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December 19, 2025

Connie Chen
Project Manager
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, California 94102

Re: Comments on Draft Environmental Impact Report Collinsville 500/230 kV Substation Project
Application No. A.24-07-018 SCH

Dear Ms. Chen,

The Solano County Department of Resource Management, Planning Services Division (County), submits these comments on the Draft Environmental Impact Report (Draft EIR) for the proposed Collinsville 500/230 kV Substation Project. As the local land use authority with responsibility for balanced planning that supports both environmental protection and economic prosperity for Solano County residents, the County appreciates the opportunity to provide input on this important transmission infrastructure project.

After careful review of the Draft EIR and consultation with the project applicant, LS Power Grid California (LSPGC), regarding the technical and siting considerations of the various alternatives analyzed in the Draft EIR, Solano County respectfully supports approval of the initially proposed project site and does not support Alternative 1 (Collinsville Substation North of Talbert Lane). This letter explains the County's position and requests specific revisions to the Final EIR to ensure a complete analysis of alternatives.

1. Summary of County's Position

The County's support for the initially proposed project site over Alternative 1 is based on two principal considerations. First, the initially proposed site provides superior long-term economic development potential and infrastructure flexibility for Solano County and the region. This advantage stems from the site's physical characteristics including flat topography, adequate surrounding space, and fewer constraints from wind turbine setbacks that would otherwise limit future grid interconnections, co-located battery energy storage systems, and potential industrial development requiring substantial electrical capacity. Alternative 1, while adequate for the project's primary transmission purpose, suffers from substantial constraints related to surrounding wind turbine infrastructure and hillier

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terrain that significantly limit its utility for future expansion and economic development applications. These technical limitations mean that Alternative 1 cannot readily support future uses that would maximize the economic value of this generational infrastructure investment over its 50-plus year operational life.

Second, the initially proposed site consists of nearly 50 years of local and regional planning that has designated the Collinsville area for potential infrastructure and water-dependent industrial development under the Suisun Marsh Protection Plan and the Solano County General Plan. This location represents appropriate concentration of development in areas specifically planned for such uses rather than dispersal to other locations. Alternative 1 is not located within an area designated for water-dependent industrial development or supporting infrastructure in regional planning documents. The County recognizes that the California Public Utilities Commission has exclusive jurisdiction over utility siting and design under Public Utilities Code Section 1001 and General Order 131-D. However, the County respectfully submits that economic development potential, infrastructure optimization, and consistency with long-standing local and regional planning frameworks are legitimate considerations under the California Environmental Quality Act that should inform the Commission's alternatives analysis and site selection decision.

2. Suisun Marsh Regulatory Framework

For informational purposes, the County notes that the initially proposed LSPGC Collinsville Substation site is located within the Secondary Management Area of the Suisun Marsh as defined by the Suisun Marsh Preservation Act of 1977 (Public Resources Code Section 29000 et seq.). The Act established state policy to preserve, protect, restore, and enhance the Suisun Marsh as one of California's major fish and wildlife habitats. The Act designates two management areas: the Primary Management Area consisting of tidal marshes, seasonal marshes, managed wetlands, and lowland grasslands, and the Secondary Management Area consisting of upland grasslands and cultivated lands that serve as significant buffers to the Marsh.

If the initially proposed site is selected, the project would require a Marsh Development Permit from Solano County pursuant to Solano County Code Section 28.104 and the Suisun Marsh Act. The Commission would determine whether the project is approved, where it is sited, and how it is designed under its exclusive jurisdiction. The County would determine, through the Marsh Development Permit process, whether the project is consistent with Suisun Marsh protection policies established under state law and implemented through Chapter 12 of the Solano County General Plan (Suisun Marsh Local Protection Program Policies).

Solano County Code Section 28.104.H requires that a Marsh Development Permit shall not be approved unless all of the following general findings are made: (1) that the application process complies with the California Environmental Quality Act of 1970, as amended; (2) that the establishment, maintenance, or operation of the use is in conformity with the County General Plan with regard to traffic circulation, population densities and distributions, and all other pertinent

aspects; (3) that adequate utilities, access roads, drainage, and other necessary facilities have been or are being provided; (4) that the applicant has exhibited proof that such use will not constitute a nuisance or be detrimental to the health, safety, comfort, or general welfare of the people of the County, or be detrimental to adjacent property or improvements to the neighborhood; and (5) that the proposed development shall be consistent with the certified Suisun Marsh Local Protection Program. Additionally, the project must be consistent with all policies in Chapter 12 of the Solano County General Plan.

The County has conducted a preliminary review of the initially proposed site's consistency with Chapter 12 policies and finds that the project could be made consistent with Suisun Marsh Local Protection Program policies. General Plan Policy SM.P-25(b) specifically provides that urban utilities and public services should be allowed to extend into the Suisun Marsh and the adjacent upland area necessary to protect the Marsh only to serve existing uses and other uses consistent with protection of the Marsh, such as agriculture, but that utilities in the Secondary Management Area necessary for the operation of water-related industry within the area designated for such use in the Suisun Marsh Protection Plan at Collinsville would be permissible. The initially proposed substation site is within the Collinsville area specifically identified in the Suisun Marsh Protection Plan for potential water-related industrial uses, and electrical infrastructure to serve this area is explicitly contemplated by this policy framework.

General Plan Policies SM.P-50 through SM.P-55 address water-dependent industrial uses and specifically acknowledge that the upland portion of the Collinsville site presents no significant physical constraints for development and should be reserved for water-related industry use. These policies recognize that the Collinsville area has unique characteristics including proximity to deep-water access, existing transportation infrastructure, and location within a designated buffer zone for the Suisun Marsh. The project can be conditioned through the Marsh Development Permit process to ensure consistency with additional Chapter 12 policies addressing erosion control and water quality (SM.P-13), industrial facilities water quality protection (SM.P-14), riparian vegetation preservation (SM.P-15), diking, filling, and dredging standards (SM.P-33), and scenic resource protection (SM.P-44 through SM.P-49).

For the Commission's information, Alternative 1 is located outside the Suisun Marsh Management Area boundaries and therefore would not require a Marsh Development Permit.

3. Consideration of Economic Development Potential in Alternatives Analysis

The Draft EIR's Section 5.2 (Growth Inducing Effects) concludes that the proposed project would not serve new users or expand service areas and would not indirectly induce population growth, and that the proposed project would provide electrical transmission to meet existing and planned growth in the Greater Bay Area and would not induce additional population growth beyond that which is planned for in the region. While this analysis is accurate at a regional level, it fails to differentiate between the site-specific development potential and economic implications of the initially proposed site versus

Alternative 1. The growth-inducing effects analysis treats all substation locations as functionally equivalent, which is not the case.

Growth inducement under California Environmental Quality Act Guidelines Section 15126.2(e) refers to whether a project directly causes population growth beyond that considered in local and regional plans, removes obstacles to population growth such as extending urban services to undeveloped areas, or sets precedent for future development pressure. The initially proposed site does not induce unplanned population growth, which is consistent with the Draft EIR's finding. However, the sites differ substantially in their ability to enable planned economic development consistent with County planning objectives and to optimize the long-term utility of generational infrastructure investments.

The initially proposed site and Alternative 1 may both serve the same regional transmission function of relieving Bay Area grid constraints, but they have fundamentally different capacities to support local economic development through future interconnections and co-located infrastructure. The initially proposed site has superior physical characteristics, including flat topography, adequate space, and fewer surrounding constraints, that allow for future expansion of substation facilities, additional transformers, breakers, and interconnection points without major reconstruction. Battery energy storage systems are increasingly important for grid reliability and renewable energy integration, and large-scale battery storage facilities (100 megawatts or greater) require direct high-voltage interconnections. The initially proposed site can accommodate future battery storage co-location, while Alternative 1's spatial and wind turbine constraints significantly limit this potential. While the substation is designed primarily for transmission reliability, substations with adequate capacity can also serve large industrial loads consistent with General Plan designations. The initially proposed site is better positioned to support future water-dependent industrial development in the Collinsville area through direct or nearby interconnection, consistent with Suisun Marsh Protection Plan policies.

Access to on-grid electrical capacity is the essential foundation for large-scale economic development projects that provide substantial employment and tax revenue. This is particularly true for emerging industries that require enormous electrical loads, including data centers (typically 20 to 100 or more megawatts per facility), advanced manufacturing such as electric vehicle batteries and semiconductors (50 to 200 or more megawatts), green hydrogen production (100 or more megawatts per electrolyzer plant), and large-scale battery energy storage systems. Without available grid capacity, these industries cannot locate in a jurisdiction regardless of other favorable conditions. Conversely, demonstrated grid capacity and available interconnection points serve as powerful attractors for these high-value industries.

County planning staff met with representatives from LS Power Grid California to discuss the technical characteristics and constraints of the proposed substation site and the various alternatives analyzed in the Draft EIR. Through these discussions, County staff gained important insights into the long-term functionality and development potential differences between the initially proposed site and Alternative 1 that are not fully captured in the Draft EIR's environmental analysis. Specifically, LSPGC provided information indicating that Alternative 1 has serious physical and regulatory

restrictions that would significantly limit the substation's utilization to its full capacity for future interconnections and grid expansion. These constraints are technical in nature and relate to the site's topography, surrounding wind energy infrastructure, and spatial limitations for future electrical equipment and connections.

4. *Technical Constraints of Alternative 1*

Based on information provided by LSPGC during County consultation, Alternative 1 suffers from significant technical and spatial constraints that substantially limit its long-term utility and economic development potential. Alternative 1 is in an area densely populated with wind turbines from the Montezuma Hills Wind Resource Area. Federal regulations require that development maintain a minimum setback from operating wind turbines equal to a radius of 1.1 times the turbine height (measured from ground to blade tip) around each turbine base.

The wind turbine setback zones significantly constrain where new electrical equipment, transmission lines, or interconnection facilities can be in proximity to the Alternative 1 substation site. This creates a condition where future expansion or connection points are severely limited. Battery energy storage facilities require substantial land area (typically one to three acres per 10 to 20 megawatts of capacity), and large-scale battery storage projects (100 megawatts or greater) need five to fifteen acres plus buffer zones. The wind turbine setback restrictions surrounding the Alternative 1 location make it effectively infeasible to co-locate utility-scale battery storage facilities.

The Draft EIR notes in Section 4.20.6 that Alternative 1 substation components are not located within a turbine hazard throw zone. However, while the substation footprint itself may not be in a throw zone, the surrounding area available for future electrical infrastructure development is severely constrained by multiple overlapping throw zones. This creates operational risks and liability concerns for future facilities. The California Independent System Operator's long-term grid planning process (20-year horizon) considers where future transmission upgrades and interconnections may be needed. A substation site that cannot readily accommodate future connections or expansions creates future grid planning inefficiencies and may necessitate redundant infrastructure investments elsewhere. The initially proposed site, located near the Montezuma Hills Wind Resource Area, is positioned in a location where wind turbine density is lower and setback constraints do not create the same degree of surrounding limitation on future development and interconnections. This provides significantly greater long-term flexibility for grid expansion and co-located infrastructure.

Alternative 1 is described in the Draft EIR Section 4.20.6 as being in moderately hilly terrain, while the initially proposed site is on gently sloping to flat terrain. The initially proposed site is already substantially level and would require minimal grading to achieve the level building pad required for substation equipment. Alternative 1's varied topography would require extensive cut-and-fill operations, increasing construction costs and creating larger areas of ground disturbance. Large

substation equipment (transformers, circuit breakers, high-voltage bus work) requires level installation and precise alignment. Sites with significant grade changes require more complex foundation design, more extensive retaining structures, and careful drainage management. A substation on hilly terrain has limited options for future expansion. Adding equipment requires finding or creating additional level areas through grading. The initially proposed site's flatter topography allows for more straightforward future expansion in multiple directions.

The combination of wind turbine setbacks, topographic limitations, and existing infrastructure creates a condition at Alternative 1 where the substation itself can be built and will function for its primary transmission purpose, but the site cannot readily support future uses that would maximize its economic value. This is the critical distinction the County wishes to emphasize. Alternative 1 is adequate for the project's stated narrow purpose, but the initially proposed site is optimal for supporting long-term economic development and grid flexibility that serves broader public interests.

5. Consistency with Regional Planning Framework

The Suisun Marsh Protection Plan (adopted 1976, most recently updated 2012) and Solano County General Plan (adopted 2008) have consistently identified the Collinsville area as appropriate for water-dependent industrial development and necessary infrastructure. This represents nearly 50 years of planning recognition.

General Plan Policy SM.P-50 states that the upland portion of the Collinsville site, above the 10-foot contour line, presents no significant physical constraints for development and should be reserved for water-related industry use. Policy SM.P-51 addresses the low-lying portion of the Collinsville site and states that the portion that fronts deep water should be reserved for water-related industry use. Policy SM.P-25(b) specifically contemplates that utilities in the Secondary Management Area necessary for the operation of water-related industry within the area designated for such use in the Suisun Marsh Protection Plan at Collinsville would be permissible.

The Collinsville area's designation for water-dependent industrial use reflects recognition of specific locational characteristics including proximity to deep-water port access on the Sacramento-San Joaquin River Delta, existing transportation infrastructure (Interstate 80 corridor, Union Pacific rail service, and maritime shipping channels), strategic regional location between the Bay Area and Sacramento region, and presence of extensive wind energy generation infrastructure in the Montezuma Hills area. The initially proposed substation site is located within this specifically designated area.

Alternative 1 is not located within an area designated for water-dependent industrial development or infrastructure in either the Suisun Marsh Protection Plan or the Solano County General Plan.

6. Requested Revisions to Final Environmental Impact Report

To support informed decision-making, Solano County respectfully requests that the Final EIR include the following additions and clarifications.

The County requests that Section 5.2 (Growth Inducing Effects) be revised to acknowledge site-specific differences in economic development potential between the initially proposed site and Alternative 1. The analysis should address future interconnection capacity and discuss the physical and regulatory constraints at Alternative 1 related to wind turbine setbacks and how these constraints limit future grid interconnection opportunities compared to the initially proposed site. The analysis should address battery energy storage system co-location potential and analyze the differing potential for utility-scale battery energy storage system co-location at each site, given land availability, wind turbine setbacks, and site topography. The analysis should address infrastructure optimization and recognize that 500 kV substations are generational infrastructure investments (50-year or longer operational life) and that site selection should consider not just near-term transmission functions but long-term infrastructure flexibility.

The County suggests the following language be added to Section 5.2: "While both the initially proposed site and Alternative 1 would provide the same regional transmission reliability benefits, the sites differ in their long-term capacity to support future grid expansion and economic development, and in their relationship to local land use planning frameworks. The initially proposed site is located within the Suisun Marsh Secondary Management Area and the Collinsville Special Study Area. The Suisun Marsh Protection Plan, adopted in 1976 and incorporated into the Solano County General Plan Chapter 12, specifically designates the Collinsville area as appropriate for water-dependent industrial development and acknowledges that utilities necessary to serve such development are permissible (General Plan Policy SM.P-25(b), SM.P-50 through SM.P-55). This nearly 50-year planning framework recognizes the Collinsville area's unique characteristics including proximity to deep-water access, existing transportation infrastructure, and location within a designated buffer zone for the Suisun Marsh.

Alternative 1 is surrounded by wind turbine infrastructure that creates federal setback requirements restricting future development and interconnections within a 1.1 times blade-tip-height radius of each turbine. These setback zones significantly constrain future co-located development such as battery energy storage systems and limit the site's long-term utility for additional grid interconnections. The initially proposed site, while also located within the Montezuma Hills Wind Resource Area, has fewer proximate wind turbines and greater spatial flexibility for future infrastructure expansion. Alternative 1's variable topography would require more extensive grading for future equipment installation and expansion compared to the initially proposed site's flatter terrain. These differences in long-term infrastructure flexibility, development potential, and consistency with local planning frameworks are relevant considerations in alternatives evaluation.

The County requests that the Final EIR include a new subsection in Section 4.11 (Land Use and Planning) specifically addressing Suisun Marsh Preservation Act requirements and local planning framework consistency. This subsection should include a description of the Act's regulatory framework, Primary and Secondary Management Areas, and Local Protection Program requirements. It should explain that projects in the Secondary Management Area require a Marsh Development Permit from Solano County and that Alternative 1 is located outside Suisun Marsh boundaries. It should discuss how the initially proposed site is consistent with Suisun Marsh Protection Plan policies that specifically identify the Collinsville area for potential water-dependent industrial use and necessary utilities (SM.P-25(b), SM.P-50 through SM.P-55), and that Alternative 1 is not located in an area designated for such uses.

The County requests that the Final EIR clarify in multiple locations (Executive Summary, Section 4.2, Alternatives Comparison) that no Prime Farmland, Unique Farmland, or Farmland of Statewide Importance would be converted by any of the alternatives, including the initially proposed project. The Draft EIR correctly states this in Section 4.2.4, but casual readers may be confused by references to agricultural land conversion. The County suggests the following clarification for the Executive Summary: "The Proposed Project and alternatives would result in permanent conversion of approximately 13 acres of Grazing Land (not Prime Farmland) to utility use. All alternatives have similar agricultural impacts, with conversion offset through agricultural mitigation easements (MM AG-1). No Prime Farmland, Unique Farmland, or Farmland of Statewide Importance would be affected."

The County requests that Section 6 (Comparison of Alternatives) include a discussion of economic development potential and planning framework consistency as factors in the alternative's comparison. The County suggests adding a comparison criterion addressing long-term infrastructure flexibility and land use policy consistency with an assessment noting that the initially proposed site has superior flexibility due to flat topography, adequate space for future expansion, and fewer constraints on future interconnections and co-located infrastructure and is in an area designated for water-dependent industrial development since 1976. The assessment for Alternative 1 should note that it is constrained by surrounding wind turbine infrastructure and varied topography, is adequate for primary transmission function but limited in long-term infrastructure flexibility and is not located in an area designated for water-dependent industrial development.

7. Conclusion

Solano County appreciates the California Public Utilities Commission's consideration of stakeholder input in this important infrastructure siting decision. The County recognizes that the Commission has exclusive jurisdiction and that state-level transmission planning objectives must take priority. However, the County hopes this comment letter provides valuable local perspective on the long-term implications of site selection.

Solano County respectfully requests that the California Public Utilities Commission approve the initially proposed project configuration rather than Alternative 1. The County requests that the Commission include expanded discussion of economic development potential differences between sites in Final EIR Section 5.2, Suisun Marsh regulatory framework and planning framework consistency in Final EIR Section 4.11, and long-term infrastructure flexibility considerations in Final EIR Section 6. The County requests clarification that no Prime Farmland exists at any site.

The County requests that the Commission coordinate with County staff during project implementation, particularly regarding the Marsh Development Permit application process and timing, Chapter 12 policy consistency demonstration, agricultural mitigation easement selection and monitoring, and future interconnection inquiries and economic development coordination.

Solano County commits to working collaboratively with LS Power Grid California, Pacific Gas and Electric Company, the California Public Utilities Commission, and other stakeholders to ensure successful project implementation if the initially proposed site is approved. If the project proceeds at the initially proposed site, the County will process the required Marsh Development Permit, coordinate with LSPGC on project design and mitigation measures, work with the applicant on Chapter 12 policy compliance documentation, coordinate on agricultural mitigation easement site selection, participate in biological and cultural resources monitoring as appropriate, and serve as a resource for future developers seeking to interconnect to the substation for economic development projects consistent with County planning processes.

The County appreciates this opportunity to provide input and stands ready to answer any questions or provide additional information that would be helpful to the Commission's decision-making process.

Sincerely,



James Bezek,
Solano County Director of Resource Management

Cc: Ian Goldberg, CAO
Debbie Vaughn, Assistant CAO