



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

September 25, 2019

Mr. Daniel G. Stoddard
Senior Vice President and Chief Nuclear Officer
Innsbrook Technical Center
5000 Dominion Blvd.
Glen Allen, VA 23060-6711

SUBJECT: NORTH ANNA POWER STATION, UNIT NOS. 1 AND 2 – CORRECTION
LETTER FOR ISSUANCE OF AMENDMENT NOS. 282 AND 265 TO REVISE
TECHNICAL SPECIFICATIONS REGARDING OPEN PHASE PROTECTION
(EPID L-2018-LLA-0132)

Dear Mr. Stoddard:

By letter dated September 12, 2019 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML19238A127), the U.S. Nuclear Regulatory Commission issued Amendment Nos. 282 and 265 to Renewed Facility Operating License Nos. NPF-4 and NPF-7 for the North Anna Power Station (North Anna), Unit Nos. 1 and 2, respectively. These amendments were in response to your application dated April 30, 2018 (ADAMS Accession No. ML18127A073), as supplemented by letters dated May 24 (ADAMS Accession No. ML19156A207) and August 8, 2019 (ADAMS Accession No. ML19225D130).

The amendments revised North Anna Technical Specifications to add operability requirements, required actions, and surveillance requirements for the new 4160 volt emergency bus voltage unbalance protection systems. As indicated in your application, the system was installed as part of the Virginia Electric Power Company response to NRC Bulletin 2012-01.

Subsequent to issuance of the amendments, two errors were identified. The first error was in Section 1.0 of the Safety evaluation which stated, "By letter dated May 24, 2019, the licensee stated that non-Class 1E Alstom Open Phase Detection (OPD) system at the switchyard transformers TX-1 and TX-2 is within the scope of this LAR." This statement should have said "By letter dated May 24, 2019, the licensee stated that non-Class 1E Alstom Open Phase Detection (OPD) system at the switchyard transformers TX-1 and TX-2 is not within the scope of this LAR."

The second error, the amendment page for Unit 2 incorrectly listed the application date as April 30, 2019. Instead, it should have said April 30, **2018**.

A revised version of the Unit 2 amendment page is enclosed to this letter.

Sincerely,

/RA/

G. Edward Miller, Project Manager
Special Projects and Process Branch
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-338 and 50-339

Enclosure:

1. Revised North Anna Unit 2 Amendment Page and SE Page

cc: Listserv

Enclosure 1
Revised North Anna Unit 2 Amendment Page and SE Page



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VIRGINIA ELECTRIC AND POWER COMPANY

DOCKET NO. 50-339

NORTH ANNA POWER STATION, UNIT NO. 2

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 265
Renewed License No. NPF-7

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Virginia Electric and Power Company et al., (the licensee) dated April 30, 2018, as supplemented by letters dated May 24 and August 8, 2019, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations as set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

stated that non-Class 1E Alstom Open Phase Detection (OPD) system at the switchyard transformers TX-1 and TX-2 is not within the scope of this LAR.

2.0 REGULATORY EVALUATION

2.1 Electrical System Design and Operation

As described in its submittals, the North Anna station electrical power distribution system consists of a 230/500 kV switchyard, which is an integral part of the transmission network and is the preferred source of offsite power to the station Class 1E electrical system. The distribution system to the station Class 1E electrical distribution system is comprised of a minimum of two qualified off-site circuits between the 230/500 kV switchyard and the onsite Class 1E Electrical Power System and two separate and independent Emergency Diesel Generators (EDGs) per unit. Each one is qualified to meet the requirements of 10 *Code of Federal Regulations* (CFR) 50, Appendix A, General Design Criteria (GDC) 17.

By letter dated October 24, 2012 (ADAMS Accession No. ML12305A017), the licensee provided its initial response to NRC Bulletin 2012-01 which described the normal operating configuration of the ESF buses at power as follows:

[T]here are four 4160 VAC Engineered Safeguards Features (ESF) buses (two per unit) at North Anna Power Station (NAPS) (1H, 1J, 2H, and 2J). In the normal operating configuration (at power), the ESF buses are powered from their preferred power source, which are the three reserve station service transformers (RSSTs) (A, B, and C). Each RSST receives power at 34.5 kV from three 34.5kV buses (Bus 3, 4, and 5), which are separated by normally open circuit breakers with open disconnect switches.

The 34.5 kV buses receive power from three transformers (XFMR 1, 2 and 3) that are provided power from the point of interconnect on the 500 kV and 230 kV levels.

500-34.5 kV XFMR 1 in the switchyard normally supplies 34.5kV Bus 3. Bus 3 normally supplies 34.5-4.16 kV RSST-C which is the preferred source for ESF buses 1H and 2J.

500-34.5 kV XFMR 2 in the switchyard normally supplies 34.5kV Bus 4. Bus 4 normally supplies 34.5-4.16 kV RSST-B which is the preferred source for ESF bus 2H.

230-34.5 kV XFMR 3 in the switchyard normally supplies 34.5 kV Bus 5. Bus 5 normally supplies 34.5-4.16 kV RSST-A which is the preferred source for ESF Bus 1J.

The above alignment is typical. Only two of the three 34.5 kV buses are required for operation. It is permissible to supply RSST-A and RSST-B from a single source. However, RSST-C is maintained separate from RSST-A and RSST-B in order to maintain separation of the associated ESF buses in accordance with Technical Specifications (TS).

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(EPID L-2018-LLA-0132) DATED SEPTEMBER 25, 2019

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