



Entergy Nuclear-South
River Bend Station
5485 U.S. Highway 61
P.O. Box 220
St. Francisville, LA 70775
Tel 225 381 4374
Fax 225 381 4872
phinnen@entergy.com

Paul D. Hinnenkamp
Vice President, Operations
River Bend Station

RBG-45936

May 14, 2002

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

Subject: River Bend Station
Docket No. 50-458
License No. NPF-47
License Amendment Request (LAR) 2002-08, "Division 1, 2, and 3 Degraded Voltage Setpoint Revision due to Updated Calculations and Installation of Improved Relays"

REFERENCES: NRC Inspection Report No. 50-458/00-17, October 30, 2000

Dear Sir or Madam:

Pursuant to 10CFR50.90, Entergy Operations, Inc. (Entergy) hereby requests the following amendment for River Bend Station, Unit 1. The Degraded Voltage – Voltage basis and LOCA time delay allowable values (Technical Specification Table 3.3.8.1-1, Items 1 c & e; and Items 2 c & e) are revised to reflect the results of new calculations performed in association with a design basis reconstitution. The new values are based on the replacement of the Division 1 and 2 degraded voltage relays and reflect analysis that ensures adequate voltage is provided to required equipment with instrument uncertainty and drift of the degraded voltage instruments taken into account.

The proposed change has been evaluated in accordance with 10CFR50.91(a)(1) using criteria in 10CFR50.92(c) and it has been determined that this change involves no significant hazards considerations. The bases for these determinations are included in the attached submittal.

The proposed change includes new commitments as summarized in Attachment 4.

Entergy requests approval of the proposed amendment by January 30, 2003, to allow revision of the applicable Surveillance Test Procedures prior to Refueling Outage RF-11, which is scheduled for spring, 2003. Because the amendment cannot be implemented until circuit modifications have been performed during Refueling Outage RF-11, Entergy requests an implementation date of prior to restart from Refueling Outage RF-11. Although this request is neither exigent nor emergency, your prompt review is requested.

Pool

If you have any questions or require additional information, please contact Joe Leavines at 225-381-4642.

I declare under penalty of perjury that the foregoing is true and correct. Executed on 05/14/02.

Sincerely,



PDH/khj

Attachments:

1. Analysis of Proposed Technical Specification Change
2. Proposed Technical Specification Changes (mark-up)
3. Changes to TS Bases pages
4. List of Regulatory Commitments

cc: U. S. Nuclear Regulatory Commission
Region IV
611 Ryan Plaza Drive, Suite 400
Arlington, TX 76011

NRC Senior Resident Inspector
P. O. Box 1050
St. Francisville, LA 70775

U.S. Nuclear Regulatory Commission
Attn: Mr. David J. Wrona MS O-7D1
Washington, DC 20555-0001

Mr. Prosanta Chowdhury
Program Manager – Surveillance Division
Louisiana Department of Environmental Quality
Office of Radiological Emergency Plan and Response
P. O. Box 82215
Baton Rouge, LA 70884-2215

Attachment 1

RBG-45936

Analysis of Proposed Technical Specification Change

1.0 DESCRIPTION

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

The proposed change will revise Technical Specification Table 3.3.8.1-1 by modifying the allowable values for Division 1, 2, and 3 degraded voltage instrumentation. Entergy has determined that the existing Technical Specifications require this change to resolve a degraded condition under which Class 1E Motor Operated Valves are currently considered Operable but Degraded. Replacement of the existing Division 1 and 2 degraded undervoltage relays with models of increased accuracy is planned for Refueling Outage 11 to support the new allowable values. Entergy considers this change as providing a safety improvement.

2.0 PROPOSED CHANGE

The proposed change would revise Technical Specification Table 3.3.8.1-1 allowable values as follows:

Division 1 and 2 Degraded Voltage	Current Value	Proposed Value
<i>Item 1c - 4.16 KV basis</i>		
Minimum Allowable Value	≥ 3605 V	≥ 3689.0 V
Maximum Allowable Value	≤ 3875 V	≤ 3735.2 V
<i>Item 1e – Time Delay, LOCA</i>		
Minimum Allowable Value	≥ 2.67 seconds	≥ 4.5 seconds
Maximum Allowable Value	≤ 3.33 seconds	≤ 5.7 seconds
Division 3 Degraded Voltage	Current Value	Proposed Value
<i>Item 2c - 4.16 KV basis</i>		
Minimum Allowable Value	≥ 3702 V	≥ 3674.0 V
Maximum Allowable Value	≤ 3852 V	≤ 3721.2 V
<i>Item 2e – Time Delay, LOCA</i>		
Minimum Allowable Value	≥ 2.67 seconds	≥ 4.5 seconds
Maximum Allowable Value	≤ 3.33 seconds	≤ 5.7 seconds

These allowable value changes support corresponding setpoint changes to ensure that minor voltage transients will not result in an inadvertent power supply transfer; however, sustained degradations in voltage will result in emergency bus transfer to the onsite power supplies.

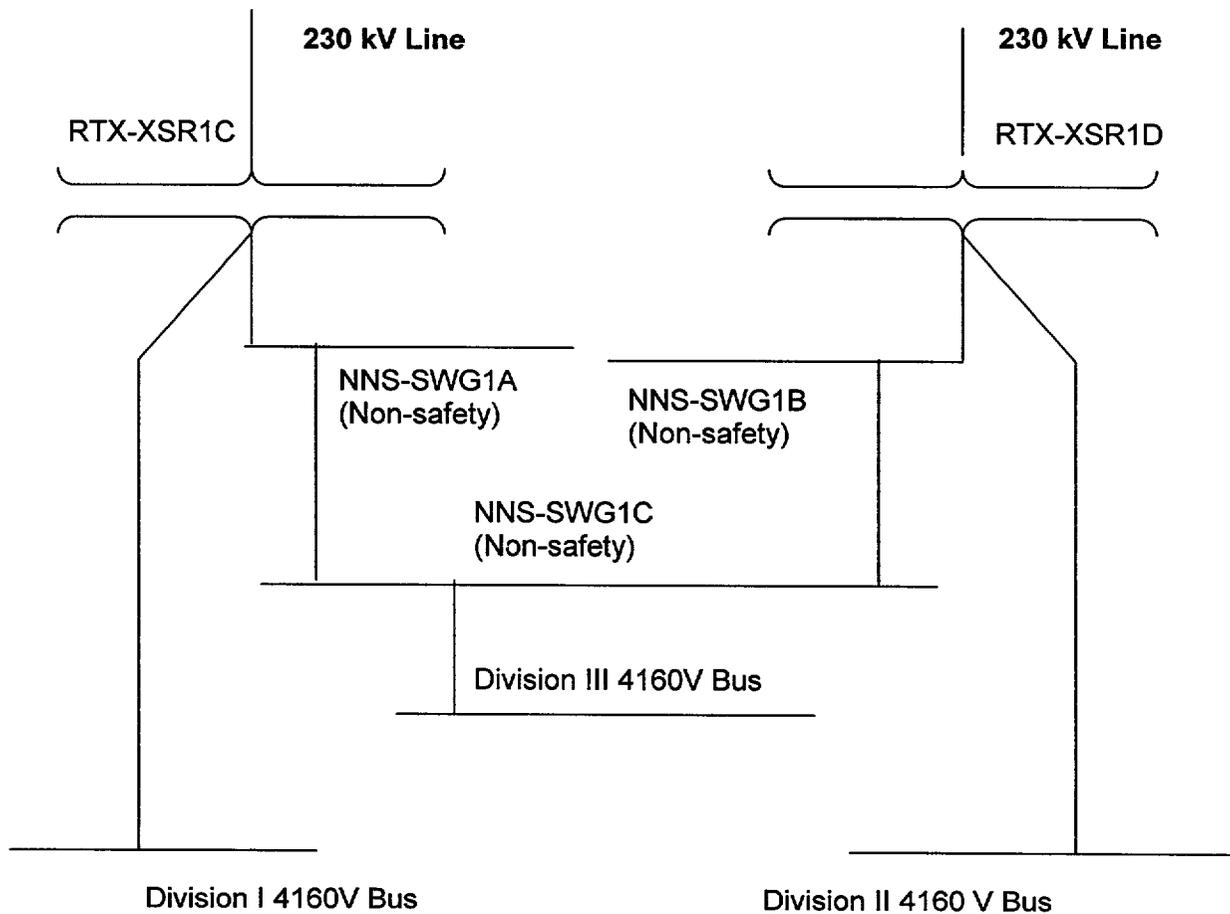
Changes will also be made to the TS Bases in accordance with the Bases Control Program of TS 5.5.11. Initial conditions assumed in the calculation of the degraded voltage allowable values will be added to the Bases for Technical Specification 3.3.8.1 for clarification. These changes are provided in Attachment 3 for your information

3.0 BACKGROUND

The undervoltage protection scheme at River Bend consists of two levels of protection for Class 1E equipment. The first level is set at approximately 70% of nominal bus voltage with a time delay of three seconds. Following this delay the Class 1E distribution system is automatically separated from the offsite power system.

The second level of undervoltage protection is designed to actuate when grid voltages fall below 0.95 per unit, which corresponds to an emergency bus voltage of approximately 90% rated voltage. Each divisional 4160 V safety related bus has a dedicated circuit consisting of relays arranged in a 2-out-of-3 coincidence logic with two separate time delays. The first time delay is approximately 3 seconds to accommodate normal motor starting transients. Following this delay, an alarm in the main control room alerts the operator to the degraded condition. An occurrence of a LOCA signal subsequent to this degraded voltage condition immediately separates the Class 1E 4160 V safety related bus from the offsite power system. The second time delay is approximately 60 seconds. After this delay, if the operator has failed to restore adequate voltages, the Class 1E 4160 V safety related bus is automatically separated from the offsite power system.

The River Bend Station Division 1 4160 V safety related bus is fed directly from preferred transformer RTX-XSR1C and the Division 2 4160 V safety related bus is fed directly from preferred transformer RTX-XSR1D. A non-safety 4160 V bus is also fed from each of these preferred transformers. In turn, a third non-safety 4160 V bus can be fed from either of the upstream non-safety 4160 V buses. See Simplified One-Line Diagram below:



RBS Simplified One-Line

Technical Specification Bases criteria for the Degraded Voltage instrumentation requires: 1) the Degraded Voltage Allowable Values to be low enough to prevent inadvertent power supply transfer, but high enough to ensure that sufficient voltage is available to the required equipment; and 2) the Time Delay Allowable Values be 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

NRC Inspection Report No. 50-458/00-17, dated October 30, 2000, identified the following finding:

The specified minimum voltage on the ac buses used to calculate equipment operability was based on an assumption of 95 percent nominal voltage at the Fancy Point substation in lieu of the more limiting technical specification allowable value for the degraded grid voltage relays on the 4.16 kV buses. The technical specification bases stated that these relays were set high enough to ensure that sufficient power was available to the required equipment. However, design calculations did not exist to support this statement. The non-conservative voltage assumption resulted in overestimating the minimum voltage available for motor-operated valves and other loads on the safety-related 480 Vac buses.

An operability determination was performed and documented in accordance with the RBS corrective action program. Because all Class 1E motors were purchased to be capable of starting and accelerating their driven equipment with motor terminal voltages of 70 or 80 percent of motor nameplate voltage without affecting performance or equipment life, no operability concerns existed for any equipment with the exception of the motor operated valves governed by GL 89-10. These valves require the performance of an analysis to determine the minimum starting voltage necessary to ensure the torque or thrust that must be delivered to the valve stem by the motor operator is available. These calculations for the current Technical Specification allowable values did not exist; therefore, compensatory measures were required to ensure motor operated valve operability. These compensatory measures consisted of compliance with the Technical Requirements Manual (TRM) degraded voltage setpoints and the addition of main control room alarms to alert the operators of both Low Grid Voltage (98%) and Low-Low Grid Voltage (96.5%) conditions. Calculations were performed to demonstrate that adjustment of the degraded voltage relays to the TRM minimum setpoints ensured sufficient voltage was available for the GL 89-10 motor operated valves to develop the required torque or thrust. A grid stability study has shown that grid voltages below 1.00 per unit are infrequent and short in duration. To provide additional assurance that grid stability does not adversely impact the safety of RBS, low grid voltage alarms were provided. This alarm allows operations to take preemptive measures to conservatively place the plant in a safe condition due to low grid voltage. Based on these compensatory measures, the GL 89-10 applicable MOV's were determined to be operable but degraded.

Subsequent calculations performed in conjunction with a design basis reconstitution effort demonstrated that the existing Technical Specification Allowable Values for the degraded voltage relays and time delays did not satisfy the Technical Specification Bases criteria. The minimum allowable degraded voltage value did not support operation of all GL 89-10 applicable MOV's. The maximum allowable degraded voltage value did not provide sufficient margin to ensure that the instrument would reset following an Emergency Core Cooling System (ECCS) pump start. The allowable values for the degraded voltage time delay-LOCA were too short to prevent relay actuation during the LOCA sequencing of multiple ECCS pumps.

Based on the calculation results, the allowable voltage band for the degraded voltage relays will be smaller. Because the design specifications for the current Division 1 and 2 relays are not compatible with the revised allowable band, actions have been initiated to modify the circuit design and install degraded voltage relays with the required accuracy and deadband. Deadband is the difference between the relay's actuation point and deactuation (reset) point. The Division 3 circuit already contains the improved relay; therefore, replacement of this component is not required.

4.0 TECHNICAL ANALYSIS

The revised set points were developed to allow recovery from the motor starting transients at reduced voltages and ensure the degraded voltage relay setpoints are optimized. The methodology of IEEE Standard 741-1997, "Criteria for the Protection of Class 1E Power Systems and Equipment in Nuclear Power Generating Stations" was used to determine the new degraded voltage relay allowable values. During the performance of the degraded voltage calculation, it was determined that the Division 1 and Division 2 degraded voltage relays should be upgraded to the same model used on Division 3 with a minimum deadband of 0.5% of setting. The smaller deadband provides for a higher maximum allowable value. Because the degraded relay allowable value is reached during emergency motor starting with the grid at the minimum acceptable voltage, the reset value must be low enough to ensure that the relay resets following the motor start. By reducing the deadband, it is possible to increase the relay's maximum allowable value, which will also result in a higher minimum allowable voltage.

Maximum Allowable Voltage Basis

Technical Specification Bases criteria for the Maximum Degraded Bus Voltage Allowable Values requires a voltage low enough to prevent inadvertent power supply transfer. The initial conditions assumed in these calculations are grid voltage at the design minimum value with the associated Preferred Station Transformer (RTX-XSR1C or RTX-XSR1D) supplying all automatically loaded emergency loads (ten minute loading) in addition to the maximum postulated non-safety 4160 Vac bus loads with the exception of heater drain pumps. To be consistent with normal operating practices, each transformer was assumed to be providing power to only one operating heater drain pump. Based on these initial conditions, the associated Class 1E 4160 V safety related bus voltage was determined utilizing PowerStation software and model values. This load flow program has been verified in accordance with Branch Technical Position PSB-1 through comparison with original plant test data. Because the safety related bus voltage falls below the degraded voltage relay trip setpoint during the sequencing of the automatically initiated emergency loads (see Time Delay Allowable Value Basis section for discussion of this transient), the voltages calculated by this program represent the maximum reset values for the degraded voltage relays. The Maximum Degraded Bus Voltage Allowable Values are then determined by subtracting the relay deadband from these calculated reset voltages.

Using this methodology, the load flow calculations determined the maximum allowable degraded bus voltage relay reset value that would prevent transfer to the onsite source with 0.95 per unit at the grid (218.5 KV). Calculations were performed for both Division 3 power lineups (i.e., supplied by either Preferred Station Transformer). The standby service water pumps were conservatively included as a load, even though the normal service water pumps should remain running and supply safety-related loads with offsite power available. Automatic initiation of the SSW system only occurs when the normal service water system pressure or the reactor plant component cooling water system pressure drops below preset values. The load flow calculations determined that the maximum allowable safety bus degraded voltage relay reset values were 3754 Vac both for the Division 1 and 2 emergency buses and 3740 Vac for the Division 3 emergency bus. These reset values correspond to maximum allowable safety bus degraded voltage relay values of 3735.2 Vac both for the Division 1 and 2 emergency buses and 3721.2 Vac for the Division 3 emergency bus with a relay deadband of 0.5% of the setting.

Load flow calculations were then performed at a minimum grid voltage of 220 kV, as referenced in USAR Section 8.2.1, with automatically started LOCA accident loads and the maximum postulated load (including both heater drain pumps) on the non-safety 4160 V buses attached to the Preferred Station Transformers to determine if the relays would reset with the degraded voltage relay trip setpoints at these maximum allowable values. Separate cases were run for maximum loading on each Preferred Transformer. This calculation determined that a transfer to the onsite power source does not occur with the offsite source at the license basis limit of 220 kV and transformer RTX-XSR1C carrying its maximum load. However, due to significantly longer cable runs associated with RST-XSR1D, inadvertent power supply transfer of the Division 2 and Division 3 4160 v safety buses was determined to occur assuming the same initial conditions. The maximum loading condition is conservative because it assumes that the following non-safety loads are powered from RTX-XSR1D (RTX-XSR1C is assumed to be powering no non-safety loads): 1) two 1250 HP turbine building chillers 98% loaded; 2) two 1250 HP heater drain pumps; and 3) one fully loaded radwaste building chiller. In addition, a 5 HP margin load is added to each safety related motor control center to allow for future modifications.

The final load flow calculations determined the minimum grid voltage required, to ensure that an inadvertent power supply transfer of the Division 2 and Division 3 4160 v safety buses did not occur. Assuming the maximum loading condition of transformer RTX-XSR1D described in the previous paragraph, with automatically started LOCA loads, (which results in a transformer loading of 107% rated KW) the degraded voltage relays are demonstrated to reset at a grid voltage of 220.524 kV. Because this is significantly below the main control room Low-Low Grid Voltage alarm of 221.95kV, Entergy commits to revising the alarm response procedures to ensure that Preferred Station Transformer RTX-XSR1D is supplying no more than three 1250 HP motors with the grid voltage below this alarm setpoint.

In summary, the maximum allowable safety bus degraded voltage relay values of 3735.2 Vac for the Division 1 and 2 emergency buses and 3721.2 Vac for the Division 3 emergency bus are low enough to prevent inadvertent power supply transfer down to a grid voltage of 0.95 per unit (218.5 KV) assuming normal load distribution on the non-safety related buses. In addition, these setpoints prevent inadvertent power supply transfer at the minimum grid voltage referenced in USAR Section 8.2.1 (220 kV) with transformer RTX-XSR1C carrying its maximum load. To ensure inadvertent power supply transfer is prevented with RTX-XSR1D carrying its

maximum load, administrative controls will be established to prohibit this highly unusual lineup with the grid voltage below the main control room Low-Low Grid Voltage alarm.

Minimum Allowable Voltage Basis

The minimum allowable safety bus voltages were determined using the total loop uncertainty. This methodology results in an adequate range of voltages in which the relays' trip setpoint may be adjusted while providing sufficient margin to the allowable values to account for instrument drift. The total loop uncertainty for Division 1 and 2 is 22.9 kV. The total loop uncertainty for Division 3 is 23.4 kV. The loop uncertainty includes the impact of the relays having harmonic filters installed. Based on these uncertainties, the minimum allowable safety bus degraded voltage relay values were determined to be 3689.0 Vac for the Division 1 and 2 emergency buses and 3674.0 Vac for the Division 3 emergency bus. These values were validated by ensuring that all GL 89-10 applicable motor operated valves were capable of performing their safety function at these voltages. In addition, all other loads were determined to have adequate voltage to operate once minor modifications to certain 120 volt loads are performed during RF11.

Time Delay Allowable Value Basis

A dynamic motor starting analysis was performed for the initial emergency load sequence with the worst case drift on the sequence relays. This evaluation determined that the maximum time the voltage took to return to the reset value following a motor starting transient at 0.95 per unit grid voltage was approximately 3.5 seconds. Therefore a minimum delay of 4.5 seconds was selected for the LOCA short time degraded voltage time delay. The voltage transient was determined to be approximately 3.8 seconds at the approximate minimum allowable pickup value. The existing time delay was found to be adequate at 1.0 per unit voltage at the grid. A review of the time characteristic curves for motor breakers shows the 5.7 second maximum degraded voltage time delay with a LOCA signal is short enough to prevent tripping of any safety related motor that is attempting to start. Because the diesel start due to a Loss of Coolant Accident signal is not impacted by this change, the degraded voltage time delays will continue to isolate the Class 1E distribution system from offsite power before the diesel is ready to assume the emergency loads during an actual degraded voltage condition. In addition, the maximum LOCA degraded voltage time delay relay setpoint continues to be considerably shorter than the non-LOCA degraded voltage time delay relay allowable value of 66.6 seconds; therefore, equipment protection is not impacted by this change.

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 GDC differently than described in the SAR.

5.2 No Significant Hazards Consideration

Entergy Operations, Inc. (Entergy) proposes changes to the Degraded Voltage – Voltage basis and LOCA time delay allowable values to reflect the results of new calculations performed in association with a design basis reconstitution. Entergy 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 change in the degraded voltage protection voltage and time delay allowable values allows the protection scheme to function as originally designed. The proposed allowable values ensure that the Class 1E distribution system remains connected to the offsite power system when adequate offsite voltage is available and motor starting transients are considered. Replacement of the Division 1 and 2 degraded voltage relays provide operational flexibility to accommodate the proposed protection voltage allowable values, which are more conservative than the current limits. Calculations have demonstrated that adequate margin is present to support the decrease in the minimum allowable Division 3 degraded voltage. The small increase in the time delay allowable values more accurately reflects the actual load sequencing experienced during an accident condition. The proposed time delay continues to provide equipment protection while preventing a premature separation from offsite power. The diesel start due to a Loss of Coolant Accident signal is not impacted by this change. During an actual degraded voltage condition, the degraded voltage time delays will continue to isolate the Class 1E distribution system from offsite power before the diesel is ready to assume the emergency loads, which is the limiting time basis for mitigating system responses to the accident. For this reason, the existing Loss of Power / Loss of Coolant accident analysis continues to be valid.

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 proposed change involves the revision of degraded voltage protection voltage and time delay allowable values to satisfy existing design requirements. Component replacement necessary to support these new values will be performed in accordance with plant procedures, which ensure adherence with all quality requirements. No additional failure mechanisms are introduced as a result of the changes to the allowable values.

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 protection voltage allowable values are low enough to prevent inadvertent power supply transfer, but high enough to ensure that sufficient voltage is available to the required equipment. The small increase in the time delay allowable values more accurately reflects the actual load sequencing experienced during an accident condition. The proposed time delay continues to provide equipment protection while preventing a premature separation from offsite power. The diesel start due to a Loss of Coolant Accident signal is not impacted by this change. During an actual degraded voltage condition, the degraded voltage time delays will continue to isolate the Class 1E distribution system from offsite power before the diesel is ready to assume the emergency loads.

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.

Attachment 2

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Proposed Technical Specification Changes (mark-up)

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	≥ 2850 V and ≤ 3090 V
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	≥ 2.67 seconds and ≤ 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	≥ 3600 V and ≤ 3875 V 3689.0 3735.2
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	≥ 53.4 seconds and ≤ 66.6 seconds
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	4.5 ≥ 2.67 seconds and ≤ 3.33 seconds 5.7
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	≥ 2831 V and ≤ 3259 V
b. Loss of Voltage - Time Delay	2	SR 3.3.8.1.3 SR 3.3.8.1.4	≥ 2.67 seconds and ≤ 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	≥ 3702 V and ≤ 3802 V 3674.0 3721.2
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	≥ 53.4 seconds and ≤ 66.6 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	4.5 ≥ 2.67 seconds and ≤ 3.33 seconds 5.7

Attachment 3

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Changes to Technical Specification Bases Pages

BASES

APPLICABLE SAFETY ANALYSES, LCO, and APPLICABILITY (continued) 1.c, 1.d, 1.e, 2.c, 2.d, 2.e. 4.16 kV Emergency Bus Undervoltage (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 Degraded Voltage Function Allowable Values (degraded voltage with a time delay). This ensures that adequate power will be available to the required equipment.

The Bus Undervoltage Allowable Values are low enough to prevent inadvertent power supply transfer, but high enough to ensure that sufficient power is available to the required equipment. The Time Delay Allowable Values are 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.

Three channels of Division I and II - 4.16 kV Emergency Bus Undervoltage (Degraded Voltage) Function per associated emergency bus and two channels of Division III - 4.16 kV Emergency Bus Undervoltage (Degraded Voltage) Functions per associated emergency bus are only required to be OPERABLE when the associated DG is required to be OPERABLE to ensure that no single instrument failure can preclude the DG function. Refer to LCO 3.8.1 and LCO 3.8.2 for Applicability Bases for the DGs.

ACTIONS A Note has been provided to modify the ACTIONS related to LOP instrumentation channels. Section 1.3, Completion Times, specifies that once a Condition has been entered, subsequent divisions, subsystems, components, or variables expressed in the Condition discovered to be inoperable or not within limits will not result in separate entry into the Condition. Section 1.3 also specifies that Required Actions of the Condition continue to apply for each additional failure, with Completion Times based on initial entry into the Condition. However, the Required Actions for inoperable LOP instrumentation channels provide appropriate compensatory measures for separate inoperable channels. As such, a Note has been provided that allows separate Condition entry for each inoperable LOP instrumentation channel.

(continued)

To ensure an inadvertent power supply transfer does not occur, no more than three 1250 HP motors may be powered by Preferred Station Transformer RTX-XRS1D with grid voltage below the main control room Low-Low Grid Voltage alarm setpoint.

Attachment 4

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List of Regulatory Commitments

List of Regulatory Commitments

The following table identifies those actions committed to by Entergy in this document. Any other statements in this submittal are provided for information purposes and are not considered to be regulatory commitments.

COMMITMENT	TYPE (Check one)		SCHEDULED COMPLETION DATE (If Required)
	ONE- TIME ACTION	CONTINUING COMPLIANCE	
Entergy will revise the alarm response procedure for the main control room Low-Low Grid Voltage alarm to ensure that Preferred Station Transformer RTX-XSR1D is supplying no more than three 1250 HP motors with the grid voltage below the alarm setpoint.	X		RF11 Restart