

Section 19.66.010 – Purpose and Intent

- A. To provide areas suitable for the establishment of commercial battery energy storage systems based upon where commercial solar energy facilities can be sited and mitigated in relation to the County's adopted agricultural zoning.
- B. To provide site criteria for the suitable location of battery energy storage systems in the County. Each commercial solar energy facility will be subjected to individualized review and the imposition of conditions based on site-specific information that will be tailored to address project impacts in accordance with the adopted site criteria. The ultimate goal is to achieve a predictable but sensitive siting process that effectively addresses project impacts.

Section 19.66.020 – Definitions

Battery Energy Storage System (BESS) - A rechargeable energy storage system consisting of electrochemical storage batteries, battery chargers, controls and associated electrical equipment designed to provide electrical power to a building. The system is typically used to provide standby or emergency power, an uninterruptable power supply, load shedding, load sharing or similar capabilities. A battery energy storage system is classified as a Tier 1, Tier 2, or Tier 3 battery energy storage system as follows:

- a. Tier 1 (Residential-Scale) battery energy storage systems have a maximum stored energy capacity less than or equal to 20 kWh and, if in a room or enclosed area, consist of only a single energy storage system technology. The aggregate rating of the ESS shall not exceed the following for each location listed:
 - i. 40 kWh within utility closets, basements, and storage or utility spaces
 - ii. 80 kWh in attached or detached garages and detached accessory structures.
 - iii. 80 kWh where outdoor wall mounted.
 - iv. 80 kWh where outdoor ground mounted.
- b. Tier 2 (Medium -Scale/Commercial) battery energy storage systems have an aggregate energy capacity greater than 40 kWh up to 600 (kWh).
- c. Tier 3 (Industrial-Scale/Public Utility) battery energy storage systems having an aggregate energy capacity greater than 600 kWh, up to, but not exceeding 200 mega-watt hours (MWh), or battery energy storage systems with more than one storage battery energy technology is provided in a room or enclosed area. An HMA shall be required for lithium-ion ESS that exceed 600 kWh (2,160 MJ) for outdoor ESS installations, ESS installations in open parking garages and on rooftops of buildings, and mobile ESS equipment.

Dedicated-Use Building - A building that is built for the primary intention of housing battery energy storage system equipment, is classified as Group F-1 occupancy as defined in the International Building Code, and complies with the following:

- 1) The building's only use is battery energy storage, energy generation, and other electrical grid-related operations.
- 2) No other occupancy types are permitted in the building.
- 3) Occupants in the rooms and areas containing battery energy storage systems are limited to

personnel that operate, maintain, service, test, and repair the battery energy storage system and other energy systems.

- 4) Administrative and support personnel are permitted in areas within the buildings that do not contain battery energy storage system, provided the following:
 - a. The areas do not occupy more than 10 percent of the building area of the story in which they are located.
 - b. A means of egress is provided from the administrative and support use areas to the public way that does not require occupants to traverse through areas containing battery energy storage systems or other energy system equipment.

Energy Code - The 2021 Washington State Commercial and Residential Energy Code, as currently in effect and as hereafter amended from time to time.

Energy Storage - Any technology that is capable of absorbing electricity, storing the electricity for a period of time, and redelivering the electricity.

Fire Code - The 2021 Washington State Fire Code, as currently in effect and as hereafter amended from time to time.

National Fire Protection Association (NFPA) - A nonprofit organization dedicated to eliminating death, injury, property, and economic loss due to fire, electrical, and related hazards. Established in 1896, the NFPA develops and publishes over 300 consensus codes and standards intended to minimize the risk and effects of fire by establishing criteria for building, processing, design, service, and installation in the United States and internationally. The NFPA's mission extends beyond code development; it also focuses on research, training, education, and advocacy to promote safety and preparedness.

National Electric Code (NEC) - Also known as NFPA 70, is a set of standards for the safe installation of electrical wiring and equipment in the United States. Its primary purpose is to ensure the safety of electrical installations by setting forth requirements to protect people and property from electrical hazards. The NEC covers the installation of electrical conductors, equipment, and raceways; signaling and communications conductors and equipment; and fiber optics. It is updated every three years to incorporate new technologies and improve safety measures

NFPA 855 - The *Standard for the Installation of Stationary Energy Storage Systems*, provides comprehensive guidelines for the safe installation of stationary energy storage systems (ESS), including those using lithium batteries. This standard addresses various aspects of installation to mitigate fire and explosion risks associated with energy storage technologies. It covers topics such as system design, construction, operation, and maintenance to ensure safety and reliability.

UL 9540 - Is a standard for Energy Storage Systems (ESS) and Equipment. It is designed to ensure the safety of these systems and covers their construction, performance, and testing requirements. UL 9540 certification is essential for verifying that energy storage systems, such as batteries and related equipment, meet rigorous safety standards to prevent hazards related to electrical, mechanical, and environmental conditions.

Nationally Recognized Testing Laboratory (NRTL) - A U.S. Department of Labor designation recognizing a private sector organization to perform certification for certain products to ensure that they meet the requirements of both the construction and general industry OSHA electrical standards.

Section 19.66.030 – Application of Standards and Criteria

Applications for permits shall be approved in accordance with the following:

- A. Purpose. The following standards and regulations are necessary for the health, safety, general welfare and convenience of the inhabitants of the County.
- B. Permits. No person or applicant shall establish a Battery Energy Storage System without first complying with the provisions and standards of this ordinance and obtaining all necessary state and local permits and approvals.
- C. A commercial energy generating facility (which includes commercial solar energy facilities) over \$5 million in total value plus associated reasonable costs, the applicant shall be required to enter into a cost reimbursement agreement with the County to cover reasonable costs associated with this application up to actual cost (including in-house and outside legal fees).
- D. Pre-Conditional Use Meeting. The project applicant will, before submitting a conditional use permit application, hold a minimum of one informal community meeting within the County to inform the public about the proposed facility. Planning staff will take responsibility for arranging these meetings.
- E. Permits Required. Before any person commences construction, a valid conditional use permit shall be approved. Prior to construction of the project, County road use and right-of-way permits shall be obtained.
- F. Permit Application. Application for a conditional use permit to create a commercial Battery Energy Storage System shall be filed with the Planning Office. The application for a conditional use permit shall be in writing, signed by the applicant, and shall include the following:
 - 1. The name and address of the applicant.
 - 2. The project site location and a listing of the tax parcels and parcel ownerships of the proposed facility.
 - 3. A narrative describing the proposed Battery Energy Storage System, including an overview of the project; the approximate generating capacity of the project; a copy of the lease document, less financial compensation terms, that shows the developer has entered into an agreement for site control with the landowner; and a copy of the contract with a power company showing permission to connect to the grid.
 - 4. Ten copies of a site plan drawn to an appropriate scale that identifies the project boundaries; the location of all existing and proposed structures (includes the batteries); property lines; setbacks; access routes; proposed road improvements; residences within one quarter of a mile of the project perimeter; existing utilities, pipelines and transmission lines; proposed utility lines; utility and maintenance structures; existing and proposed drainage areas; topography; proposed grading/landscaping; area of natural vegetation removal and any re-vegetation methods; weed control; dust and erosion controls; any critical areas (as defined in WCC Chapter 9.05) on or abutting the project boundaries; and any other relevant items identified by the County Planner.

Section 19.66.040 – General Requirements

- A. Battery Energy Storage System (BESS) building permit, issued by the Whitman County Building Department, an electrical permit, issued by the Washington State Department of Labor and Industries shall be required for the installation of all battery energy storage systems. In addition, a conditional use permit, issued by the County, shall be required for the installation of all Tier 2 and Tier 3 battery energy storage systems.
- B. All battery energy storage systems, all Dedicated Use Buildings, and all other buildings or structures that (a) contain or are otherwise associated with a battery energy storage system and (b) subject to the requirements of the most current editions of the International Codes (IBC, IFBC, IRC) including applicable state amendments, and the most current editions of both the National Electrical Code (NEC). All battery energy storage systems shall comply with NFPA 855, the standard for the installation of Stationary Energy Storage Systems, and all equipment shall be UL 9540 listed.
- C. An approved energy storage management system shall be provided for battery technologies other than lead-acid and nickel cadmium for monitoring and balancing cell voltages, currents, and temperatures within the manufacturer's specifications. The system shall transmit an alarm signal to an approved location if potentially hazardous temperatures or other conditions such as short circuits, over voltage or under voltage are detected.

Section 19.66.050 – Permitting Requirements for Tier 1 Battery Energy Storage Systems

Tier 1 Battery Energy Storage Systems are allowed in all zoning districts, subject to the applicable requirements of the most current editions of the IRC, IBC, NEC, NFPA 70, NFPA 855, and all equipment shall be UL 9540 listed. Tier 1 systems, if installed outside a structure, shall meet all established setbacks for the zone they are within, be protected by fencing and screened from view by adjacent property and the public Right of Way.

Section 19.66.060 – Permitting Requirements for Tier 2 Battery Energy Storage Systems

Tier 2 Battery Energy Storage Systems are allowed, in conjunction with a Conditional Use Permit, within the Agricultural District and the North and South Pullman-Moscow Corridor District zones, subject to the applicable requirements of the most current edition of the IEC, IBC, NEC, and NFPA 855. Tier 2 systems shall be set back a minimum of fifty (50) feet from adjacent property lines, provide security fencing, and be screened from view from adjacent property and public Right of Way.

Section 19.66.070 – Permitting Requirements for Tier 3 Battery Energy Storage Systems

Tier 3 Battery Energy Storage Systems are allowed in the Agricultural District and the North and South Pullman-Moscow Corridor District zones, in conjunction with a

Conditional Use Permit. Tier 3 systems shall be set back five hundred (500) feet from any residentially zoned property, provide security fencing, and be screened from view from adjacent property and the public Right of Way. All Tier 3 Battery Energy Storage Systems shall adhere to the most current edition of the following Codes, Standards and Test Methods:

1. 2021 International Fire Code® (IFC)
2. 2021 NFPA 1, Fire Code (NFPA 1)
3. 2023 NFPA 855, Standard for the Installation of Stationary Energy Storage Systems(NFPA 855).
4. 2018 NFPA 68, Standard on Explosion Protection by Deflagration Venting (NFPA 68)
5. 2019 NFPA 69, Standard on Explosion Prevention Systems (NFPA 69)
6. IEC 60529, Degrees of Protection Provided by Enclosures, 2.2 Edition, January 2019 (IP Code)
7. IEC 62619, Secondary cells and batteries containing alkaline or other non-acid electrolytes – Safety requirements for secondary lithium cells and batteries, for use in industrial applications, Edition 1.0, 2017 (IEC 62619)
8. IEC 62933-5-2, Electrical energy storage (EES) systems - Part 5-2: Safety requirements for grid-integrated EES systems - Electrochemical-based systems, April 15, 2020 (IEC 62933-5-2).
9. UL 1642, Lithium Batteries, Edition 6, September 29, 2020 (UL 1642).
10. UL 1973, Standard for Batteries for Use in Stationary, Vehicle Auxiliary Power and Light Electric Rail (LER) Applications, Edition 2, February 7, 2018 (UL 1973).
11. UL 9540, Standard for Safety of Energy Storage Systems and Equipment, Edition 2, February 27, 2020 (UL 9540).
12. UL 9540A, Test Method for Evaluating Thermal Runaway Fire Propagation in Battery Energy Storage Systems, Edition 4, November 12, 2019 (UL 9540A).

Section 19.66.080 – SEPA Requirements

Expanded SEPA Checklist

- A. An Expanded SEPA Checklist shall be submitted to the Planning Office for each application for a Tier 2 and Tier 3 Battery Energy Storage System. The Expanded Checklist shall be submitted simultaneously with any other permit application(s) that may be required by the County; *provided* that if the County determines that an Environmental Impact Statement (EIS) will be required, an Expanded Checklist will not be required.
- B. The Expanded Checklist shall (in addition to being consistent with the SEPA Checklist required in this chapter) provide analysis of impacts to elements of the environment as noted in the SEPA Checklist required in this chapter and Chapter 197-11 WAC, and explain the measures proposed to avoid, minimize or mitigate those impacts.
- C. Site specific studies for impacts to habitat/wildlife (including avian species), cultural resources, and a grading and stormwater management plan complying with applicable local or state best management practices and stormwater quality standards, shall be submitted with the Expanded Checklist.

- D. Because additional studies may be required by the Planning Office for effective review and siting, a pre-application meeting with a representative from the Planning Office is strongly recommended. The level of detail and analysis necessary is dependent on the type of project proposed, its location, and the currently available environmental information and review relevant to the proposal.
- E. The Expanded Checklist shall include sufficient information to adequately describe the proposal and its impacts, including but not limited to, information regarding the total square footage of buildings to be constructed, expected noise generation levels, the location of occupied structures in proximity to the proposed project, the locations and length of new roads and above-ground and below-ground electrical cables and power lines, and transportation impacts.
- F. An application for review under this Chapter shall not be deemed complete until the information required under letter E above is provided. Except for site specific studies for impacts to habitat/wildlife and avian species, upon a clear showing by the applicant that the study is not applicable or is unnecessary, the Planning Office may, within its discretion, waive specific application requirements. Such a determination shall be documented in writing in the project file. Should the applicant prepare an EIS, the Planning Office may waive all requirements for the submittal of individual studies at the time of application and deem the application complete upon submitting the information required in Section 19.66.030 above.
- a. Utility Lines and Electrical Circuitry. All on-site utility lines shall be placed underground to the extent feasible and as permitted by the serving utility, with the exception of the main service connection at the utility company right-of-way and any new interconnection equipment, including without limitation any poles, with new easements and right-of-way.