Planning Commission
Public Hearing

Community Development • 125 NW Chehalis Avenue, Chehalis, WA 98532 • Phone: (360) 740-1146

STAFF REPORT

Date: June 2, 2025

From: Guilherme Motta, Long-range Planner
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Attachments: A – LCC 17.127 Energy Production and Storage Facilities
B – Land Use Summary Table – Energy Uses
C - LCC 10.10 Definitions.

BACKGROUND

On May 13, 2025, the Planning Commission voted on the Lewis County Comprehensive Plan and zoning designations, including the Packwood Urban Growth Area (UGA) boundary and zoning designation amendments for both Packwood and Onalaska. It included new zoning designations for the new UGA in Onalaska and Packwood, new Planned Resort zone designations and changes to Rural Residential Center (RRC). The next step in the Periodic Update process is to review and hold a public hearing on proposed amendments to the Lewis County Code development regulations. The development regulations will be presented to the Planning Commission at workshops as follows:

- May 27 – Small Town Urban Growth Areas & Master Planned Resort
- June 10 – Energy Production, Storage and Distribution workshop
- June 24 – All Other Development Regulations workshop
- July 08 – Public Hearing

This staff report includes the draft proposal for new energy production and storage regulations (aka Energy Code).

SUMMARY

Each staff report with attachments that will be sent to the Planning Commission, and posted online, will contain significantly more information than can be reasonably summarized. Staff request that commissioners read all the materials before the workshops and submit questions to staff, which will help staff hone the presentations.

Currently there are no development regulations related to energy production and storage in Lewis County and all energy production and storage for commercial sales must be permitted through the state. The proposed development regulations are intended to support appropriately scaled energy production, storage and distribution, while minimizing impacts to surrounding properties.

Note – Individual energy production, not for commercial sale, such as solar panels on a house, are exempt from these regulations. Individual energy production is regulated by Chapter 15, Building and Construction.

Small scale energy production would be allowed in some zones in Lewis County. Larger scale energy production would be allowed only in the Major Industrial District (MID) zone. If a company or utility wishes to site a larger energy production facility in a zone where it is not allowed, there are state processes that allow for siting, such as through the Washington State Energy Facility Site Evaluation Council (EFSEC) or Washington State Department of Ecology Clean Energy Coordination Permit Process. These processes can site an energy facility in Lewis County regardless of local zoning.

Every type of energy production must comply with all federal and state laws, as well as any other applicable local laws including Shoreline and Critical Areas Ordinance. In many situations, Lewis County has minimum additional standards beyond what is required by federal or state laws. Below is a high-level summary of the major topics contained within this staff report's proposed new Energy Code.

1. Administration and Standards: The purpose and intent of the chapter is to create a process for establishing and maintaining energy production and storage facilities in Lewis County. The standards are intended to protect the health, welfare, safety, and quality of life of the general public, to protect resource lands and rural character, and to ensure compatibility with land uses in the vicinity of these facilities. General standards for all facilities are screening and buffering, fire protection and electrical housing.

2. Geothermal: Geothermal facilities are subject to rules and regulations under RCW 78.60 and the use of water associated with geothermal well is subject to RCW 90 (water rights). There are no additional requirements in the Lewis County Code.

3. Hydroelectric / Hydropower: It is required to follow WA State Dam Safety regulations (WAC 173-175), Water Right Permit from WA Department of Ecology, Fish Passage Plan submitted to WDFW for projects that affect stream flow and food hazard analysis if located within FEMA floodplain. There are no additional requirements in the Lewis County Code.

4. Hydrogen: In addition to state requirements, the Lewis County Code will require a 1,000 feet setback from residential property lines, schools and hospitals, and 500 feet from any water body or wetland. Storages tanks are limited to 15,000 gallons. The owner/operator is required to have an approved hazard materials management plan.

5. Natural Gas: In addition to state requirements, the Lewis County Code will require a 1,000 feet setback from residential property lines, school, hospital and drinking water sources. Operations may not exceed 55dBA (day), 45dBA (night). The owner/operator is required to have an Emergency Response and Spill Prevention Plan.

6. Nuclear Reactor: The Washington State Department of Health, Chapter 70A.388 RCW, is designated as the state radiation control agency, and shall be the agency having sole responsibility for administration of the regulatory, licensing, and radiation control provisions of the chapter. There are no additional requirements in the Lewis County Code.

7. Sola Energy Facilitiesr: To produce energy from solar, a single parcel or a group of parcels under one ownership must be 10 acres or larger in size. Solar farms are not allowed on sites with a slope greater than 7%, and are required to be setback 100 feet of any adjacent where residential is permitted. There is a maximum height of 20 feet and a requirement for glare resistant panels, lighting shall be shield and downward.

8. Wind Farm: There are multiple local requirements proposed for wind energy production including height limits, blade clearance, lighting, noise reduction, and property setbacks.

9. Battery Energy Storage System: Battery storage facility layout, design and installation shall conform to applicable industry standards, such as those of the American National Standards (ANSI), Underwriters Laboratories (UL), the American Society for Testing and Materials (ASTM), and the Institute of Electrical and Electronics Engineers (IEEE), the Electrical Testing Laboratory (ETL), the National Fire Protection Association BESS Safety Fact Sheet (NFPA 70E), the National Electric Code, or other similar certifying organizations, and with all other applicable fire and life safety requirements. The facilities shall be fenced at least 8 feet high and setback 100 feet from any adjacent parcel and located at least 200 feet away from any adjacent parcel where residential development is permitted. Noite shall not exceed 60dBA. Hazard mitigation analysis is required for energy storage exceeding 600kWh.

10. Abandonment and Decommissioning: The county shall be notified of any abandoned or discontinued operation and remove all grade structures and equipment and restore the location to its natural condition.

NEXT STEPS

Staff will present the new proposed Energy Code regulations on June 10 at 6:00pm to the Planning Commission. The commissioners are encouraged to provide questions and comments prior to the meeting to help staff hone the presentation.

On June 13, staff will send a report with the proposed draft of all other Development Regulations and that will be the subject of the June 24 Planning Commission workshop. On July 8, it is scheduled Public Hearing for the Energy Code and all other development regulations changes.

The public is encouraged to attend the Planning Commission meetings in person at 125 NW Chehalis Avenue, Chehalis or via Zoom. Please check the Lewis County Event Calendar to confirm location and dates https://lewiscountywa.gov/departments/community-development/events/. The Zoom link is on the agenda for each meeting. These are workshops; therefore, no testimony will be taken. Testimony can be provided when the public hearing is noticed.

All materials are posted the Lewis County Comprehensive Plan Periodic Update webpage https://lewiscountywa.gov/departments/community-development/rezones/comprehensive-plan-and-development-regulation-amendments/comprehensive-plan-periodic-update/. The development regulations can be found under Task 10. Hard copies are available upon request.

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Commentary

ATTACHMENT A – LEWIS COUNTY CODE 17.127 ENERGY PRODUCTION AND STORAGE FACILITIES.

In order to maintain consistency with the Washington State Growth Management Act and protect agricultural lands for present and future generations, this regulation may only allow energy facilities in agricultural zones as an accessory use.

This is new code.
It is not underlined for readability.

Chapter 17.127
Energy Production and Storage Facilities

Sections:

Commentary

Code Section

Small-scape energy production is allowed in many zones in Lewis County. Larger scale energy production is allowed only in the Major Industrial District (MID) zone. If an company or utility wishes to site a larger energy production facility in a zone where it is not allowed, there are state processes that allow for siting such as through the Washington State Energy Facility Site Evaluation Council (EFSEC) or Washington State Department of Ecology Clean Energy Coordination Permit Process. The processes can site an energy facility in Lewis County regardless of local zoning.

Every type of energy production must comply with all federal and state laws, as well as any other applicable local laws including Shoreline and Critical Areas Ordinance. In many situations, Lewis County has minimum additional standards beyond what is required by federal or state laws.

17.127.020 Applicability.

On-site energy production and storage that is for the owner's use and is not distributed off of the site is exempt from these requirements. For example, a house with a solar array on the roof that powers the house is exempt.

Article I. Administration

17.127.010 Purpose.

The purpose and intent of this chapter is to establish a process for establishing and maintaining energy production and storage facilities in Lewis County. The standards are intended to protect the health, welfare, safety, and quality of life of the general public, to protect resource lands and rural character, and to ensure compatibility with land uses in the vicinity of these facilities.

17.127.020 Applicability.

Chapter 17.127 LCC applies to uses listed in Chapter 17.42 LCC for the primary purpose of producing or storing energy. Distribution of energy is considered an accessory use to energy production and storage. On-site energy production and storage that is not distributed off-site is exempt.

17.127.030 Procedure.

See Chapter 17.42, Table 2, Land Use Summary, and 17.05.040 Table 1 and Table 2, LCC. Energy production and storage facilities that are not listed in Chapter 17.42 Table 2 or prohibited within a specific zoning designation shall obtain a permit through the State of Washington to be sited in Lewis County.

Article II. Standards

17.127.040 General Standards

(1) Screen and buffering. Screening around the perimeter of the site must be provided. Screening may include fences, walls, vegetation, earth berms with vegetation, or a combination of these or other methods. The screening must be at least eight (8) feet high. Fences and walls shall be articulated by at least two (2) feet in depth, or a shrub or tree shall be planted every 25 feet, of fence or wall length. When vegetation is used, it must obscure at least 80 percent visibility of all equipment and structures as seen from rights-of-way and adjacent properties. The use of vegetation as screening and buffering is prohibited within 20 feet of any facilities or equipment associated with Battery Energy Storage Systems.

(2) Fire protection. All energy production and storage facilities shall have a Lewis County Fire Marshal approved fire management plan provided by the applicant prior to any county permit approval. Energy production and storage facilities, when applicable shall use as zoning reference the following standards: NFPA 1: Fire Code, NFPA 70: National Electric Code, NFPA 855: Standard for the Installation of Stationary Energy Storage Systems, NFPA: BESS Fact Sheet, and the International Fire Code in order to ensure that the system installations are meeting safety best practices. Additional requirements may be required by the Lewis County Fire Marshal

Commentary

(3) Electrical Housing. All electrical equipment shall be safely and appropriately enclosed from unintentional access by means such as barrier fencing, equipment cabinetry or similar means. All access doors to electrical equipment shall remain locked unless access is necessary. Appropriate warning signage (e.g., electrical hazards) shall be placed on all electrical equipment.

17.127.050 Geothermal

(1) Geothermal facilities for electrical production are subject to the rules and regulations as described by the Geothermal Resources Act, RCW 78.60.

(2) Authorization for consumptive or nonconsumptive use of water associated with a geothermal well, shall be subject to Title 90 RCW (Water Rights). Any person proposing to drill a well or redrill an abandoned well for geothermal resources shall file with the Washington State Department of Natural Resources a written application for a permit to commence such drilling or redrilling.

17.127.060 Hydroelectric / Hydropower

(1) Authorization for use of water associated with a hydroelectric / hydropower facility, shall be subject to Title 90 RCW (Water Rights). If applicable, it is required to follow Washington State Dam Safety Regulation WAC 173-175.

(2) A Fish Passage Plan must be submitted to WDFW for all projects affecting stream flow.

(3) Must include flood hazard analysis if located within FEMA floodplain.

17.127.070 Hydrogen

(1) All equipment associated with the facility shall be setback 1,000 feet from residential property lines, school, hospitals, and 500 feet from any water body or wetland.

(2) Storage tanks shall not exceed 15,000 gallons unless secondary containment is provided.

(3) Shall submit and maintain an approved Hazard Materials Management Plan.

Commentary

17.127.080 Natural Gas

(1) All equipment associated with the facility shall be setback at least 1,000 feet from residential property lines, school, hospitals, and drinking water sources and at least 300 feet from public roads.

(2) Operations shall not exceed 55dBA during the day and 45dBA at night at the property line.

(3) Natural Gas facilities shall comply with all air quality standards as Southwest Clean Air Agency (SWCAA) standards and submit and maintain an approved Emergency Response and Spill Prevention Plan Chapter 90.56 RCW.

17.127.090 Nuclear Reactor

The Washington State Department of Health, Chapter 70A.388 RCW, is designated as the state radiation control agency, and shall be the agency having sole responsibility for administration of the regulatory, licensing, and radiation control provisions of this chapter.

17.127.100 Solar Power Production Facilities

(1) All equipment associated with the facility may occupy a single parcel, or combination or parcels under common ownership, of which at least one parcel shall be at least 10 acres in size.

(2) Solar Energy Facilities shall not be allowed on sites or portions of sites with an existing average slope greater than seven percent (7%). Each solar energy facility submitted for permit consideration shall include a full topographic survey of the site with 2-foot contour intervals. The topographic survey shall delineate all portions of the site greater than 7-percent slope.

(3) All equipment associated with the facility shall be setback at least 100 feet of any adjacent parcel where residential development is permitted.

(4) All equipment associated with the facility shall not exceed a maximum of 20 feet in height as measured from grade at the base of the equipment to its highest point during operation, as shown in Figure 1.

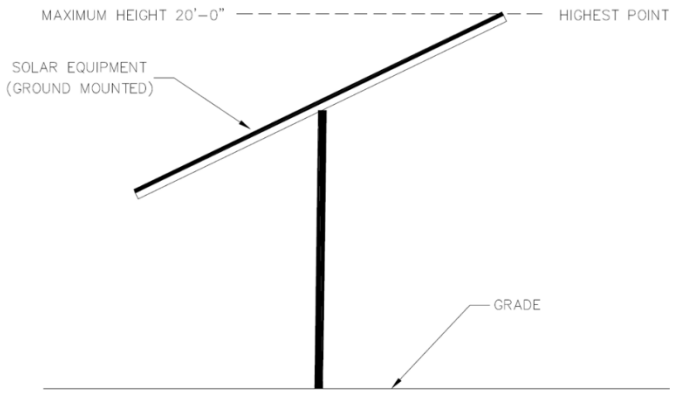
(5) Glare resistant panels shall be required.

(6) Any disturbed areas that are not permanently occupied by equipment shall be re-vegetated with native species.

Commentary

This is new code.
It is not underlined for readability.

Figure 1 – Solar Power Production Facility Equipment Maximum Height



17.127.110 Wind Farms

(1) In Urban Growth Areas, except Major Industrial Districts (MID), wind turbines shall not exceed a total height of 75 feet as measured from the ground at grade level at the tower to the tip of the rotor blade when extended vertically. Rotors shall not exceed 30 feet in diameter.

(2) Any tower shall be set back at least 1.2 times the total height, as measured from the ground at grade level at the tower to the tip of the rotor blade when extended vertically, from all outer property lines, unless an easement is secured from the adjacent property.

(3) Wind turbines shall be painted a non-reflective, non-obtrusive color. Small wind energy towers shall maintain galvanized steel, brushed aluminum, white or gray finish, unless FAA standards require otherwise.

(4) No wind turbine shall be artificially lighted, except to the extent required by the FAA or other applicable authority.

5) No wind turbine shall be used for displaying any advertising except for reasonable identification of the manufacturer.

(6) Electrical controls, control wiring and powerlines shall be wireless or underground after reaching grade from the turbine and extending away from the base of the tower. Wiring may be exposed vertically from the turbine to the base of the tower.

17.127.090

Commentary

Pursuant to the RCW, before the agency issues a license to an applicant, DOH shall give notice of such application to the county legislative authority. The county legislative authority or the official or employee selected by it, shall have the right to file with the agency within twenty (20) days after date of transmittal of such notice, written objections against the applicant or against the activity for which the license is sought, and shall include with such objections a statement of all facts upon which such objections are based, and in case written objections are filed, may request and the agency may in its discretion hold a formal hearing under chapter 34.05 RCW. Upon the granting of a license under this section DOH shall send a duplicate of the license or written notification to the county legislative authority.

(8) Audible sound due to operations shall not exceed 55 dBA for any period of time, when measured at the outer property line of any abutting property. The sound level may, however, be exceeded during short-term events such as utility outages and/or severe windstorms. During operations, the project shall comply with applicable state noise standards.

(9) The rotor blade tip of any wind turbine shall, at its lowest point, have ground clearance of no less than (15) feet, as measured at the lowest point of the arc of the rotor blades.

(10) The following safety requirements shall apply to all facilities.

a. Wind turbine towers shall not be climbable up to 15 feet above ground level.

b. All SWES shall be equipped with manual and/or automatic overspeed controls to limit rotation of the rotor blades to a speed below the designed limits of the system.

c. Any SWES found to be unsafe by the building official shall be repaired by the landowner to meet federal, state and local safety standards or removed within 3 months.

17.127.120 Battery Energy Storage System (BESS)

(1) Battery storage facility layout, design and installation shall conform to applicable industry standards, such as those of the American National Standards (ANSI), Underwriters Laboratories (UL), the American Society for Testing and Materials (ASTM), and the Institute of Electrical and Electronics Engineers (IEEE), the Electrical Testing Laboratory (ETL), the National Fire Protection Association BESS Safety Fact Sheet (NFPA 70E), the National Electric Code, or other similar certifying organizations, and with all other applicable fire and life safety requirements.

(2) BESSs shall be constructed, maintained, and operated in accordance with applicable codes and standards, including but not limited to National Fire Protection Association (NFPA) 855, Standard for the Installation of Stationary Energy Storage Systems, 2020 Edition and subsequent additions; Underwriters Laboratories (UL) 9540A Ed. 4-2019, Standard for Test Method for Evaluating Thermal Runway Fire Propagation in Battery Energy Storage Systems and subsequent editions.

(3) BESS facilities and equipment shall be completely enclosed by a secure fence that consists of a fence at least eight (8) feet high with a locking gate. A clearly visible warning sign shall be placed on the fence informing individuals of potential voltage hazards.

(4) BESS facilities and equipment shall not be used to display signs or advertising except for signs at ground level identifying the equipment manufacturer, the facility owner/operator, emergency contact information, and appropriate warnings as required by national, state and local laws.

Commentary

(5) BESS and any related facilities or equipment shall meet all of the following:

(a) Be located at least 100 feet from any adjacent parcel and located at least 200 feet away from any adjacent parcel where residential development is permitted. BESS facilities that are adjacent to parcels where a substation is located are not required to be setback from the parcel containing the substation.

(b) Areas within 20 feet on each side of any BESS facility or equipment shall be cleared of combustible vegetation and other combustible growth. Single specimens of trees, shrubbery, or cultivated ground cover such as green grass, ivy, succulents, or similar plants used as ground covers shall be permitted provided that they do not form a means of readily transmitting fire.

(6) The [1-hour] average noise generated from the battery energy storage systems, components, and associated ancillary equipment shall not exceed a noise level of [55] dBA as measured at the outside wall of any non-participating residence or occupied community building. Applicants may submit equipment and component manufacturers noise ratings to demonstrate compliance. The applicant may be required to provide Operating Sound Pressure Level measurements from a reasonable number of sampled locations at the perimeter of the battery energy storage system to demonstrate compliance with this standard. State noise standards also apply.

(7) Operators of BESS facilities with total combined energy storage exceeding 600 kWh must complete a hazard mitigation analysis, utilize fire suppression designs and equipment, conduct fire and explosion testing in accordance with UL 9540A, develop emergency planning, and conduct annual training of maintenance staff.

17.127.130 Abandonment and Decommissioning

(1) At any time, an energy production and storage facility is scheduled to be decommissioned or is abandoned or discontinued, the owner or operator shall notify the Lewis County Building Official and Lewis County Fire Marshal, or their designee. Upon discontinuation of use, the owner or operator shall physically remove all related structures and equipment within 90 days from the date of discontinuation of use. This period may be extended at the discretion of Lewis County Building Official or their designee. The term "physically remove" shall in include, but not be limited to:

(a) Removal of all above grade structures and equipment.

(b) Restoration of the location of the energy production and storage facility to its natural condition, except that any landscaping, grading or below-grade foundation may remain.

Commentary

(a) If any energy production and storage facility is not operational for a period of 12 consecutive months, the Lewis County Building Official or designee will notify the Lewis County Code Compliance Officer, who may issue a Notice of Abandonment to the owner or operator of the facility. The owner shall have the right to respond to the Notice of Abandonment within 30 days of the notice receipt date. The Lewis County Code Compliance Officer may withdraw the Notice of Abandonment and notify the owner that the notice has been withdrawn if the owner provides sufficient information to demonstrate that the facility has not been abandoned.

(b) If the owner fails to respond to the Notice of Abatement or if after review by the Lewis County Code Compliance Officer it is determined that the facility has been abandoned or discontinued, the owner or operator of the facility shall remove all structures and equipment at the owner's sole expense within three (3) months of receipt of the Notice of Abandonment. If the owner fails to physically remove the structures and equipment after the Notice of Abandonment procedure, the County shall have the authority to enter the subject property and physically remove the structures and equipment and to recover costs associated with that removal from the property owner.

(3) The site shall be restored within six (6) months of removal. The owner of any energy production and storage facility shall demonstrate decommission assurances to Lewis County in the form of a surety bond or escrow account to cover the cost of removal in the event the facility must be removed by Lewis County. The intent of this requirement is to guarantee performance (not just provide financial insurance) to protect the public interest and the County budget from an unanticipated, unwarranted burden to decommission an energy production and storage facility. The proponent shall submit a fully inclusive estimate of the costs associated with removal prepared by a qualified Washington State licensed engineer that is accepted by Lewis County. The decommissioning funds shall be equivalent to 125% of the engineer’s estimated cost for the purpose of guaranteeing completion of the work. The decommissioning assurance shall be reevaluated every five (5) years to ensure sufficient funds for decommissioning, and if deemed appropriate at that time, the amount of decommissioning funds shall be adjusted accordingly.

ATTACHMENT B – Land Use Tables

1. Land Use Table for Rural Zonings

	RDD-5	RDD-10	RDD-20	STMU	RRC	CC	TSA	STI	FC	RAI	ARL	FRL	MRL	MID	MPR	Park
Energy production, distribution or storage for off-site distribution																
Geothermal	X	X	X	X	X	X	X	X	X	X	X	X	X	A	X	X
Hydroelectric, hydropower	SUP	SUP	SUP	X	X	X	X	X	X	X	X	X	X	A	X	X
Hydrogen	X	X	X	X	X	X	X	X	X	X	X	X	X	A	X	X
Natural gas	X	X	X	X	X	X	X	X	X	X	X	X	X	A	X	X
Nuclear Reactor - Micro (less than 20 NW)	X	X	X	X	X	X	X	SUP	X	SUP	X	X	X	A	X	X
Nuclear Reactor	X	X	X	X	X	X	X	X	X	X	X	X	X	A	X	X
Small Solar Power Production (less than 5 MW)	X	X	SUP	X	X	X	X	SUP	X	SUP	X	X	X	A	X	X
Solar Power Production	X	X	X	X	X	X	X	X	X	X	X	X	X	A	X	X
Small Wind Energy System	X	X	SUP	X	X	X	X	SUP	X	SUP	X	X	X	A	X	X
Wind Farms	X	X	X	X	X	X	X	X	X	X	X	X	X	A	X	X
Other, not specified	X	X	X	X	X	X	X	X	X	X	X	X	X	SUP	X	X
Battery Energy Storage System (BESS)																
Minor	X	X	A	X	X	X	X	A	X	P	P-ac	P-ac	P-ac	P	X	X
Major	X	X	SUP	X	X	X	X	SUP	X	SUP	X	X	X	SUP	X	X

RDD: Rural Development District; **STMU**: Small Town Mixed Use; **RRC**: Rural Residencial Center; **CC**: Crossroads Commercial; **TSA**: Tourist Service Area; **STI**: Small Town Industrial; **FC**: Freeway Commercial; **RAI:** Rural Area Industrial; **ARL**: Agricultural Resource Land; **MRL**: Mineral Resource Land; **MID**: Major Industrial District; **MPR**: Master Planned Resort.

2. Land Use Table for UGA Small Town (Onalaska and Packwood)

	RL	RM	RH	MU	CBZ	AX	IND	OS
Energy production, distribution or storage for off-site distribution								
Solar Power Production - Small	X	X	X	X	X	SUP	X	X
Small Wind Energy System	X	X	X	X	X	SUP	X	X
Battery Energy Storage System (BESS)								
Minor	X	X	X	X	X	SUP	SUP	X
Major	X	X	X	X	X	X	X	X

RL: Residential Low Density; **RM**: Residential Medium Density; **RH**: Residential High Density; **AX**: Airport District; **MU**: Mixed Use; **CBD**: Commercial Business District; **IND**: Industrial Small Town; **OS**: Open Space.

Commentary

ATTACHMENT C – LEWIS COUNTY CODE 17.10 DEFINITIONS

Legislative intent.

Code text to be removed is shown
with a ~~strike through~~ and code text to be added is shown with an underline.

Chapter 17.10.020
"B" Definitions

"Battery Energy Storage System" (BESS) means an energy storage system that can store and deploy generated energy, typically a group of batteries that charge (i.e., collect energy) and store electrical energy from the grid or energy generation facility and then discharge that energy at a later time to provide electricity or other grid services when needed. BESS generally consists of batteries, battery storage containers, on-site switchyard, inverters, associated interconnection transmission line, and supervisory control and data acquisition system.

"Battery Energy Storage System – Minor" have an aggregate energy capacity less than or equal to 1MWh and, if in a room or enclosed area, consist of only a single energy storage system technology.

"Battery Energy Storage Systems – Major" have an aggregate energy capacity greater than 1MWh or are comprised of more than one storage battery technology in a room or enclosed area.

"Battery Energy Storage Facilities" is defined as one or more battery cells for storing electrical energy in a Battery Energy Storage System with a Battery Management System.

Chapter 17.10.060
"F" Definitions

"FAA" means the Federal Aviation Administration.

Chapter 17.10.070
"G" Definitions

"Geothermal resources" includes the natural heat of the earth, the energy, in whatever form, below the surface of the earth present in, resulting from, or created by, or that may be extracted from, the natural heat, and all minerals in solution or other products obtained from naturally heated fluids, brines, associated gases and steam, in whatever form, found below the surface of the earth, exclusive of helium or oil, hydrocarbon gas or other hydrocarbon substances, but including, specifically:

(a) All products of geothermal processes, including indigenous steam, and hot water and hot brines;

Commentary

(b) Steam and other bases, hot water and hot brines resulting from water, gas, or other fluids artificially introduced into geothermal formations;

(c) Heat or other associated energy found in geothermal formations; and

(d) Any by-product derived from them.

"Glare" means the effect produced by light with intensity sufficient to cause annoyance, discomfort, or loss in visual performance and visibility.

Chapter 17.10.140.
"N" Definitions

"Nuclear reactor" is defined as a facility where nuclear fission reaction occurs. A nuclear facility includes an area, structure, or activity related to nuclear operations, ensuring safe operations and compliance with safety standards. The U.S. Nuclear Regulatory Commission (NRC) regulates nuclear reactors to ensure safety and environmental protection.

"Nuclear reactor - micro", also known as microreactors, are compact nuclear reactors that can generate up to 20 megawatts of thermal energy. They are subcategory of Small Modular Reactors (SMRs) and are designed to generate electricity on a smaller scale than traditional nuclear reactors.

Chapter 17.10.190
"S" Definitions

"Small Wind Energy System (SWES)" means a wind energy conversion system which converts wind energy into electricity through the use of a wind turbine generator, and includes any of the following to accomplish this production: a wind turbine, rotor blades, tower, foundation, and associated control or conversion electronics, which has a rated capacity of not more than 25kW, less than 120 feet high and which is intended to primarily reduce on-site consumption of utility power.

"Solar Power Production Facilities" or "SPPF" means a utility on an area of land designated for the purpose of producing photovoltaic electricity with a nameplate capacity of over one hundred kilowatts (100 KW) and includes, but is not limited to, an assembly of solar panels and solar equipment that converts sunlight into electricity and then stores and/or transfers that electricity. Solar Power Production Facilities may include mechanical buildings and other uses that are typical to a SPPF, however offices and other commercial uses are prohibited. For minor Solar Power Production Facilities, the production of photovoltaic electricity shall not exceed 1MW.

Commentary

Chapter 17.10.230
"W" Definitions

"Wind farm" means a single wind turbine exceeding 120 feet in height above grade or more than one wind turbine of any size proposed and/or constructed by the same person or group of persons on the same or adjoining parcels.

"Wind turbine" means any machine used to produce electricity by converting the kinetic energy of wind to electrical energy. Wind turbines consist of the turbine apparatus and any other buildings, support structures or other related improvements necessary for the generation of electric power.

"Wind Turbine Total Height" means the distance measured from the grade plane to the tip of the rotor blade when extended vertically to its highest point.