



Nuclear Reactor Program
Department of Nuclear Engineering
www.ne.ncsu.edu/nrp

Campus Box 7909
2500 Stinson Drive
Raleigh, NC 27695-7909
919.515.7294 (voice)
919.513.1276 (fax)

September 25, 2020

US Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

**SUBJECT: REPLY TO A NOTICE OF VIOLATION; 50-120/2020-201-01
LICENSE NO. R-120
DOCKET NO. 50-297**

Enclosed please find supplemental data for the 2015 Annual Operating Report. This data is being provided as stated in our letter dated August 31, 2020 in response to Notice of Violation 50-120/2020-201-01.

If you have any questions regarding the above information, please contact Scott Lassell at 919-515-3347 (salassel@ncsu.edu).

I declare under penalty of perjury that the forgoing is true and correct. Executed on 25 September 2020.

Sincerely,

A handwritten signature in blue ink that reads "Ayman Hawari".

Ayman I. Hawari, Ph.D.
Director, Nuclear Reactor Program

Enclosures:
Supplement to 2015 Annual Operating Report

Supplemental Data for 2015 Annual Operating Report, Section 6.7.4.f

Liquid Waste

iv. Releases to Unrestricted Areas

An unaccounted loss of water from the reactor coolant system (RCS) occurred during the reporting period (calendar year). The RCS water loss is measured every work day and occurred at variable rates over the year. RCS water was not observed in surface locations or storm sewer locations outside the reactor building. Therefore, the unaccounted RCS water was assumed to be continuously released to grounds beneath the surface on the reactor site at the measured RCS loss rates over the year.

The average annual concentrations of radioactive material in the RCS water did not exceed values given in 10 CFR Part 20 Appendix B Table 2 Column 2 for liquid effluents. Therefore, no additional dilution was needed. Detected radionuclides were tritium and activation products associated with reactor operation. No fission products were detected. No tritium or activation products were detected in environmental samples (refer to Section 6.7.4.i).

RCS water activity and volume assumed to be released to unrestricted areas is shown below:

Period	Total μCi	Tritium μCi	Volume Liters
01 JAN – 31 MAR 2015	1,157	1,155	7,085
1 APR – 30 JUN 2015	1,318	1,316	9,477
1 JUL – 30 SEP 2015	1,876	1,871	13,759
1 OCT – 31 DEC 2015	1,506	1,501	15,378
CALENDAR YEAR 2015	5,857	5,843	45,699