

July 16, 2025

Docket Nos. 52-025
52-026

NL-25-0276
10 CFR 20.1703(b)

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

Vogtle Electric Generating Plant, Units 3 and 4
Application for Authorized Use of Mururoa Single-Use, Supplied-Air Suits,
Models V4F1 and MTH2 - Supplement

Ladies and Gentlemen:

In a letter dated June 27, 2025, Vogtle Electric Generating Plant (VEGP), Units 3 and 4, Application for Authorized Use of Mururoa Single-Use, Supplied-Air Suits, Models V4F1 and MTH2 [ML25178C655] (Reference 1), Southern Nuclear Operating Company (SNC) requested, pursuant to 10 CFR 20.1703(b), authorized use of Mururoa single-use, supplied-air suits (Models V4F1 and MTH2), which have not been tested or certified by the National Institute for Occupational Safety and Health (NIOSH). These suits have been identified as having benefits from contamination control, heat stress reduction, and respiratory protection viewpoints. Upon Nuclear Regulatory Commission (NRC) approval, these suits will be included as an option in the Vogtle Electric Generating Plant Units 3 and 4 respiratory protection program.

Pursuant to 10 CFR 20.1705, SNC also requested in Reference 1 to use an Assigned Protection Factor (APF) of 5,000 associated with the use of the Mururoa V4F1 and MTH2 supplied-air suits.

On July 3, 2025, the NRC Staff inquired about the need for standby rescue persons described by 10 CFR 20.1703(f). This supplement to Reference 1 provides additional detail concerning use of the Mururoa V4F1 and MTH2 supplied-air suits without standby rescue persons.

Based on the safety features to quickly open the suit in order to breathe outside air in the event that a loss of supplied air occurs, SNC also proposes to use Mururoa V4F1 and MTH2 supplied air suits without the standby rescue persons described by 10 CFR 20.1703(f).

Therefore, an additional VEGP Units 3 and 4 anticipated condition of use for these suits is:

Use without a designated standby rescue person. Pursuant to 10 CFR 20.1703(f), standby rescue persons are required whenever one-piece atmosphere-supplying suits, or any combination of supplied air respiratory protection device and personnel protective equipment are used from which an unaided individual would have difficulty extricating himself or herself. Based on the safety features built into this equipment, SNC proposes to use this equipment without the standby rescue persons described by 10 CFR 20.1703(f). The NRC has found similar proposals from SNC and numerous other licensees to be acceptable, as documented in Safety Evaluations identified in Reference 1. The relevant safety features which obviate the need for a standby rescue person include:

- An egress strip stretching from left arm, over the head, to right arm that is normally used for undressing and can be used for self-rescue during an emergency, such as loss of supplied air;
- A removable strip covering an opening near the mouth that could be used for emergency breathing in case of loss of supplied air;
- Two exhaust valves that provide ventilation, and protect from overpressure; and
- Air intake located at the waist with a built-in control valve that can adjust, but not block, air flow.

The “General Description” (Attachment 1 of Reference 1) and the “Instructions for Use” (Attachment 7 of Reference 1) provided by the manufacturer indicate that emergency egress takes less than 3-5 seconds while, in case of an air supply failure, this equipment remains pressurized for a few minutes. SNC plans to update its procedures to indicate that this equipment may be used without a standby rescue person.

Based on the safety features of this equipment, SNC is proposing to use this equipment without the standby rescue persons described by 10 CFR 20.1703(f).

SNC is requesting approval of Reference 1, including this supplement, by August 29, 2025 to allow sufficient time for outage preparation for the first Unit 4 refueling outage.

This application supplements Reference 1 to propose that these suits may be used without standby rescue persons as required by 10 CFR 20.1703(f).

This letter contains no NRC commitments.

If you have any questions, please contact Ryan Joyce at 205-992-6468.

Respectfully submitted,

Jamie M. Coleman
Director, Fleet Regulatory Affairs
Southern Nuclear Operating Company

JMC/kgj/trb

cc: NRC Regional Administrator
NRR Project Manager - Vogtle 3 & 4
Senior Resident Inspector - Vogtle 3 & 4
RType: VND.LI.L00

REFERENCE

1. Vogtle Electric Generating Plant, Units 3 and 4, Application for Authorized Use of Mururoa Single-Use, Supplied-Air Suits, Models V4F1 and MTH2 dated June 27, 2025 (ML25178C655)