



**JIM DESMOND**  
SUPERVISOR, FIFTH DISTRICT  
SAN DIEGO COUNTY BOARD OF SUPERVISORS

**AGENDA ITEM**

**DATE:** July 17, 2024

**08**

**TO:** Board of Supervisors

**SUBJECT:**

**ESTABLISHING DEVELOPMENT STANDARDS FOR SITING BATTERY ENERGY STORAGE SYSTEM PROJECTS IN THE UNINCORPORATED COUNTY (DISTRICTS: ALL)**

**OVERVIEW**

The County's vision for decarbonization through a transition away from traditional sources of energy, such as contemplated in the "Regional Decarbonization Framework" (RDF) gives considerable attention toward solar and wind generation capabilities interlinked by the grid. Due to the intermittent nature of these sources of energy, an inherent component of this vision – then - is the need for battery storage of the renewable electricity generated during off-peak hours to power homes and businesses throughout the night and to prevent black and brownouts. As this transition continues to unfold, demand for battery storage projects (typically referred to as "battery energy storage systems" (BESS)) will only increase.

Currently, the County does not have specific definitions nor development standards in place to guide the review process for new BESS projects. Because of this, the County's department of Planning & Development Services (PDS) processes these types of projects consistent with the nearest comparable land use categories in the Zoning Ordinance, such as minor and major impact utilities. Land uses considered minor impact utilities include cellular antenna facilities, electrical substations, and small water tanks. Examples of major impact utilities include large wind turbines, water treatment facilities, and steam, fossil, or nuclear power plants. It is not unreasonable to accept that BESS projects are comparable in scope and scale to some of these land uses. However, certain aspects of BESS projects are especially unique and often utilize cutting-edge technology that must be specifically accounted for, such as the operating characteristics and safety requirements for lithium-ion battery storage.

Beyond the uniqueness of BESS facilities, these projects also often generate public controversy and opposition, particularly when located near existing residential neighborhoods. By and large, this is based on an understanding of the associated public health and safety risks, such as fire, thermal runaway, and release of toxic gases. For example, the 250-megawatt Gateway Energy Storage facility located in East Otay Mesa (District 1), approved by the County in 2018 caught fire in May of this year and continued to reignite despite efforts to contain it. This incident prompted an evacuation warning for nearby businesses, deployment of firefighters and HAZMAT teams to

**SUBJECT: ESTABLISHING DEVELOPMENT STANDARDS FOR SITING BATTERY ENERGY STORAGE SYSTEM PROJECTS IN THE UNINCORPORATED COUNTY (DISTRICTS: ALL)**

put out the blaze, monitor air quality conditions and discharge of waterborne contaminants in firefighting suppression activities, and establishment of a 600-foot buffer from the site due to potential for release of toxic gases. In Valley Center (District 5) a much smaller, but nonetheless concerning fire occurred recently at the County-approved Terra-Gen BESS facility. This resulted in temporary road closures and evacuation orders for nearby homes. Clearly, public fixation on the health, safety and environmental risks posed by these facilities is well warranted.

Given the unique operating characteristics of BESS facilities, their inherent safety concerns, and a growing public awareness of their impacts – particularly when located near or within residential neighborhoods - the County must adopt specific development standards for guiding our review process of new BESS project applications. In this spirit, today's action directs the Chief Administrative Officer (CAO) to establish development standards for siting BESS projects in the unincorporated areas and orders a temporary pause on any new application submittals until standards have been developed and adopted.

**RECOMMENDATION(S)  
SUPERVISOR JIM DESMOND**

- 1) Find that the proposed actions are not subject to the California Environmental Quality Act (CEQA) pursuant to SCEQA Guidelines Sections 15060(c)(2) and (3), Section 15061(b)(3), and 15378(b)(5) because the action is an administrative action that does not commit County to a specific project and will not have a reasonably foreseeable direct or indirect effect on the environment.
- 2) Direct the Chief Administrative Officer (CAO) to establish development standards for siting battery energy storage system (BESS) projects in the unincorporated areas. This process shall be informed by community, industry, and all other relevant stakeholder input as deemed appropriate. At a minimum, standards should include, but are not limited to the following:
  - a) Avoid locating BESS projects in residential areas.
  - b) Avoid locating BESS projects near sensitive receptors, such as schools, day care centers, senior care centers and hospitals.
  - c) Incentivize locating BESS projects in commercial and/or industrial zones.
  - d) Incentivize BESS projects that can co-locate with existing utility facilities, electrical substations, etc., unless located in a residential area.
  - e) Specific safety requirements for thermal runaway, fire and explosion risks, emergency response, hazardous materials, toxic gases, and noise.
  - f) Specific development regulations for setbacks, building height, etc.
  - g) Specific design standards for aesthetics, community character, lighting, and landscaping.

**SUBJECT: ESTABLISHING DEVELOPMENT STANDARDS FOR SITING BATTERY ENERGY STORAGE SYSTEM PROJECTS IN THE UNINCORPORATED COUNTY (DISTRICTS: ALL)**

- h) Consider exemption criteria based on project location, size, and/or other metrics as deemed appropriate and as consistent with sub-recommendations a – g (above).
- 3) Direct the CAO to work with applicants with BESS projects currently under review to align their submittals with today’s recommendations, to the extent feasible. The CAO shall also, at the next possible meeting, prepare and bring back an ordinance temporarily (45 days) pausing any new BESS project application from being accepted, pursuant to Government Code Section 65858 as an urgency measure to protect public health, safety, and welfare. This pause shall include two additional one-year extensions, each to be executed until BESS development standards have been adopted.

**EQUITY IMPACT STATEMENT**

Battery energy storage system (BESS) projects may pose significant health, safety, and environmental risks to surrounding communities, especially when located within or near existing residential neighborhoods. These risks range from acute noise nuisances to fire and thermal run-away hazards. To protect and buffer residential areas from these risks, and to ensure historically disadvantaged communities don’t bear the brunt moving forward, the County must adopt standards and guidelines for siting future BESS projects that considers their unique operating characteristics, potential health and safety risks, and appropriateness for locating them within close proximity to existing communities and other sensitive receptors.

**SUSTAINABILITY IMPACT STATEMENT**

While there are many benefits of BESS facilities that contribute to the County’s sustainability goals, such as strengthening grid reliability and increasing energy efficiency, there are also several potential adverse consequences. These include fire and thermal runaway risks, managing the limited life cycle and degradation of batteries over time, and extraction of rare earth minerals that can have devastating environmental and societal consequences (unethical mining practices, etc.). The key here is striking a balance between the pros and cons of these facilities. Adopting rules for how we process and locate BESS projects in the unincorporated areas is a necessary first step.

**FISCAL IMPACT**

Funds for this request are included in the Fiscal Year (FY) 2024-25 Operational Plan in Planning & Development Services (\$1.0 million) and San Diego County Fire (\$0.25 million). If approved, this request will result in costs and revenue of approximately \$1.25 million to establish development standards for siting battery energy storage system (BESS) projects, depending on the complexity of the environmental review required. The funding source is one-time General-Purpose Revenue. There will be no change in net General Fund cost and no additional staff years.

**BUSINESS IMPACT STATEMENT**

N/A

**ADVISORY BOARD STATEMENT**

N/A

**SUBJECT: ESTABLISHING DEVELOPMENT STANDARDS FOR SITING BATTERY ENERGY STORAGE SYSTEM PROJECTS IN THE UNINCORPORATED COUNTY (DISTRICTS: ALL)**

**BACKGROUND**

Over the past few years, we have seen a growing increase in both proposed and approved/constructed BESS projects in the unincorporated areas. Since 2018 the County has approved three of them, ranging in size from 40 megawatts (MW) to 250 MW. Some of these have been in commercial or industrial areas like East Otay Mesa in District 1, while others have been located near residential areas such as in Fallbrook and Valley Center in District 5. Beyond those that have already been approved, there are *twelve* active applications currently under review with PDS in various stages of the process. What's more, utility companies such as San Diego Gas & Electric (SDGE) are building their own BESS facilities in the unincorporated areas, while often being able to circumvent the local permitting process. Now is the time to establish specific and transparent guidelines, and effectively telegraph the County's stance on permissible locations and intended standards for new BESS projects.


Given the County's reliance on intermittent sources of energy going forward, demand for BESS facilities will almost certainly continue to grow in the coming decades. For this reason, it's imperative the County adopt specific development standards while it's still relatively "early" enough to have any meaningful impact. Due to the public health and safety concerns, having appropriate standards in place will ensure new BESS facilities are designed, located, and constructed with safety as the top priority. Moreover, since BESS facilities are going to be a critical component in meeting future electricity demand, building and gaining the public's trust and acceptance of them appears to be a necessary requirement. To this end, standards would establish clear rules and definitions that will enable the County to gather more meaningful community input, provide better transparency for the public during the review process, and address specific safety and other environmental concerns such as fire risk, air quality, noise, and visual impacts.

Given the unique operating characteristics of BESS facilities, their inherent safety concerns, and a growing public awareness of their impacts, the County must adopt specific development standards for guiding our review process of new and future BESS project applications. In this spirit, today's action directs the Chief Administrative Officer (CAO) to establish development standards for siting battery energy storage system (BESS) projects in the unincorporated areas, and also orders a temporary pause on any new application submittals until standards have been developed and adopted.

**LINKAGE TO THE COUNTY OF SAN DIEGO STRATEGIC PLAN**

Today's proposed actions support the *Sustainability: Climate; Equity: Health; and Community: Engagement, Safety, and Quality of Life* Strategic Initiatives in the County of San Diego's 2024-2029 Strategic Plan.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Jim Desmond', with a stylized, cursive script.

JIM DESMOND  
Supervisor, Fifth District