Entergy

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River Bend Station
5485 U.S. Highway 61N
St. Francisville, LA 70775

RBG-47430

January 31, 2014

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

Subject: Response to Request For Additional Information Regarding Response To Bulletin 2012-01, "Design Vulnerability In Electric Power System"
River Bend Station – Unit 1
License No. NPF-47
Docket No. 50-458

References:
1. Letter RBG-47299, October 24, 2012, 90-Day Response to Bulletin 2012-01
2. Request For Additional Information Regarding Response To Bulletin 2012-01, "Design Vulnerability In Electric Power System," dated December 20, 2013

RBF1-14-0013

Dear Sir or Madam:

On July 27, 2012, the U.S. Nuclear Regulatory Commission (NRC) issued Bulletin 2012-01, "Design Vulnerability in Electric Power System" to all holders of operating licenses and combined licenses for nuclear power reactors. In addition, Watts Bar Nuclear Plant, Unit 2, is addressing the issues identified in the bulletin as part of the licensing process. Bulletin 2012-01 requested information about each facility's electric power system designs, in light of recent operating experience involving the loss of one of the three phases of the offsite power circuit (single-phase open circuit condition) at Byron Station, Unit 2. Per Reference 1, River Bend Station provided the initial response to the Bulletin.

On December 20, 2013, NRC issued to licensees a request for additional information (Reference 2). Attachment 1 to this letter provides the requested information relative to River Bend Station.

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This letter contains no commitments. Should you have any questions regarding this submittal, please contact Joseph Clark at 225-381-4177.

I declare under penalty of perjury that the foregoing is true and correct. Executed on January 31, 2014.

Sincerely,

Terry A. Evans
Director – Regulatory and Performance Improvement

TAE/dhw

Attachment

cc: U. S. Nuclear Regulatory Commission
Region IV
1600 East Lamar Blvd.
Arlington, TX 76011-4511

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

Department of Environmental Quality
Office of Environmental Compliance
Radiological Emergency Planning and Response Section
JiYoung Wiley
P.O. Box 4312
Baton Rouge, LA 70821-4312

U.S. Nuclear Regulatory Commission
Attn: Mr. Alan Wang
Washington, DC 20555-0001

Public Document Room
Public Utility Commission of Texas
1701 N. Congress Ave.
Austin, TX 78711-3326

Attachment 1
RBG-47430

Response to Request For Additional Information Regarding Response To Bulletin 2012-01, "Design Vulnerability In Electric Power System"

REQUEST NO. 1

Provide a summary of all interim corrective actions that have been taken since the January 30, 2012, event at Byron Station, Unit 2, to ensure that plant operators can promptly diagnose and respond to open phase conditions on the offsite power circuits for Class-1 E vital buses until permanent corrective actions are completed.

RESPONSE:

The interim corrective actions that have been taken are as follows:

Operations Standing Order #257, "Guidelines for Single Failed Phase Event," was written to provide guidance for diagnosis of a single phase event similar to that which occurred at Byron.

Operations Section Procedure (OSP)-0028, "Log Report - Normal Switchgear, Control, And Diesel Generator Buildings," was revised to add walkdowns of transformer yards to inspect for a possible open circuit on the phases.

OSP-0031, "Log Report - Outside Area," was revised to add inspections of disconnects on 230kV side of the preferred station transformers for a possible open circuit on the phases.

REQUEST NO. 2

Provide a status and schedule for completion of plant design changes and modifications to resolve issues with an open phase of electric power.

RESPONSE:

RBS is developing a design change modification for an open phase detection (OPD) System developed by PCS2000 Solutions.

RBSs offsite power source outage schedule is such that only one of the two offsite power sources is taken out of service during a scheduled refueling outage (RF). Nuclear Energy Institute's (NEI) open phase condition (OPC) initiative document requires all sites to complete the "monitoring" phase of the design change by Dec 31, 2016, and the "active" actuation phase of the design change by Dec 31, 2017. The next two refueling outages for RBS are scheduled in February 2015 (RF-18) and February 2017 (RF-19). The two preferred station transformers (RTX-XSR1D and RTX-XSR1C) that require installation of open phase detection systems are supplied by two different offsite power sources that will be out of service in RF-18 and RF-19 respectively. The earliest opportunity to implement the "monitoring" phase of the design change on RTX-XSR1D and RTX-XSR1C will be RF-18 and RF-19 respectively. Due to this offsite power source outage schedule, it is expected that the monitoring phase of the design change can only be performed on one preferred station transformer (RTX-XSR1D) during RF-18. The "active" actuation phase of the design change on both preferred station transformers is expected to be implemented during RF-19. Therefore, RBS will need to request a deviation

from NEIs schedule on implementation of open phase detection on RTX-XSR1C. This request or any other deviations from NEIs schedule will be documented through deviations/exemption process addressed in the NEI OPC Guidance Document.