7590-01-P

NUCLEAR REGULATORY COMMISSION

VIRGINIA ELECTRIC AND POWER COMPANY

NORTH ANNA POWER STATION, UNIT NOS. 1 AND 2

SURRY POWER STATION, UNIT NOS. AND 2

DOCKET NOS. 50-338 AND 50-339

DOCKET NOS. 50-280 AND 50-281

[NRC-2010-0116]

EXEMPTION

1.0 BACKGROUND

Virginia Electric and Power Company (the licensee) is the holder of Facility Operating License Nos. NPF-4, NPF-7, DPR-32, and DPR-37, which authorize operation of the North Anna Power Station, Unit Nos. 1 and 2 (NAPS) and Surry Power Station, Unit Nos. 1 and 2 (SPS) located in Lake Anna, Virginia, and Surry, Virginia, respectively. The license provides, among other things, that the facility is subject to all rules, regulations, and orders of the Nuclear Regulatory Commission (NRC, the Commission) now or hereafter in effect.

The facilities consist of two pressurized-water reactors each located in Lake Anna, Virginia, and Surry, Virginia, respectively.

2.0 REQUEST/ACTION

Title 10 of the *Code of Federal Regulations* (10 CFR), Part 20, “Standards for Protection Against Radiation” Subpart H, “Respiratory Protection and Controls to Restrict Internal Exposure in Restricted Areas,” establishes the requirements for implementing a respiratory protection program. These programmatic requirements ensure that worker doses from airborne radioactive materials are maintained as low as reasonably achievable.

In summary, by letter dated November 24, 2009, as supplemented by letter dated February 11, 2010, the licensee requested an exemption from 10 CFR 20.1703(a), 10 CFR 20.1703(g)(1), and certain requirements of 10 CFR Part 20, Appendix A, Footnote "a," to use the Mine Safety Appliances, Inc. (MSA), model Firehawk 7 Air Mask self-contained breathing apparatus (SCBA) with a gas mixture of 35% oxygen and 65% nitrogen at SPS and NAPS. The licensee's letter dated November 24, 2009, contains proprietary information and accordingly is not available to the public. In addition, the licensee requested NRC authorization under 10 CFR 20.1703(b) to use these SCBAs in a configuration not certified by the National Institute for Occupational Safety and Health (NIOSH). The regulations in 10 CFR 20.1703(b) allow a licensee to seek authorization to use respiratory equipment that has not been tested and certified by NIOSH. When seeking authorization to use equipment not certified by NIOSH, the licensee is required to demonstrate by testing that a respirator is capable of safely providing the necessary level of protection under the anticipated conditions of use. An exemption from 20.1703(a) and an exemption from the protection factors listed in 10 CFR Part 20, Appendix A is not necessary when the NRC grants authorization under 20.1703(b) for use of the respiratory equipment.

3.0 DISCUSSION

Pursuant to 10 CFR 20.2301, the Commission may, upon application by a licensee or upon its own initiative, grant an exemption from the requirements of 10 CFR Part 20, as it deems appropriate or necessary to protect health or to minimize danger to life or property.

Authorized by Law

This exemption would allow the use of MSA model Firehawk M7 Air Mask SCBA with a gas mixture of 35% oxygen and 65% nitrogen. Section 20.1703(b) permits a licensee to request NRC approval to use equipment which has not been tested or certified by NIOSH. The

application must supply evidence that equipment is capable of providing the proposed degree of protection under the anticipated conditions of use. Dominion has demonstrated, by documented third-party testing conducted by the National Aeronautics and Space Administration and Interek, that the equipment will continue to provide the proposed degree of protection under the anticipated conditions of use. Dominion also has over 30 years of trouble-free operating experience with 35/65 charged SGBA (MSA Model 401/Ultraiite/Custom 4500 model line).

As stated above, 10 CFR 20.2301, allows the NRC to grant exemptions from the requirements of 10 CFR Part 20. The NRC staff has determined that granting of the licensee's proposed exemption will not result in a violation of the Atomic Energy Act of 1954, as amended, or the Commission's regulations. Therefore, the exemption is authorized by law.

No Undue Hazard to Life or Property

The underlying purposes of 10 CFR 20.1703(g)(1) is to ensure that "Atmosphere-supplying respirators must be supplied with respirable air of Grade D quality or better as defined by the Compressed Gas Association" and that Grade D air criteria include oxygen content (v/v) of 19.5-23.5%. Section 20.1703(b) permits a licensee to request NRC approval to use equipment which has not been tested or certified by NIOSH. The application must supply evidence that the equipment is capable of providing the proposed degree of protection under the anticipated conditions of use. The licensee has demonstrated by documented third-party testing conducted by NASA and Intertek that the equipment will provide the proposed degree of protection under the anticipated conditions of use.

Based on the above, no new accident precursors are created by the use of MSA model Firehawk 7 Air Mask SCBA with a gas mixture of 35% oxygen and 65% nitrogen at SPS and NAPS, thus, the probability of postulated accidents is not increased. Also, based on the above,

the consequences of postulated accidents are not increased. Therefore, there is no undue hazard to life or property.

4.0 CONCLUSION

Accordingly, the Commission has determined that, pursuant to 10 CFR 20.2301, the exemption is authorized by law and there is no undue hazard to life or property. Therefore, the Commission hereby grants Virginia Electric and Power Company an exemption from the 10 CFR 20.1703(g)(1), and certain requirements of 10 CFR Part 20, Appendix A, Footnote “a”, to use the MSA model Firehawk 7 Air Mask SCBA with a gas mixture of 35% oxygen and 65% nitrogen at SPS and NAPS.

Pursuant to 10 CFR 51.32, the Commission has determined that the granting of this exemption will not have a significant effect on the quality of the human environment (Environmental Assessment published in the *Federal* Register on March 22, 2010, 75 FR13600).

This exemption is effective upon issuance.

Dated at Rockville, Maryland, this 28th day of May 2010.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

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