



DATE: March 26, 2025

TO: Orange County Planning Commission

FROM: OC Development Services/Planning

SUBJECT: Study Session for General Plan Amendment GPA 24-03 and Zoning Code Amendment CA 24-03 – County of Orange Battery Energy Storage System Facilities Ordinance

PROPOSAL: Staff will present information on policy considerations relating to Battery Energy Storage System (BESS) facilities as well as provide an update on the efforts to develop guidelines and standards. The proposed ordinance will only apply to BESS facilities located within unincorporated areas of the County of Orange.

**ZONING DISTRICT/
GENERAL PLAN DESIGNATION:** N/A

LOCATION: Unincorporated Areas of the County of Orange

APPLICANT: OC Development Services/Planning

STAFF CONTACT: Scarlet Duggan, Land Use Manager
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RECOMMENDED ACTIONS:

OC Development Services/Planning recommends the Planning Commission:

1. Receive staff report and public testimony; and
2. Provide feedback to staff as appropriate.

BACKGROUND:

On October 8, 2024, the Board of Supervisors (Board) approved Supplemental Item #S14D, which directed OC Public Works/Planning staff (staff) to research and draft an ordinance setting forth development guidelines and standards for Battery Energy Storage Systems (BESS), also known as Lithium-ion Battery Storage projects (Attachment 1).

On December 11, 2024, Planning Commission authorized initiation of General Plan Amendment GPA 24-03 and Zoning Code Amendment CA 24-03.

On January 28, 2025, the Board approved Supplemental Item #S32A, which adopted an interim Urgency Ordinance placing a 45-day moratorium on establishment of large-scale BESS facilities in all unincorporated areas of the County of Orange (Attachment 2). The interim Urgency Ordinance included

direction to OC Public Works staff to coordinate with the Orange County Fire Authority (OCFA) to provide a report (describing or recommending measures to alleviate the conditions which led to the adoption of the urgency ordinance) back to the Board of Supervisors 10 days prior to the expiration of the interim Urgency Ordinance.

On March 11, 2025, the Board approved Supplemental Item #S33E (inclusive of the report required by the approval of Supplemental Item #S32A), which extended the interim Urgency Ordinance and moratorium by 10 months and 15 days to allow additional time for staff to consider, study, and assess the various approaches to the regulation of BESS facilities and ways to address risks associated with such facilities (Attachment 3). The extension of the interim Urgency Ordinance prevents the issuance of any permits, except those specifically exempted including residential and other smaller BESS, for BESS facilities in the unincorporated areas of the County of Orange.

The interim Urgency Ordinance, which expires on January 26, 2026, does not apply to the residential and non-residential energy storage requirements specified by the California Code of Regulations, Title 24, Part 6, and nothing in the interim Urgency Ordinance conflicts with the Opt-In Certification Process for BESS facilities established by and under the authority of the California Energy Commission.

DISCUSSION:

At present, the County of Orange has no regulations specific to BESS facilities. The State Legislature has adopted statutes impacting BESS facilities:

- SB 100 (2018)
 - Requires all electricity in California to come from renewable and zero-carbon resources by 2045.
- AB 205 (2022)
 - Broadened California Energy Commission (CEC) authority to permit certain clean and renewable energy facilities through an Opt-In Certification Program (Attachment 4 – CEC Opt-In Certification Program Fact Sheet);
 - BESS facilities capable of storing 200 megawatt-hours (MWh) or more are eligible to participate in the optional Opt-In Certification Program;
 - The permit issued by the CEC through the Opt-In Certification Program is in lieu of any local jurisdiction permits.

The State Legislature is currently considering a new bill that would enable more local authority over BESS facilities:

- AB 303 (introduced to State Assembly on January 23, 2025)
 - Remove authority from CEC to permit BESS facilities capable of storing 200 MWh or more; local jurisdictions to permit all BESS facilities;
 - Require BESS facilities capable of storing 200 MWh or more to be located at least 3,200 feet away from sensitive receptors (e.g., residences, schools, hospitals, businesses open to the public) and not located within environmentally sensitive sites (e.g., very high fire hazard severity zones, coastal zones, flood hazard areas, earthquake fault).

As part of the effort to develop guidelines and standards, staff has initiated coordination with key energy stakeholders – Southern California Edison (SCE) and San Diego Gas & Electric (SDG&E) – and with OCFA in the process of studying and drafting regulations on BESS facilities.

Key Feedback from SCE, SDG&E, and OCFA:

- Regulatory consistency with other jurisdictions will provide for more predictable permitting process throughout the state;
- Developers of BESS facilities will more likely cite a facility where there is easy interconnection to the energy grid (e.g., existing substation) to minimize the need to build additional infrastructure;
- Consider limiting or prohibiting BESS facilities in areas susceptible to wildfires or designated as very high fire hazard severity;
- Consider prohibiting BESS facilities designed to be wholly enclosed in a building and encourage facilities to be mostly outdoors;
- Consider requiring a Hazard Mitigation Analysis and other Fire Code strategies.

In continuing with the process of developing a regulatory framework for Unincorporated Orange County, staff requests input from the Planning Commission on considerations for the following development standards and guidelines for BESS facilities:

Location/Citing

- Public Safety of residences and businesses
 - Consider prohibiting BESS facilities within 3,200 feet of sensitive receptors as defined in AB 303.
- Potential hazards
 - Consider prohibiting BESS facilities to be cited in environmentally sensitive sites as defined in AB 303.
- Limit BESS to Specific Zoning Districts
 - Agricultural (A1), Commercial (C1, C2) and Light Industrial (M1);
 - Allowable in Specific Plan areas and Planned Communities if permitted use by those community plans.

Facility Capacity

- Consider inclusion of BESS facilities with any capacity, including Utility-Scale/Large-Scale Bess Facilities (generally refers to BESS facilities with storage capacity of 200 megawatt-hours or more).
- Consider exclusion of residential and non-residential energy storage requirements specified by the California Code of Regulations, Title 24, Part 6.

Aesthetics

- Decorative and non-scalable screening walls and fencing at a maximum height of six (6) feet;

- Only landscaping on the exterior side of the perimeter screen walls and fencing (will not conflict with any vegetation management required by OCFA);
- Height limitations of six (6) feet for exposed equipment, 15 feet for enclosed equipment, and height limitations subject to Planning Commission approval for utility connection equipment/utility poles exceeding zoning district standards.

Parking

- One (1) off-street parking space per employee or one (1) off-street parking space for unoccupied sites.
- Off-street parking requirements to meet or exceed current zoning code requirements for off-street parking requirements for non-residential uses such as public utility facilities.

Lighting, Noise, and Signage

- Consistent with lighting, noise, and signage requirements of the zoning code

OCFA Review

- Subject to a Hazard Mitigation Analysis to be reviewed and approved by OCFA concurrent with any entitlements to allow the appropriate agency to review appropriate fire mitigation measures.

Decommissioning Plan

- Requirement of a decommissioning plan to be submitted for review and approval prior to issuance of any permits relating to decommissioning activities.

Economic and Public Benefits

- Consider whether use permit for a BESS facility shall not be granted unless findings can be made that the construction and operation of the facility will have an overall net positive economic benefit to the County consistent with Public Resources Code section 25545.9.
- Consider whether use permit for a BESS facility shall not be granted unless the County of Orange has entered into a legally binding and enforceable community benefit agreement with the facility owner/operator consistent with Public Resources Code section 25545.10.

Required Approval


- Use Permit to the Planning Commission

Next Steps

Task/Milestone	Date
Planning Commission - Request Authorization to Initiate General Plan and Zoning Code Amendments	December 2024
Internal Coordination (Building and Safety, Planning, County Counsel) External Coordination (OCFA, SCE, SDG&E)	January – March 2025
Planning Commission - Study Session	March/April 2025
Meeting with Supervisorial Districts - Study Session/Gain Feedback	April/May 2025


Planning Commission - Public Hearing/Recommendation to Board of Supervisors	June/July 2025
Board of Supervisors Meeting - Public Hearing/First Reading	August/September 2025
Board of Supervisors Meeting - Public Hearing/Second Reading/Ordinance Approval	September/October 2025
Ordinance Becomes Effective (30 Days from Board of Supervisors approval)	October/November 2025

Submitted by:

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OC Development Services/Planning

Concurred by:

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Cindy Salazar, Division Manager
OC Development Services/Planning

ATTACHMENTS:

1. Board of Supervisors Supplemental Item # S14D (October 8, 2024)
2. Board of Supervisors Supplemental Item #S32A (January 28, 2025)
3. Board of Supervisors Supplemental Item #S33E (March 11, 2025)
4. CEC Opt-In Certification Program Fact Sheet