loss of Voltage - Time Delay	3	SR 3.3.8.1.2 SR 3.3.8.1.3 SR 3.3.8.1.4
d. Degraded Voltage – Time Delay, No LOCA	3	SR 3.3.8.1.2 SR 3.3.8.1.3 SR 3.3.8.1.4
e. Degraded Voltage – Time Delay, LOCA	3	SR 3.3.8.1.2 SR 3.3.8.1.3 SR 3.3.8.1.4

The required number of channels for these functions are incorrect. While the Loss of Voltage and Degraded Voltage functions consist of three channels per division, the circuitry is designed such that all three channels for each function in each division send signals to a single time delay relay. Thus, the required channels for the above time delay functions should be changed from three per division to one per division to be consistent with the current RBS design.

In addition, the Surveillance Requirements for the time delay functions include a Channel Functional Test, SR 3.3.8.1.2, to be performed at least once every 31 days. While this SR is applicable to the Loss of Voltage and Degraded Voltage channel functions, it should not have been applied to the time delay functions because the time delay relay is not part of a channel (i.e., the channels lose their identity upstream of the time delay relays). This amendment request proposes to delete the requirement to perform SR 3.3.8.1.2 for Functions 1.b, 1.d, and 1.e.

Item 2 of Table 3.3.8.1-1 pertains to similar requirements for the Division 3 emergency bus undervoltage protection functions. Similar to Divisions 1 and 2, there are three time delay functions included:

<u>Function</u>	<u>Required Channels per Division</u>	<u>Surveillance Requirements</u>
b. Loss of Voltage - Time Delay	2	SR 3.3.8.1.3 SR 3.3.8.1.4
d. Degraded Voltage – Time Delay, No LOCA	2	SR 3.3.8.1.2 SR 3.3.8.1.3 SR 3.3.8.1.4
e. Degraded Voltage – Time Delay, LOCA	2	SR 3.3.8.1.2 SR 3.3.8.1.3 SR 3.3.8.1.4

The above Division 3 table is correct except for the requirement to perform SR 3.3.8.1.2 for function 2.d. This amendment request proposes to delete the requirement to perform SR 3.3.8.1.2 for Function 2.d.

The Division 3 bus incoming power is monitored for degraded voltage by two instrument channels which each contain an integrated time delay device. The channel time delay device of Function 2.e. is tested per SR 3.3.8.1.2 as part of Function 2.c.

Both degraded voltage monitoring channels (with the integrated time delay device) then combine signals (for a two-out-of-two logic) and output to two redundant "no-LOCA" time delay relays. Actuating either time delay relay will provide the LOP trip function. SR 3.3.8.1.2 should not have been applied to the "no-LOCA" time delay function because the time delay relays are not part of either channel (i.e., the channels lose their identity upstream of the time delay relays) and because actuation of either relay would cause the LOP trip function to actuate.

In summary, Entergy proposes to revise the RBS TS to correct the required number of channels for the LOP time delay functions and delete the requirement to perform a monthly Channel Functional Test for certain time delay functions.

### 3.0 BACKGROUND

#### 3.1 System Functional Description

The Loss of Power (LOP) instrumentation is installed to monitor the normal power supply to the 4.16 kV emergency buses. Successful operation of the Emergency Core Cooling Systems (ECCS) is dependent upon the availability of adequate power sources. Offsite power is the preferred source of power for the 4.16 kV emergency buses. If the monitors determine that sufficient power is not available, the buses are disconnected from the offsite power sources and connected to the onsite diesel generator (DG) power sources. Each 4.16 kV emergency bus has its own independent LOP instrumentation and associated trip logic. The voltage on each bus is monitored at two undervoltage protection levels: loss of voltage and degraded voltage.

##### Loss of Voltage

A loss of voltage on a 4.16 kV emergency bus indicates that offsite power may be completely lost to the respective emergency bus and is unable to supply sufficient power for proper operation of the applicable equipment. Therefore, the power supply to the bus is transferred from offsite power to DG power when the voltage on the bus drops below the preset values with a short time delay of approximately 3 seconds. This ensures that adequate power will be available to the required equipment. The time delay is long enough to provide time for the offsite power supply to recover to normal voltages, but short enough to ensure that power is available to the required equipment.

##### Degraded Voltage

A reduced voltage condition on a 4.16 kV emergency bus indicates that while offsite power may not be completely lost to the respective emergency bus, power may be insufficient for starting large motors without risking damage to the motors that could disable the ECCS

function. Therefore, power supply to the bus is transferred from offsite power to onsite DG power when the voltage on the bus drops below the preset values with a time delay. The time delay is set long enough to provide time for the offsite power supply to recover to normal voltages, but short enough to ensure that sufficient power is available to the required equipment.

The degraded voltage protection instrumentation is set at approximately 90 percent and utilizes two separate time delays based on the following conditions:

1. Degraded Voltage Time Delay - LOCA

One time delay is approximately 5 seconds, which accounts for a sustained degraded voltage condition (i.e., something longer than a motor starting transient). Following this delay, an alarm in the main control room alerts the operator to the degraded condition.

For Division 1 and 2, the subsequent occurrence of a LOCA signal immediately separates the Class 1E distribution system from the offsite power system, starts load shed logic and load sequence timers, starts the DG, and permits auto-close of the DG breaker.

For Division 3, the subsequent occurrence of a LOCA signal immediately separates the Division 3 bus from the offsite power system. The Division 3 bus will experience a loss of voltage and the primary undervoltage relays and control circuit will start load shed logic, start the diesel generator, and permit auto-close of the diesel generator breaker when the diesel generator attains its rated speed, voltage, and frequency.

2. Degraded Voltage Time Delay – no LOCA

The second time delay is approximately 60 seconds, which ensures that permanently connected Class 1E loads will not be damaged.

For Division 1 and 2, if the operator has failed to restore adequate voltages within this time delay, the Class 1E system is automatically separated from the offsite power system, the load shed logic and load sequence timers start, and the DG starts and permits auto-close of the DG breaker.

For Division 3, if the operator has failed to restore adequate voltages within the time delay, the Division 3 bus is automatically separated from the offsite power system. The Division 3 bus will experience a loss of voltage and the primary undervoltage relays and control circuit will start the load shed logic, start the diesel generator, and permit auto-close of the diesel generator breaker when the diesel generator attains its rated speed, voltage, and frequency.

The normal power supply to the Division 1 and 2 emergency buses are each monitored by six undervoltage relays. Three of the relays monitor the bus for a loss of voltage and three monitor the bus for degraded voltage conditions. The channels include electronic trip units that compare measured input signals with pre-established setpoints. When the setpoint is exceeded, the channel output relay actuates and outputs a LOP trip signal to the trip circuit.

The trip circuit is arranged in a two-out-of-three logic configuration. The trip circuit includes a time delay to avoid unnecessary trips.

The normal power supply to the Division 3 emergency bus is monitored by four undervoltage trip units, two for a loss of voltage and two for degraded voltage. The loss of voltage trip circuit is arranged in a one-out-of-two logic configuration with a time delay of approximately 3 seconds.

The Division 3 degraded voltage trip circuit is arranged in a two-out-of-two logic configuration. Both Division 3 degraded voltage monitors contain an integrated time delay of approximately 5 seconds. The output from the two monitors combine signals for a two-out-of-two logic and output to two redundant "no-LOCA" time delay relays. Actuating either time delay relay will provide the LOP trip function. The time delays provide a total delay of approximately 60 seconds for the "no-LOCA" condition.

### 3.2 Licensing Basis Background:

Prior to conversion to the Improved Technical Specifications (ITS), the RBS TS included the following requirements for LOP Instrumentation:

<u>Trip Function</u>	<u>Total Channels</u>	<u>Surveillance Requirements</u>
<u>1. Div. 1 &amp; 2</u>		
a. 4.16 kV Sustained Undervoltage	3/bus	Channel Check once per 12 hours, Channel Functional Test once per 31 days, and Channel Calibration once per 18 months.
b. 4.16 kV Degraded Voltage	3/bus	Same as above
<u>2. Div. 3</u>		
a. 4.16 kV Sustained Undervoltage	2/bus	Same as above
b. 4.16 kV Degraded Voltage	2/bus	Same as above.

Note that the time delay functions were not listed as separate functions prior to converting the RBS TS to the ITS format. The RBS TS was converted to the ITS format by Amendment 81 dated July 20, 1995. NUREG-1434, *Standard Technical Specifications, General Electric Plants, BWR/6*, included the LOP time delays as separate functions in Table 3.3.8.1-1, Loss of Power Instrumentation.

The RBS amendment request for the ITS conversion incorrectly listed the time delay functions for Divisions 1 and 2 as having three channels per division when in fact the RBS design uses only one single relay for each function in each division. The trip signal from the three channel trip logic is combined prior to the common time delay relay. This proposed amendment seeks to correct this error by identifying that the delay functions are only one per division.



In addition, the ITS NUREG, Rev. 0 provided Surveillance Requirements (SR) for the time delay functions. SR 3.3.8.1.2, the monthly Channel Functional Test, was bracketed in the ITS NUREG as it applied to the time delay functions. The ITS NUREG uses brackets for SRs that are optional. RBS incorrectly wrote the TS to apply the requirements of SR 3.3.8.1.2 to some of the LOP time delay functions. SRs that were required (i.e., not optional) for the time delay functions were SR 3.3.8.1.3, the Channel Calibration, and SR 3.3.8.1.4, the Logic System Functional Test. RBS correctly incorporated these SRs on an 18 month frequency.

SR 3.3.8.1.2, the optional monthly Channel Functional Test, should not have been incorporated into the RBS TS for most of the time delay functions because the time delay relays are not identified as part of the channel. The LOP channel trip signals for each function are combined to provide a single action signal to a single time delay relay. IEEE 279-1971 defines "Channel" as follows:

An arrangement of components and modules as required to generate a single protection action signal when required by a generating station condition. A channel loses its identity where single action signals are combined.

NRC Inspection Manual (IM) Part 9900, STD10D.TG, "Standard Technical Specification Section 1.0 Definitions," endorses the IEEE definition. The IM states,

A CHANNEL FUNCTIONAL TEST shall be:

- a. Analog channels - the injection of a simulated signal into the channel as close to the sensor as practicable to verify OPERABILITY including alarm and/or trip functions and channel failure trips.
- b. Bistable channels - the injection of a simulated signal into the sensor to verify OPERABILITY including alarm and/or trip functions.

THE CHANNEL FUNCTIONAL TEST may be performed by any series of sequential, overlapping, or total channel steps such that the entire channel is tested.

This definition is based on industry standards (IEEE-279 and 380) which define a "channel" as: "An arrangement of components and modules as required to generate a single protective action signal when required by a generating station condition. A channel loses its identity where single-action signals are combined."

Therefore, CFT must test to the point where single-action signals are combined. An entire channel includes all contacts, relays, indications, and alarms which precede the point where the single signals are combined.

Since the channels in the RBS circuitry lose their identity upstream of the timers associated with the "Loss of Voltage" and "Degraded Voltage" functions, the time delay functions should not have been included in the monthly Channel Functional Test. Furthermore, the NRC Safety Evaluation for Amendment 81 stated that separating the time delays in improved TS 3.3.8.1, was for presentation preference only and did not change any requirements due to this separation (see section 3.3.A.7 of Reference 1).

The changes proposed by this application for amendment seek to correct TS Table 3.3.8.1-1 to achieve conformity with the RBS design and the above regulatory position.

#### 4.0 TECHNICAL ANALYSIS

The proposed changes regarding the number of required channels per division for the time delay functions are administrative in nature. The changes do not alter the instrumentation design or their physical configuration, and will not affect their operation or manner of control. The proposed changes correct an inconsistency with the RBS design basis. The required number of voltage sensors per division and associated channel components that monitor voltage conditions and provide the 4.16 kV bus undervoltage protection are unchanged.

The proposed change to exclude the time delay functions from the requirements of SR 3.3.8.1.2, the monthly Channel Functional Test, is consistent with the option provided by the ITS NUREG and is consistent with the definition of a channel provided by IEEE 279 as endorsed by NRC IM Part 9900.

Performing the Channel Functional Test of the time delay functions during power operations is undesirable. While testing an individual channel does not create a loss of function for the LOP instrumentation, performing a functional test of the common time delay relay would create a loss of function for that division. The tests could also create the potential for an unintended plant transient.

RBS reviewed the testing and maintenance history for the LOP time delay relays and identified only one failure. The failure was identified by testing during a refueling outage in 1997. Given the reliable history of the LOP time delay relays, a monthly test is unwarranted and would be inappropriate to perform during power operations since the test causes a loss of the trip function and creates the potential for a plant transient.

#### 5.0 REGULATORY ANALYSIS

##### 5.1 Applicable Regulatory Requirements/Criteria

The proposed changes have been evaluated to determine whether applicable regulations and requirements continue to be met.

Entergy has determined that the proposed changes do not require any exemptions or relief from regulatory requirements, other than the TS, and do not affect conformance with any General Design Criterion (GDC) differently than described in the Updated Final Safety Analysis Report (UFSAR.)

Excluding the time delay functions from the Channel Functional Test is consistent with the standards of IEEE 279 as endorsed by NRC IM Part 9900.

10 CFR 50.36 (c)(3) requires the TS to include Surveillance 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. The Channel Functional Test will continue to be performed every 31

days for the sensor channels that input signals to the time delays. In addition, the LOP time delay functions will continue to be functionally tested and calibrated every 18 months as required by SR 3.3.8.1.3 and SR 3.3.8.1.4. Therefore, the required LOP instrumentation continues to be tested in a manner and at a frequency necessary to provide confidence that the instrumentation can perform its intended safety function.

## 5.2 No Significant Hazards Consideration

Entergy Operations, Inc. (Entergy) proposes to revise the River Bend Station Technical Specifications (TS) to correct certain requirements for the Loss of Power (LOP) instrumentation that were erroneously introduced by Amendment 81. The proposed amendment revises TS Table 3.3.8.1-1, to correct the number of Required Channels per Division for the LOP time delay function and deletes the requirement to perform SR 3.3.8.1.2, the monthly Channel Functional Test, on the LOP time delay function. The proposed changes will achieve conformity with the current RBS design basis and regulatory standards.

Entergy Operations, Inc. has evaluated whether or not a significant hazards consideration is involved with the proposed amendment(s) by focusing on the three standards set forth in 10 CFR 50.92, "Issuance of amendment," as discussed below:

1. Does the proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No.

The proposed changes regarding the number of required channels per division for the LOP time delay functions are administrative in nature. The changes do not alter the instrumentation design or their physical configuration, and will not affect their operation or manner of control. The proposed changes correct an inconsistency between a TS Table and the RBS design basis. The TS required number of voltage sensors per division and associated channel components that monitor voltage conditions and provide the 4.16 kV bus undervoltage protection are unchanged.

The exclusion of the time delay functions from the monthly Channel Functional Test is proposed because the test creates a loss of function for the LOP instrumentation and is therefore undesirable during unit operations. The test also introduces the potential for an unintended plant transient, so the elimination of the requirement reduces the potential for such transients.

The channel functional test will continue to be performed every 31 days for the sensor channels. In addition, the LOP time delay functions will continue to be functionally tested and calibrated every 18 months as required by SR 3.3.8.1.3 and SR 3.3.8.1.4. Therefore, the required LOP instrumentation will continue to be tested in a manner and at a frequency necessary to provide confidence that the instrumentation can perform its intended safety function.

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

2. Does the proposed change create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No.

The changes do not alter the instrumentation design or their physical configuration, and will not affect their operation or manner of control. The proposed TS changes do not introduce any new failure mechanisms, malfunctions, or accident initiators not considered in the design and licensing bases.

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

3. Does the proposed change involve a significant reduction in a margin of safety?

Response: No.

The proposed changes have no affect on any safety analysis assumptions or methods of performing safety analyses. The changes do not adversely affect system OPERABILITY or design requirements and the equipment continues to be tested in a manner and at a frequency necessary to provide confidence that the equipment can perform its intended safety functions. 10 CFR 50.36 (c)(3) requires the TS to include Surveillance 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. The channel functional test will continue to be performed every 31 days for the sensor channels. In addition, the LOP time delay functions will continue to be functionally tested and calibrated every 18 months as required by SR 3.3.8.1.3 and SR 3.3.8.1.4.

Therefore, the proposed change does not involve a significant reduction in a margin of safety.

Based on the above, Entergy concludes that the proposed amendment(s) present no 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.

### 5.3 Environmental Considerations

The proposed amendment does not involve (i) a significant hazards consideration, (ii) a significant change in the types or significant increase in the amounts of any effluent that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed amendment meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed amendment.

## 6.0 PRECEDENCE

The standards defining what constitutes an instrument "channel" for the purposes of performing a Channel Functional Test are set forth in IEEE 279 and NRC IM Part 9900. The proposed changes are consistent with these standards.

## 7.0 REFERENCES

- 7.1 Letter RBC-46160 from USNRC to Mr. John R, McGaha of Entergy Operations, Inc., "Amendment No. 81 to Facility Operating License No. NPF-47 (TAC No. M88314) dated July 20, 1995

**Attachment 2**

**RBG-46474**

**Proposed Technical Specification Changes (mark-up)**

LOP Instrumentation  
3.3.8.1

Table 3.3.8.1-1 (page 1 of 1)  
Loss of Power Instrumentation

FUNCTION	REQUIRED CHANNELS PER DIVISION	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
1. Divisions 1 and 2 - 4.16 kV Emergency Bus Undervoltage			
a. Loss of Voltage - 4.16 kV basis	3	SR 3.3.8.1.1 SR 3.3.8.1.2 SR 3.3.8.1.3 SR 3.3.8.1.4	$\geq 2850$ V and $\leq 3090$ V
b. Loss of Voltage - Time Delay	2	<del>SR 3.3.8.1.2</del> SR 3.3.8.1.3 SR 3.3.8.1.4	$\geq 2.67$ seconds and $\leq 3.33$ seconds
c. Degraded Voltage - 4.16 kV basis	3	SR 3.3.8.1.1 SR 3.3.8.1.2 SR 3.3.8.1.3 SR 3.3.8.1.4	$\geq 3689.0$ V and $\leq 3735.2$ V
d. Degraded Voltage - Time Delay, No LOCA	2	<del>SR 3.3.8.1.2</del> SR 3.3.8.1.3 SR 3.3.8.1.4	$\geq 53.4$ seconds and $\leq 88.6$ seconds
e. Degraded Voltage - Time Delay, LOCA	2	<del>SR 3.3.8.1.2</del> SR 3.3.8.1.3 SR 3.3.8.1.4	$\geq 4.5$ seconds and $\leq 5.7$ seconds
2. Division 3 - 4.16 kV Emergency Bus Undervoltage			
a. Loss of Voltage - 4.16 kV basis	2	SR 3.3.8.1.1 SR 3.3.8.1.3 SR 3.3.8.1.4	$\geq 2831$ V and $\leq 3259$ V
b. Loss of Voltage - Time Delay	2	SR 3.3.8.1.3 SR 3.3.8.1.4	$\geq 2.67$ seconds and $\leq 3.33$ seconds
c. Degraded Voltage - 4.16 kV basis	2	SR 3.3.8.1.1 SR 3.3.8.1.2 SR 3.3.8.1.3 SR 3.3.8.1.4	$\geq 3674.0$ V and $\leq 3721.2$ V
d. Degraded Voltage - Time Delay, No LOCA	2	<del>SR 3.3.8.1.2</del> SR 3.3.8.1.3 SR 3.3.8.1.4	$\geq 53.4$ seconds and $\leq 68.6$ seconds
e. Degraded Voltage - Time Delay, LOCA	2	SR 3.3.8.1.2 SR 3.3.8.1.3 SR 3.3.8.1.4	$\geq 4.5$ seconds and $\leq 5.7$ seconds