

Service by Email:

November 1, 2023

Chairperson Anna C. Hansen
ahansen@santafecountynm.gov

Commissioner Justin S. Greene
jsgreene@santafecountynm.gov

Commissioner Camilla Bustamante
cbustamante@santafecountynm.gov

Commissioner Anna T. Hamilton
athamilton@santafecountynm.gov

Commissioner Hank Hughes
hhughes@santafecountynm.gov

Gregory S. Shaffer, Santa Fe County Manager
gshaffer@santafecountynm.gov

Jeffrey S. Young, Santa Fe County Attorney
jyoung@santafecountynm.gov

Jacob Black, Fire Chief
jblack@santafecountynm.gov

Jaome Blay, Assistant Chief, Fire Marshal
jblay@santafecountynm.gov

Penny Ellis-Green, Growth Management Director
pengreen@santafecountynm.gov

102 Grant Avenue
Santa Fe, NM 87501

Re: The County's adoption of the International Fire Code and National Fire Protection Association Standard 855

Dear County Commissioners, County Manager Shaffer, County Attorney Young, Fire Chief Black, Fire Marshal Blay and Director Ellis-Green:

I'm writing to express my concern about the County's adoption of an obsolete fire safety standard when it adopted the 2021 edition of the International Fire Code (IFC) on August 29, 2023 as the Santa Fe County Fire Code. County Ordinance 2023-06 adopted the 2021 IFC (which is the

most current edition) except for modifications specifically identified in the ordinance. As one of the modifications, Section 7.DD of the adopting ordinance amended Chapter 80 of the IFC, titled "Referenced Standards," to add National Fire Protection Association (NFPA) Standard 855-20, regarding the Installation of Stationary Energy Storage Systems.

But the County's ordinance adopted the 2020 edition of NFPA 855 ("NFPA 855-20: Standard for the Installation of Stationary Energy Storage Systems") instead of the 2023 edition. And the differences between the two editions are significant.

The NFPA began its initial work on the subject in 2016 and issued the first edition of the standard on August 5, 2019. This became known as the 2020 edition of NFPA 855.

The introduction to the current 2023 standard states that the 2023 edition was developed expressly to address the fire and other risks of battery energy storage systems that have become known since the 2020 standard was issued:

In response to international incidents of ESS fires, requirements for fire detection and suppression, explosion control, exhaust ventilation, gas detection and thermal runaway have been added or revised. The requirements for fire and explosion testing (formally large-scale fire testing) have been clarified.

Requirements from Chapters 4 and 10 specific to electrochemical ESS have been consolidated and reorganized in Chapter 9. Chapter 13 has been added to address flywheel ESS.

Information has been added in Annex B to provide guidance on the hazards associated with different battery types. Annex G has been added as a guide for suppression and safety of lithium-ion battery ESS.¹

Among the various differences between the 2020 and 2023 standards, the 2023 standard, in particular, provides greater elaboration on the requirements for Hazard Mitigation Analyses. Section G.3.5 of the 2023 standard establishes site-specific Hazard Mitigation Analyses as a key focus of permitting. This section includes provisions for early input from stakeholders to develop the fire and explosion criteria that the stakeholders agree is appropriate for the level of risk they are willing to accept at a particular site:

G.3.5 Fire Protection HMA or FRA (Deliverables)

G.3.5.1 The scope of the HMA should be to establish the fire and explosion protection design criteria for the facility. The development of the HMA should be an iterative process. The HMA should be revised as the design progresses and technical design aspects are selected and finalized, based on dialogue among the stakeholders. The HMA should outline the protection/prevention design basis for

¹ NFPA 855, Standard for the Installation of Stationary Energy Storage Systems, 2023 Edition, National Fire Protection Association, at 855-1.

achieving the fire hazard control objectives agreed upon by the stakeholders, including the following:

- (1) Identify assumptions and threats (including Section 3.3.2).
- (2) Identify source documents.
- (3) Identify each hazard and consequence, identify which prevention/protection features are to be provided or omitted, and summarize the decision-making process.
- (4) Identify where operational and administrative controls are assumed to be in place to mitigate the need for fire protection features.²

The 2023 edition also highlights the importance of considering in the Hazard Mitigation Analysis the input of stakeholders with an interest in the fire risks of the project:

G.3.2 Stakeholders

G.3.2.1 Stakeholders with an interest in the scope and applicability of the fire protection design should be identified early in the process.

G.3.2.2 Stakeholders should establish goals and objectives and evaluate whether the requirements of NFPA 855 are adequate to meet these goals and objectives. The criteria for acceptability of the level of fire and explosion protection should consider the perspective of the various stakeholders.³

Clearly, the County's review of the Conditional Use Permit application and any permit applications under the Santa Fe County Fire Code for the Rancho Viejo Solar Energy Project should be evaluated under the most current safety standards that apply to lithium-ion battery energy storage systems.

Indeed, one of the County's primary standards for the issuance of a Conditional Use Permit is whether the project will "create a potential hazard for fire, panic, or other danger" for adjacent lands.⁴ It also appears that Construction and Operational permits are required for the project under the County Fire Code, and a Hazard Mitigation Analysis is required for the issuance of those permits.⁵ The Rancho Viejo applications should be evaluated under the 2023 standards for Hazard Mitigation Analyses, not the obsolete 2020 standard.

² NFPA 855-23, Annex G, G.3.5. Section G.1.2.1 states the purpose of Annex G "is to help stakeholders, designers, and authorities having jurisdiction (AHJs) understand and implement minimum safety requirements through a permitting and inspection process to ensure efficiency, transparency, and safety in their local communities."

³ NFPA 855-23, Annex G, G.3.2 (Emphasis added).

⁴ Sustainable Land Development Code, Section 4.9.6.5.

⁵ International Fire Code, Sections 1207.1.2; 1207.1.4.

Please explain why the County did not include the 2023 edition of NFPA 855 in its August 2023 adoption of the IFC. Ordinance 2023-06 should be amended to include NFPA 855-23, and the County should apply it to the applications for the Rancho Viejo Solar Energy Project under the Sustainable Land Development Code, the Fire Code and any other requirements that may pertain to the project.

Respectfully,
Ashley C. Schannauer
Santa Fe, NM 87508

cc: joselarra@santafecountynm.gov