

March 11, 2021

Buck Cutting
Sacramento Municipal Utility District
P.O. Box 15830, Sacramento, CA 95852-0830

Re: Solano 4 Replacement Wind Turbines & Sacramento Municipal Utility District (SMUD)

Mr. Cutting,

Westslope Consulting and Capitol Airspace Group have provided radar and air traffic consulting services to SMUD with the purpose of identifying acceptable wind turbine numbers, locations, and heights that would not present a hazard to air navigation and that would not adversely affect Travis Air Force Base (AFB) operations.

Although the proposed development will be within line-of-sight of and will interfere with the Travis AFB Digital Airport Surveillance Radar (DASR), the proposed replacement wind turbines will not impact the base's operations. The following points are submitted for your consideration:

1. Solano 4 will replace 23 existing, older wind turbines currently visible to the DASR with 19 wind turbines using newer wind turbine technology.
2. Extensive modeling of the replacement wind turbines was conducted to identify a number and specific locations of the wind turbines to ensure that there will be no material difference on the performance of the DASR and on Travis AFB's tracking and display system, the Standard Terminal Automation Replacement System (STARS). This was confirmed by the conclusion of a formal Mitigation Response Team (MRT) review undertaken by Travis AFB and its subject matter experts. For reference, attached is a copy of the operational risk assessment letter from the 60th Air Mobility Wing (AMW) and the resolution letter from the DoD's Office of the Assistant Secretary of Defense, Military Aviation and Installation Assurance Siting Clearinghouse.
3. The base's key radar system used for air traffic control, the Monopulse Secondary Surveillance Radar (MSSR) which is co-located with the Travis AFB DASR, will not be affected. The MSSR interrogates transponder equipment on board the vast majority of aircraft operating in and around the base's airspace.
4. The planned replacement turbines do exceed obstruction standards and will require a routine change to civilian airspace. Specifically, an increase in minimum vectoring altitudes used by Northern California air traffic control. The Federal Aviation Administration (FAA) completed a detailed aeronautical study and deemed these changes as insignificant and issued favorable Determinations of No Hazard (DNHs) on February 1, 2019. The FAA then extended these DNHs on January 28, 2021, after an additional review of the proposed replacement wind turbines. For reference, attached are the favorable determinations and extension letters.
5. To provide conspicuity to both civilian and military users of the National Airspace System, each wind turbine will be marked and lighted in accordance with FAA's determinations and obstruction marking and lighting advisory circular. This includes painting each wind turbine white for daytime conspicuity and two synchronized flashing red L-864 lights for nighttime conspicuity.

The Travis AFB Land Use Compatibility Plan (LUCP) considers any land use involving a wind turbine that is within line-of-sight of the Travis AFB DASR to be incompatible. The LUCP allows for consideration of special conditions that allow for the acceptance of otherwise normally incompatible use "because of terrain, specific location, or other extraordinary factors or circumstances related to the site." In order to apply this analysis, the Airport Land Use Commission (ALUC) must make findings that the proposed use will neither (1) create a safety hazard to people on the ground or aircraft in flight, (2) result in excessive noise exposure, or (3) impact airport military operations (Paragraph 6.2.4(c)(6)).

Based on the number, specific locations, and height of the proposed replacement wind turbines to ensure that there will be no material difference on the performance of the DASR and STARS, and on the favorable responses from the U.S. Air Force, the DoD, and the FAA, we conclude that Solano 4 will not be a safety hazard for aircraft in flight and will not impact airport military operations. As such, we believe that the ALUC can find the planned replacement turbines as an acceptable land use that addresses the stated goals of the LUCP.

Please direct any questions to Geoff Blackman of Westslope Consulting at gnblackman@westslopeconsulting.com or Joe Anderson of Capitol Airspace Group at joe.anderson@capitolairspace.com.

Respectfully,



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