


STAFF REPORT

TO: Zoning Commission Regular Meeting – February 18, 2025
City Commission Regular Meeting – February 19, 2025

FROM: Kim Golden, P.E., City Engineer, Director of Engineering & Planning 

CC: Casey Bennett, CBO; Jason Brown, FM; Chief Dennis Harris, TCFD; Doug Kneupper, P.E.

DATE: February 12, 2025

RE: Ordinance regarding Battery Energy Storage Systems

Background: Battery Electrical Storage Systems (BESS) are installations of large containers of batteries which are usually located close to an electrical power substation. The batteries charge during periods of low demand and then supplement the electric grid during periods of high demand. Locations close to an existing substation are essential for most of the projects.

Texas City has two existing BESS installations at 505 34th Ave N and 430 SH 146 N, and two approved sites on SH 146 (410 Hwy 146 N and 701 SH 146). All four locations are south of Palmer Hwy and in or near areas of existing industrial uses. In 2020 and 2021 respectively, these small 10MW installations were found most comparable to the “District F-1” (Outdoor Industrial) zoning classification. Since 2022 and 2023 the applications for the 200MW installations have been processed for rezoning to “District S-P” (Site Plan) as “specific uses which are not normally found in zoning districts”. Numerous pre-development inquiries have been received for sites located in various other zoning districts throughout the city, including several in close proximity to existing residential uses or zoning districts. Some of the proposed projects include energy generation as a component of the projects.

Staff Analysis: During reviews of the various applications and previous presentations of BESS projects to the Planning Board and Zoning Commission, concerns have been expressed regarding risk of battery fire, contamination from site runoff, contamination of air and water byproducts of fire suppression in the event of catastrophic failure, and the ultimate cost of decommissioning. The BESS installations are characterized by their developers as temporary installations. The review procedures of the “District S-P” (Site Plan) process provide the most thorough process for obtaining public input and evaluating the proposed projects in the various locations and zoning districts when presented.

A previously proposed ordinance was presented to the Zoning Commission and City Commission in late 2023 and early 2024. The Zoning Commission recommended the designation of “District S-P” (Site Plan) for the BESS projects. Upon introduction of the ordinance to the City Commission, comments were received from industry professionals and lobbyists. The City also engaged outside counsel regarding the

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ordinance formulation and third-party subject matter experts. Staff requested withdrawal of the proposed ordinance prior to final adoption to allow additional time for review and editing of the proposed ordinance. The newly proposed ordinance incorporates the knowledge and information gained. The designation of the "District S-P" (Site Plan) as the exclusive zoning district remains the recommendation for the preferred procedure to provide consistency in the consideration and processing of applications for BESS projects.

Recommendation: To provide for consistency and uniformity of review and the application of city policies, staff are recommending designation of the "District S-P" (Site Plan) as the zoning district for BESS and similar projects. The Zoning Commission is scheduled to consider this recommended zoning change at its regular meeting on February 18, 2025 for purposes of making recommendation to the City Commission.

Staff are also recommending the adoption of Chapter 162 Battery Energy Storage Systems to establish criteria for review of applications as well as requirements and limitations for screening, setbacks, landscaping, maximum impervious area, and other provisions etc. Adoption of Chapter 162 will provide guidance for potential applicants and developers and assist the Planning Board members, Zoning Commissioners, City Commission and staff with standards for the consistent administration and application of the zoning and land use regulations to BESS and similar projects. Chapter 162 also addresses the submittals required by the building officials, Fire Marshal and Emergency Management to fully review the projects during the site-specific permitting process and provides for the engagement of third-party subject matter experts to assist with such reviews.

Recommended amendment to the Zoning Ordinance – Following is the specific recommended amendment to the Zoning Ordinance. This amendment requires a public hearing upon 15-days advertised notice before the City Commission takes action.

"Sec. 160.051. District S-P, Site Plan is amended to add the following:

Sec. 160.051 District S-P, Site Plan

(C) *Uses.*

(1) *Uses and reasons for classification. The following uses are included under District S-P due to the following reasons:*

(b) *Uses restricted to District S-P*

(14) *Battery energy storage systems (BESS) and similar projects.*

a. *Basic zoning district most closely comparable to this requested principal use is District F – Light Industrial. However, due to the unique characteristics of these projects, potential hazards, environmental concerns, and*

long-term impacts, the site-specific review required for District SP is warranted and required in all districts, including District F. Planning Board and Zoning Commission and City Commission shall each have broad discretion to consider any and all aspects of the development and its intended use and operation in the interest of promoting the public health, safety, order, convenience, prosperity and general welfare; to protect and conserve the value of land and buildings in the area; and, to minimize conflicts among the uses of land and buildings.

b. Location in, near, or adjacent to existing residential uses or districts is not favored and shall be avoided.

c. BESS projects shall be located at least one-half mile from any existing or planned use for vulnerable populations such as schools, daycare centers, assisted living and nursing homes, hospitals, elderly or supportive housing.

d. Site Plans shall comply with the requirements of Chapter 162 Battery Energy Storage Systems.