



Code Interpretation A24-0026 Pursuant to TMC Table 18-6

Date: December 4, 2024

Interpretation:

This interpretation confirms that battery energy storage systems (BESS) are allowed as a conditional use in the Commercial/Light Industrial zoning district. Given that electrical substations are already allowed as a conditional use in the C/LI and share similar impacts with BESS it stands to reason that BESS are compatible with the district's objectives. Additionally, BESS will enhance the region's energy infrastructure while maintaining safety and regulatory standards. Therefore, the inclusion of battery energy storage systems in the C/LI zoning district aligns with the standards and purpose of the code.

Why was this interpretation developed?

Prologis is proposing the construction of a battery storage facility at 6700 S Glacier St associated with PRE24-0049. Title 18 of the Tukwila Municipal Code (TMC) does not currently contain zoning standards on battery storage facilities. The City recommended that the applicant apply for a code interpretation to determine if the proposed use would be permitted within the Commercial/Light Industrial (C/LI) zoning district

What is the justification for the interpretation?

Battery energy storage systems (BESS) are a rapidly growing technology that are not defined or included in the Tukwila Municipal Code. BESS allow for the storage of renewable energy sources, which have a variable peak in energy production throughout the day. Their modular nature enables them to be constructed within commercial, residential, and industrial zones. BESS do not generate emissions or radiation and involve limited fire risk.

To mitigate fire risk, the proposal includes an aerosol fire suppression system and requires that batteries undergo UL 9540A testing. Per the Pacific Northwest National Laboratory, systems that are UL 9540 certified are designed to contain battery failures and prevent failures from spreading to adjacent units.

The Puget Sound Regional Fire Authority (PSRFA) has confirmed with staff that UL 9540 and UL 9540A standards are referenced in the International Fire Code (IFC) as adopted by the City. PSRFA has expressed confidence in the IFC's regulations to effectively address the known issues related to BESS and raised no concerns regarding the proposal to permit BESS as a conditional use in the C/LI zone.

The intent of the C/LI zoning district is to "provide areas characterized by a mix of commercial office, or light industrial uses. The standards are intended to promote viable and attractive commercial and industrial areas." The closest comparable use to BESS in TMC Title 18 is an

electrical substation, which is allowed as a conditional use in the C/LI zone. Electrical substations and BESS have visual, auditory, and environmental impacts. Likewise, electrical fire hazards are the most prevalent hazard for either use.

In March 2024, the American Planning Association (APA) recommended BESS as a conditional use in districts across the rural-to-urban transect to provide resilience and electric power quality benefits:

“Based on the review of best practices and considering implications of existing practices in jurisdictions who have included BESS in ordinance, here are some basic recommended practices and considerations for planning and zoning.

Permit BESS as Accessory Uses Permit

BESS as an accessory use for sites with energy generation, particularly community- or utility-scale solar and wind facilities, subject to national safety standards (NFPA 855). Clarify that BESS are a permissible accessory use to substations within the substation footprint. Require a modification to an existing discretionary use permit or a new discretionary use permit for installations that would expand the substation area.

Allow BESS Across the Transect Allow

BESS as a conditional use in districts across the rural-to-urban transect. BESS can provide resilience and electric power quality benefits everywhere that the grid serves. How or where the electricity or power from the battery is used does not affect the land-use implications of the system, and generally should not affect how the BESS is regulated.

Require a Decommissioning Plan

Require BESS applications to provide a decommissioning plan. If the community requires financial surety for other kinds of uses, BESS should be subject to equivalent requirements.”

Conclusion

This code interpretation provides clarity and establishes precedent for the inclusion of battery energy storage systems as a conditional use in the Commercial/Light Industrial zoning district. BESS facilities align with the district’s goals of supporting innovative and sustainable industrial uses while minimizing environmental and safety risks. As Tukwila continues to adapt its zoning code to emerging technologies, this interpretation ensures that the City remains at the forefront of sustainable energy solutions, enhancing the community’s resilience and infrastructure capabilities.