

Residents Response to Ordinance

Resident Concern/Comment: C.2 – Add Emergency Response Plan to SUP requirements.

City Response: The Emergency Response Plan is a requirement of permitting a BESS site. Many aspects of the plan cannot be developed until final full civil design of the site is completed. The construction activities require an emergency action plan. An Emergency Response Plan will be finalized and approved by our Fire Chief prior to a permit being issued. Prior to commissioning the equipment an emergency action plan for the operation of the equipment is required, this plan will also be subject to approval by the Fire Chief. These requirements are handled under the construction permitting process.

Resident Concern/Comment: D.1 – Add – Annual tests and inspections to deliverables for each site.

City Response: The manufacturer's instructions for the equipment installed on the site will specify what cyclical inspections and testing is required, in addition the fire code will have extensive cyclical inspection and testing requirements for the installed safety systems. This is regulated by the building, electrical and fire codes.

Resident Concern/Comment: E.7 – Add – Training as needed to include jurisdictions that may assist during emergencies. To support volunteer training, DNV recommend training manuals can be for those who would benefit.

City Response: Training is provided annually to the League City Fire Department and Mutual Aid Agencies.

Resident Concern/Comment: E. 12 – Add.. for duration of event.

City Response: Noted and changed. The fire code and NFPA 855 require response of subject matter experts and fire remediation teams at any time requested by the fire department during an incident.

Resident Concern/Comment: E. 14 – Comment – do we not have redundant fans in this design.

City Response: The applicant must provide a Failure Mode and Effects Analysis as part of the construction permitting stage. This analysis includes failure of any critical system and mitigation measures. One solution to this could be redundant fans, but there also may be other solutions that are proposed by the applicants. Any plan will have to be reviewed and approved by the Fire Department.

Resident Concern/Comment: F.2 – Add – and annual calibration of applicable instrumentation.

City Response: See response to comment D.1.

Resident Concern/Comment: F.3 – Add – Site to maintain a log of all events and potential events to be shared annually with fire department, emergency response team, site operator, remote operator, and city.

City Response: The system BMS captures all the data, normal and those requiring an action or response by the fire department. Serious events causing E-stops will automatically cause supervisory or alarm signals to be sent. The local ordinance required “Battery Analytics Software” will capture the data and will provide predictive notifications to the operator and the fire department.

Resident Concern/Comment: F.4 Add – Notify Community of shelter in place directives and updates.

City Response: This is an action that occurs under the auspices of the fire department whenever any emergency event in the community requires a shelter in place order.

Resident Concern/Comment: F.8 – Revise – to Procedures and schedules for conducting annual drills.

City Response: The current wording is broader recognizing that drills and training may be more often than annual.

Resident Concern/Comment: F.9 – Add – document root cause, corrective and preventative actions. Create and maintain site event log.

City Response: Added language related to preventative actions based on an event. See answer to F.3 on data and logs, a thermal runaway is a fire event by definition and the fire department has authority to investigate any fire to determine the cause and need for corrective action.

Resident Concern/Comment: F.10 – Specify – who maintains contacts and requires updates.

City Response: The requirements apply generally to the owner/operator as the responsible party under general fire code requirements.

Resident Concern/Comment: F.11 – Add:..... natural disasters and/or extreme environmental conditions such as high ambient temperatures and/or humidity.

Note: last question in paragraph should be answered and documented in plan.

City Response: Noted and changed.

Resident Concern/Comment: G.3 – Comment – Why are we settling on 200'. Where is that defined?

City Response: This is defined by the NFPA. The setbacks may be increased if testing data and the required plume analysis shows that it is necessary.

Resident Concern/Comment: G.7 – Comment – why is 200' from a neighborhood ok when 300' from a major roadway is required.

City Response: The 300' from a major roadway is to leave room for potential commercial development between the site and the roadways. 200' is not sufficient room for a meaningful commercial development along one of our major thoroughfares.

Resident Concern/Comment: I. Typo – two sections marked I.

City Response: Noted and changed.

Resident Concern/Comment: I. Why do we have redundant 24/7 monitoring but not redundant fans?

City Response: The applicant is required to provide a plan if exhaust fans fail to work. One solution to this could be redundant fans, but there also may be other solutions that are proposed by the applicants. Any plan will have to be reviewed and approved by the Fire Department. See answer to E.14.

Resident Concern/Comment: I.1 Add – Be trained and knowledgeable in the installations, operation and **maintenance** of battery systems.

City Response: Noted and changed.

Resident Concern/Comment: Cybersecurity: BESS developers should rely on experienced suppliers who can ensure the integrity of all equipment and routinely update security software.

City Response: Noted. The software for operating the system is part of the listing of the ESS including the updating of the software. Utilities are also subject to regulation by the Federal Energy Regulatory Commission (FERC) which has stringent requirements addressing site and equipment security including cybersecurity.

Resident Concern/Comment: Only vetted, trained personnel should have access to the BESS. Connections between the BESS and other web-based systems should be kept at a minimum.

City Response: Noted. BESS site will be secured from entry and only employees and emergency personnel can access the site. The fire code and NFPA 855 require the sites to be secured against unauthorized entry, and the Federal Energy Regulatory Commission (FERC) which has stringent requirements addressing site and equipment security including cybersecurity.

Resident Concern/Comment: BESS Augmentation: A BESS augmentation strategy that maintains the performance of a system may include rotating batteries in and out of the system, adding more capacity, or both and needs to be considered within the building area of the site.

City Response: This is something that the applicants should consider when designing their site, but the city does not have any regulations related to this. The removal and replacement of battery modules is an expected occurrence and sites are designed in recognition of this. Additionally, the electrical code includes minimum clearances for the purpose of inspection and maintenance.

Resident Concern/Comment: More than 80% of large-scale batteries on the US grid have been installed within the last two years. Therefore, it is highly possible that the rate of BESS fires could increase in the coming years.

City Response: Noted. The codes and standards addressing BESS have been expanded and their requirements increased over the last 6 years starting with the 2018 editions of the fire codes.

Resident Concern/Comment: Question: Is there an HVAC or cooling system in the proposed design.

City Response: This will depend on the type of batteries/enclosures proposed. Some have liquid cooling systems and some have HVAC cooling systems. This will vary depending on the technology and containers proposed.

Resident Concern/Comment: Question: If site becomes a lease property, is the developer responsible or land-owner.

City Response: Most code enforcement actions are the responsibility of the property owner. If a lease is in place, it is the responsibility of the property owner to have language in the lease

agreement detailing responsibilities and liabilities. The fire code holds the owner responsible generally, but applies a broad definition that captures anyone in a position of responsibility.

OWNER. Any person, agent, operator, entity, firm or corporation having any legal or equitable interest in the property; or recorded in the official records of the state, county or municipality as holding an interest or title to the property; or otherwise having possession or control of the property, including the guardian of the estate of any such person, and the executor or administrator of the estate of such person if ordered to take possession of real property by a court.

Resident Concern/Comment: Question: Regarding the bond for decommissioning and requirement for liability insurance; how much coverage will be required and what percent increase is required over time.

City Response: This will vary on a case-by-case basis. Our risk management officer will provide a required quote for insurance based on current best practices as determined by the Texas Municipal League. These amounts may vary over time, and what is appropriate today, may be less appropriate 10 years from now.