Southern Nuclear

Edwin Dean III
Vice President - Farley

Joseph M. Farley Nuclear Plant
7388 North State Hwy 95
Columbia, Alabama 36319
334.661.2100 tel
334.661.2512 fax

EDDEANII@southernco.com

September 20, 2024

Docket No.: 50-348
50-364

NL-24-0349

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

Joseph M. Farley Nuclear Plant - Units 1 and 2
10 CFR 26.719(c)(1) 30-Day Report
Blind Performance Test Results Inconsistent with Sample Provided

Ladies and Gentlemen:

In accordance with the requirements of 10 CFR 26.719(c)(1), Southern Nuclear Company is submitting the enclosed 30-day report.

This letter contains no NRC commitments. If you have any questions regarding this submittal, please contact Mandy Ludlam, Licensing Engineer, at (334) 661-2886.

Respectfully submitted,

Edwin Dean III

Vice President – Farley

SD/mml/cbg

Enclosure: 10 CFR 26.719(c)(1) report

Cc: Regional Administrator, Region II
NRR Project Manager – Farley Nuclear Plant
Senior Resident Inspector – Farley Nuclear Plant
RTYPE: CFA04.054

Joseph M. Farley Nuclear Plant - Units 1 and 2
10 CFR 26.719(c)(1) 30-Day Report
Blind Performance Test Results Inconsistent with Sample Provided

Enclosure

10 CFR 26.719(c)(1) Report

Description of the Incident:

On Friday, August 23, 2024, LabCorp, a Department of Health and Human Services certified laboratory, reported a blind performance test result for Specimen 0106392533 to Southern Nuclear (SNC) Farley Nuclear Plant. On Monday, August 26, 2024, the Farley Medical Services Supervisor received the report and, upon review of the result against the certificate of analysis for that performance test, discovered that the result was inconsistent with the expected test result. The blind performance test result from the laboratory was reported as negative for hydrocodone and hydromorphone but should have been positive for hydrocodone and hydromorphone. The LabCorp manager was contacted to notify the laboratory of a potential testing error, and the laboratory began an investigation to determine the reason for the inaccurate result. LabCorp also retested the specimen and provided a corrected report on August 28, 2024, indicating a positive hydrocodone and hydromorphone result for Specimen 0106392533.

Cause:

The laboratory performed a full investigation, as follows, to determine the cause of the incorrect result.

All relevant documentation was reviewed, and no errors or omissions were identified. Analytical data supported the reported results. Chain of custody for the specimen and batch documentation were in accordance with the standard operating procedure. Instrument maintenance was performed on schedule, and no related instrument problems were noted prior to, or after, the proficiency test analysis was performed. Quantitative results and chromatography for quality control results were acceptable. Quality control charts were reviewed, and no trends were identified. Calibrator Lot 071924 had been in service since August 15, 2024.

The data was reprocessed to determine if any other opioids were present in Specimen 0106392533 (Batch 179763). The reprocessed data showed the presence of oxycodone and oxymorphone. Production logs for the extractor were reviewed to identify all batches extracted by the extractor on the same day as Batch 179763. Batch 179765 was extracted on the same day in the same extractor as Batch 179763. Batches 179763 and 179765 contained only one sample each. Batch 179765 was extracted for oxycodone, and the sample confirmed negative. Batch 179765 was reprocessed to determine if any other opioids were present in the sample. The reprocessed data showed the presence of hydrocodone and hydromorphone.

All staff involving the handling of Batches 179763 and 179765 were interviewed, and observations were conducted regarding specimen handling procedures. These staff were removed from handling NRC specimens until conclusion of the investigation.

Based on the investigation, the laboratory determined the root cause of the incorrect result for Specimen 0106392533 was failure to maintain proper specimen identification during the confirmation process. The specimen in Batch 179765 was misidentified as Specimen 0106392533, and Specimen 0106392533 was misidentified as the specimen in Batch 179765.

Corrective Actions:

Laboratory staff involved with handling Batches 179763 and 179765 were removed from handling NRC specimens until conclusion of the investigation. The laboratory also retested the specimen and provided a corrected report on August 28, 2024, indicating a positive hydrocodone and hydromorphone result for Specimen 0106392533.

All laboratory staff in the related departments will be retrained on maintaining specimen identification by handling one sample at a time and verifying the entire specimen number during each transfer step.

Certifying scientists will be instructed to investigate hydrocodone/hydromorphone results that screen positive and confirm negative.

The below threshold control (BTC) used for all opioid assays contains six opioids which does not allow the laboratory to detect errors if batches are switched. The BTC for opioid assays will be modified to contain only the opioids of interest for each assay. For example, a hydrocodone/hydromorphone batch will only have hydrocodone and hydromorphone in the BTC.

Corrective actions developed by the laboratory were deemed acceptable by SNC.