September 29, 2026

State Corporation Commission
P.O. Box 1197, Richmond, VA 23218

RE: Case No. PUR-2026-00125

Judge Bagot, Judge Hudson, Judge Towell, and members of Commission Staff:

Thank you once again for the opportunity to speak before the State Corporation Commission ("Commission") on September 1st. MAREC submits these comments to address four questions that arose during the technical conference. These four questions are:

1. What does Virginia's energy storage law require regarding NFPA 855 and the RFP process for Dominion Energy and Appalachian Power Company in 2026, 2027 and subsequent years?

2. What transparency gaps remain in how utilities evaluate developer bids submitted through the RFP process?

3. What does NFPA 855 provide regarding spacing for utility-scale battery energy storage systems? What role should wind play?

4. Is there evidence that battery energy storage fire incidents will increase as systems approach the end of their useful lives—the so-called "bathtub curve"?

Each of these questions is taken in the order below.
NFPA 855 Requirements and the RFP Process

NFPA 855 Requirements and the RFP Process in 2026 & Subsequent Years

It is important to understand how the recent energy storage legislation affects NFPA 855 requirements and the utility RFP process. The key point is that **NFPA 855 applies going forward, but the rules governing whether an NFPA 855-compliant project can submit a bid are different in 2026 than they are in 2027 and later years.**

NFPA 855 is the minimum safety standard.

Separate from the RFP process, the legislation establishes NFPA 855 as the minimum safety standard for energy storage projects proposed for construction, acquisition, or

procurement under § 56-585.5. These projects must comply with the most recently published edition of NFPA 855.

Utilities, however, may establish additional requirements for projects participating in their RFPs. For example, a utility may establish a spacing requirement that is more restrictive than what NFPA 855 requires.

For the 2026 RFP, the legislation provides additional protection for NFPA 855-compliant projects.

For the 2026 RFP, Dominion Energy and Appalachian Power cannot prevent an energy storage acquisition proposal from being submitted if the project complies with the most recently published edition of NFPA 855. For example, if a project complies with NFPA 855 but does not meet a utility's additional 25-foot spacing requirement, the utility cannot prevent that proposal from being submitted solely because it does not meet the 25-foot requirement.

That does not mean the utility must select the project. There is an important distinction between allowing a project to submit a bid and deciding whether to select that bid. The utility may still evaluate the proposals it receives using reasonable evaluation criteria. Judge Towell discussed this distinction during the technical conference.

For 2027 and later RFPs, that specific protection goes away.

The legislation does not extend the 2026 right to submit an NFPA 855-compliant proposal to RFPs conducted in 2027 and later years. NFPA 855 still applies as the minimum safety standard. However, the law no longer expressly provides that an NFPA 855-compliant proposal must be allowed into the RFP despite an additional utility requirement.

This makes the Commission's review particularly important.

As part of the 2026 RPS proceedings, the SCC is directed to review the utilities' energy storage RFP requirements and evaluation criteria. If the Commission determines that a requirement or criterion is unreasonable for protecting public safety, ensuring reliability and security, or promoting cost-beneficial proposals, it may direct the utility to modify it. The Commission may also revisit RFP requirements and evaluation criteria in future proceedings.

Put simply:

- **Before 2026:** Utilities could establish RFP requirements beyond NFPA 855, such as a 25-foot spacing requirement.

- **2026 and beyond:** NFPA 855 becomes the minimum safety standard for projects covered by § 56-585.5.

- **2026 RFP:** If an acquisition proposal complies with NFPA 855, the utility cannot prevent it from being submitted solely because it does not meet an additional utility requirement. The utility does not, however, have to select the proposal.

- **2026 RPS proceeding:** The SCC reviews the utilities' RFP requirements and evaluation criteria and may require changes.

- **2027 and later RFPs:** NFPA 855 remains the minimum safety standard, but the special 2026 protection guaranteeing an NFPA 855-compliant proposal's ability to enter the RFP process no longer applies.

The key difference is therefore straightforward: NFPA 855 remains the safety floor in both 2026 and 2027. In 2026, however, the law specifically protects an NFPA 855-compliant project to be submitted despite additional utility requirements. That specific protection does not continue for the 2027 and later RFPs, making the Commission's review of those additional utility requirements especially important.

RFP Knowledge Gaps

At the SCC Technical Conference, we shared our concerns about the RFP process and its transparency for independent power producers. The 2026 energy storage law addressed an important first hurdle by ensuring that projects meeting the applicable NFPA 855 safety standards can submit proposals into the 2026 RFP. MAREC believes that the approach should continue in 2027 with compliance with NFPA 855 and applicable large-scale fire testing providing a clear and predictable safety framework for projects seeking to participate.

But allowing a project into the RFP is only the first step. Once a proposal is submitted, Dominion and Appalachian Power's internal process for evaluating projects remains opaque. Developers have little insight into how individual requirements are applied, how projects are screened, or why proposals are rejected. That should change.

The hearing raised questions about the transparency of the RFP process. Virginia has 21.8 GW of battery energy storage projects in the PJM Cycle 1 queue; developers should have clear, advance notice of the material technical, safety, siting, and design requirements that will determine whether a proposal meets requirements. This is particularly important for issues such as container spacing. As discussed during the hearing, these requirements can affect not only land costs, but also project layout and the amount of storage capacity that can be developed on a fixed site.

Greater transparency is also needed around how proposals are screened and evaluated through utilities' models. The utilities should clearly identify the criteria used to determine whether bids are conforming and, following each solicitation, provide aggregate information on the number of proposals received, the number deemed non-conforming or otherwise eliminated, and the principal reasons for those outcomes, while protecting commercially sensitive information. This would give developers greater certainty about the RFP process and give the Commission better information to determine whether requirements are limiting competition or preventing otherwise viable third-party storage projects from competing.

Another concern is that absent clear guidance from the utilities, developers will design projects around the utilities' stated preferences rather than risk submitting a proposal that may be rejected. If Dominion or Appalachian Power continues to prefer 25-foot spacing without making clear that NFPA 855-compliant spacing will be accepted, developers have a strong incentive to design to 25 feet. This can affect project layout, land requirements, and ultimately project cost before a proposal is ever submitted.

NFPA 855 & Battery Storage Spacing

The 2026 edition of NFPA 855 does not establish 25 feet as a standard container-to-container spacing requirement for utility-scale battery energy storage systems. Nor does it establish a single separation distance that applies to every utility-scale BESS installation. Instead, NFPA 855 establishes specific requirements for different installation configurations and increasingly relies on fire and explosion testing to evaluate appropriate separation distances for a particular system and configuration.

For lithium-ion BESS, separation distances can be informed by fire and explosion testing conducted in accordance with UL 9540A. The 2026 edition of NFPA 855 places increased emphasis on large-scale fire testing, including evaluation of whether a fire can propagate from one BESS enclosure to another and whether the proposed separation distances are adequate. This allows the safety characteristics of the specific equipment and installation configuration to inform appropriate spacing where permitted by the standard and approved by the authority having jurisdiction.

NFPA 855 also contains other requirements governing outdoor installations that should not be confused with container-to-container spacing. For example, the 2026 edition limits the dimensions of an outdoor ESS walk-in unit or cabinet to 53 feet by 8.5 feet by 9.5 feet; units exceeding those dimensions must be treated as indoor installations and comply with the applicable indoor requirements. That provision addresses the classification and treatment of larger enclosures and does not establish a 25-foot separation requirement between BESS containers.

The key point is that NFPA 855 does not support a blanket 25-foot container-to-container spacing requirement for all utility-scale BESS projects. The 2026 standard instead provides a framework in which the characteristics of the system, its installation configuration, applicable fire and explosion testing, and approval by the authority having jurisdiction inform the appropriate separation requirements.

Wind Conditions and Spacing

The technical conference also raised questions about how wind conditions should be considered when determining appropriate spacing between BESS enclosures. MAREC agrees that wind is a relevant consideration. Large-scale fire testing is necessarily conducted under controlled conditions and cannot replicate every condition that may occur at a particular project site.

That limitation, however, does not mean that a fixed 25-foot spacing requirement is the appropriate response. As Mr. Scholl explained during the technical conference, the purpose of the large-scale fire testing provisions is to use actual test data, rather than a predetermined distance, to determine appropriate spacing on a case-by-case basis.

Wind should therefore be addressed as part of the project-specific engineering analysis required by the standard. Where that analysis identifies a site-specific concern, it may support additional mitigation or greater spacing. But the fact that wind conditions vary from site to site should not, standing alone, justify imposing a uniform 25-foot separation on every project regardless of its test results, equipment, configuration, or site conditions.

Energy Storage Incidents and the "Bathtub Curve"

Judge Bagot asked about the "bathtub curve" for energy storage incidents. EPRI's incident data show more incidents during construction, commissioning, and the early years of operation. What we do not know yet is whether incidents will increase again as systems reach the end of a 15- or 20-year useful life. There simply are not enough modern utility-scale battery systems that have been operating that long to know whether the right-hand side of the bathtub curve will develop.

It is also important to consider what is included in the historical incident data. The EPRI database covers several generations of battery technology, system design, and safety practices, including systems installed before today's NFPA 855, UL 9540, and UL 9540A requirements became widely used. It is also important to look at what happens when a failure does occur. The industry sometimes refers to a "successful failure" as an event in which a cell fails, or a thermal event occurs, but the system contains it and prevents it from spreading into a larger facility-level event. Modern system design, testing, and fire protection requirements are intended to do exactly that. In other words, the occurrence of a failure does not by itself tell the whole story about the safety performance of a system.

Battery aging and degradation still need to be managed. Batteries are not installed and then operated unchanged for 20 years. Systems are monitored, and components that show significant degradation or other problems can be taken offline, replaced, or repowered. Projects also have procedures for maintenance, emergency response, damaged batteries, and eventual decommissioning. For that reason, the age of a battery system itself does not tell us whether it presents a greater fire risk. How the system is designed, operated, monitored, maintained, and retired also matters.

At this point, there is not sufficient evidence to conclude that fire incidents will increase as battery storage projects reach the end of their useful lives. As more of today's projects age, we will have better data to answer that question.

MAREC Action appreciates the Commission's consideration of these comments and encourages an approach that protects safety and reliability while allowing independent power producers to compete on a fair and predictable basis.