

Staff Report

Story County Board of Supervisors



Date of Meeting: March 3, 2026

Staff Project Manager: Leanne Harter

Case Number: TA26-000002*

Name of Text Amendment Case: Text Amendment to Address Uses for Digital Asset Mining, Cryptocurrency Operations, Data Processing Centers and/or Battery/Energy Storage Solutions on properties located in unincorporated Story County.

Applicant(s): Story County Planning and Development

REQUESTED ACTION

The request is to amend Chapter 85, General Provisions and Definitions; Chapter 86, District Requirements; Chapter 88, General Site Planning Standards; and Chapter 90, Conditional Uses Of The Story County Code of Ordinances—Land Development Regulations For A Text Amendment To Address Uses for Digital Asset Mining, Cryptocurrency Operations, Data Processing Centers and/or Battery/Energy Storage Solutions on properties located in unincorporated Story County as permitted in Section 92.07 Amending the Text of the Land Development Regulations of the *Story County Code of Ordinances*.

RECOMMENDATION

All requirements for a Text Amendment request are met. Planning and Development staff recommend approval. The Story County Planning and Zoning Commission reviewed the proposed text amendment on Wednesday, February 25, 2026, and voted 4-0 to recommend approval of the proposed text amendment to the Story County Board of Supervisors.

Background

Description of Proposed Text Amendment

The application is to Amend Chapter 85, General Provisions and Definitions; Chapter 86, District Requirements; Chapter 88, General Site Planning Standards; and Chapter 90, Conditional Uses Of The Story County Code of Ordinances—Land Development Regulations For A Text Amendment To Address Uses for Digital Asset Mining, Cryptocurrency Operations, Data Processing Centers and/or Battery/Energy Storage Solutions on properties located in unincorporated Story County.

On June 17, 2025, the Story County Board of Supervisors passed Resolution #25-97, Establishing a Temporary Moratorium on the Acceptance of Applications and/or Issuance of Permits for Digital Asset Mining, Cryptocurrency Operations, Data Processing Centers and/or Battery/Energy Storage Solutions on properties located in unincorporated Story County, putting in place a temporary moratorium expiring on or before December 31, 2025. Resolution #25-97 included the ability of the Story County Board of Supervisors to adopt a resolution extending the moratorium until March 31, 2026, if more time was needed by the Story County Planning and Development Department to



complete their review and make a recommendation to the Story County Planning and Zoning Commission and Story County Board of Supervisors. Resolution #26-36 adopted by the Story

County Board of Supervisors on November 25, 2025, authorized this one-time extension. To develop the proposed regulations, County staff received technical assistance from the Great Plains Institute and participated in NACo's Rural Energy Academy Peer Exchange.

Proposed Modifications to the Code of Ordinances of Story County, Iowa - Land Development Regulations include amendments to the following Chapters:

CHAPTER 85: GENERAL PROVISIONS AND DEFINITIONS

CHAPTER 86: DISTRICT REQUIREMENTS

CHAPTER 88: GENERAL SITE PLANNING STANDARDS

CHAPTER 90: CONDITIONAL USES - Revisions to existing regulations for Commercial Wind Energy Conversion Systems (C-WECS) and Commercial Solar Energy Systems (C-SES) and the addition of regulations for Utility-Scale Battery Energy Storage System (UBESS), Cryptocurrency Data Center or Cryptocurrency Mining or Production Installations associated with a Data Center (CDC), and Data Center (DC)

The applicable requirements are outlined below.

Staff recommends a modification to the proposed Table of Conditional Uses section to clarify when U-BESS operations are proposed in conjunction with one of the following uses identified in the Table of Conditional Uses: "Commercial Wind Energy Conversion Systems (C-WECS)", "Commercial Solar Energy Systems (C-SES)", or "Any land or building used by a utility service for the purpose of generating or converting power".

- Utility-Scale Battery Energy Storage System (U-BESS) (when such use is proposed conjunction with an application or major modification for a "Commercial Wind Energy Conversion Systems (C-WECS)", "Commercial Solar Energy Systems (C-SES)", or "Any land or building used by a utility service for the purpose of generating or converting power", the U-BESS may be site on property zoned A-1, Agricultural and all supplemental standards for a U-BESS shall apply in addition to supplemental standards for "Commercial Wind Energy Conversion Systems (C-WECS)", "Commercial Solar Energy Systems (C-SES)", or "Any land or building used by a utility service for the purpose of generating or converting power".)

Analysis

92.07(2) Standards for Approval. All applications for text amendments shall satisfy the following standards for such requested action to be approved.

- The proposed amendment shall conform to the Story County Cornerstone to Capstone Plan (C2C Plan).
- The proposed amendment shall conform to the scope and purpose of the Ordinance.

The proposed text amendment is consistent with the criteria outlined in Section 92.07 of the *Story County Code of Ordinances* as noted below:

- ☒ All requirements are satisfied. ☐ Not all requirements are satisfied and those exceptions are noted below:



The proposed Text Amendments are attached to this staff report.

Commentary

The following comments are part of the official record of the proposed text amendment, Case No. TA26-000002*. If necessary, conditions of approval may be formulated based on these comments.

Comments from the General Public

The proposed regulations were posted on the County's website on February 12, 2026. In addition, the proposed regulations were distributed to identified stakeholders on February 12th.

At the time this staff report was prepared, the following comment had been received. Any additional public comments received will be shared at the Planning and Zoning Commission meeting.

Hi team, Thanks you for the email. In the interest in having and continuing a good working relationship with Story County, we are here to help with any requested solar needs.

We understand that Digital Asset Mining, Cryptocurrency Operations, and Data Processing Centers can strain utility and infrastructure capabilities. We would be happy to continue working with Story County in any capacity that helps local issues in our communities.

It is understandable that the Story County does not want to limit resources to a community by turning away possible new companies or enterprises due to resource constraints. However, resources are readily available with solar to offset and mitigate the high demand from the utility.

Supplementing solar is a solution for the utility's demands to supply the community. Installing solar power in these high-electrical-usage areas has proven effective in operations.

In closing, we are here to help Story County and our community by offering proven alternatives.

Thank you

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Design/Engineering

1 Source Solar

nathan@1sourcesolar.com

Notice of the proposed text amendment was published in the three Story County newspapers on February 19, 2026.

Comments from the Planning and Zoning Commission Meeting on February 25, 2026

Thirteen individuals addressed the Planning and Zoning Commission, and the full audio to that meeting is available on Story County's website at <https://www.storycountyiowa.gov/Archive.aspx?ADID=11743>.

In summary, most concerns expressed were in opposition to the proposed data center regulations and such uses specifically, noting impacts including, but not limited to, water resources and electrical consumption rates, and requesting an extension of the moratorium for the data center uses. In addition,



representatives of NextEra noted potential changes they would recommend be made to the proposed regulations.

Alternatives

Planning and Zoning Commission recommended approval of the text amendment.

Planning and Development Staff recommended approval of the text amendment with modifications as presented at the Board of Supervisors meeting.

The Story County Board of Supervisors may consider the following alternatives for the text amendment request:

1. The Story County Board of Supervisors approves the Code of Ordinances Text Amendment, Ordinance 329, as put forth in case TA26-000002* and sets second consideration for Tuesday, March 10, 2026.
 2. **The Story County Board of Supervisors approves the Code of Ordinances Text Amendment, Ordinance 329, as put forth in case TA26-000002* as modified and sets second consideration for Tuesday, March 10, 2026.**
 3. The Story County Board of Supervisors denies the Code of Ordinances Text Amendment, Ordinance 329, as put forth in case TA26-000002* and sets second consideration for Tuesday, March 10, 2026.
 4. The Story County Board of Supervisors defers action on the Code of Ordinances Text Amendment, as put forth in case TA26-000002*, and requests staff to further review and/or modify the application and directs staff to place this item on a future Board of Supervisors Agenda.
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Attachments to the Staff Report

- ☐ Submitted application, narrative and plans
- ☐ Public Comments
- ☐ Written responses from applicants to comments (if applicable)
- ☐ Legal Description
- ☒ Other **Attachment A - Draft regulations**



ATTACHMENT A

CHAPTER 85

LAND DEVELOPMENT REGULATIONS: GENERAL PROVISIONS AND DEFINITIONS

85.07 EXEMPTIONS.

3. Public Utilities Exempt. No requirement, restriction, or regulation contained in the Ordinance shall be construed to control the type or location of any poles, towers, wires, water or sewer lines, gas mains, cables, or any other similar distributing equipment of a public utility. County, state, and federal road projects for the maintenance and/or construction of public roads and public road right-of-way shall also be considered exempt. Battery Energy Storage Systems are not considered routine utility distribution equipment or essential services for zoning purposes.

85.08 DEFINITIONS.

“Accessory BESS (Co-Located)” means a battery energy storage system that is ancillary to another primary use of the property. Examples include a BESS co-located with a renewable energy generation facility (solar farm or wind farm) to store generated power, batteries that store electricity for on-site use (peak shaving, backup power), or batteries providing electric grid services at an existing substation. An accessory BESS is subordinate in size and purpose to the main use on the site. These are also often referred to as Hybrid BESS.

“Agrivoltaics or Agrivoltaic Projects” means solar sites that combine agricultural uses with generating electricity within the project area to maximize land use and offering mutual production benefits.

“ANSI” means the American National Standards Institute.

“Augmentation” means the process of supplementing or replacing some or all of the system components to maintain the nameplate capacity (measured in megawatts).

“Battery Energy Storage Management System” means an electronic system that protects energy storage systems from operating outside their safe operating parameters and disconnects electrical power to the energy storage system or places it in a safe condition if potentially hazardous temperatures or other conditions are detected.

“Battery Energy Storage System (BESS)” means one or more devices, assembled together, capable of storing and discharging electricity primarily intended to supply electricity to a building or to the electrical grid. This includes, but is not limited to, the following: battery cells; enclosures and dedicated-use buildings; thermal, battery, and energy management system components; inverters; access roads; distribution, collection, and feeder lines; wires and cables; conduit; footings; foundations; towers; poles; crossarms; guy lines and anchors; substations; interconnection or switching facilities; circuit breakers and transformers; overhead and underground control, communications and radio relay systems, and telecommunications equipment; utility lines and installations; and accessory equipment and structures. A BESS does not include a stand-alone 12-volt car battery or an electric motor vehicle. A BESS is classified as a Tier 1 or Tier 2 (Utility Scale) BESS as follows:

a. Tier 1 BESS have an aggregate energy capacity less than or equal to 600kWh and, if in a room or enclosed area, consist only of a single energy store system technology.

b. Tier 2 (Utility Scale) BESS have an aggregate energy capacity greater than 600kWh or are comprised of more than one storage battery technology in a room or enclosed area.

“BESS Dedicated-Use Building” means a building or structure that is only used for BESS components and equipment, is classified as Group F-1 occupancy, as defined in the International Building Code, and complies with the following:

- a. The building’s only use is battery energy storage, energy generation, and other electrical grid-related operations.
- b. No other occupancy types are permitted in the building.
- c. Occupants in the rooms and areas containing BESS are limited to personnel that operate, maintain, service, test, and repair the BESS and other energy systems.
- d. Administrative and support personnel are permitted in areas within the buildings that do not contain BESS, provided that these areas do not occupy more than ten (10) percent of the building area of the story in which they are located, and 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 BESS or other energy systems equipment.

“BESS Participating Property” means a BESS host property or any real property that is the subject of an agreement that provides for the payment of monetary compensation to the landowner from the BESS owner (or affiliate) regardless of whether any part of a BESS is constructed on the property.

“Clean Agent Fire Suppression System” means a system that uses electrically nonconductive gaseous agents that do not leave residue upon evaporation to extinguish fires.

“Closed-loop Cooling System” means a sealed system where a coolant circulates continuously, absorbing heat from a source, and then transferring that heat to a heat exchanger for removal, without the coolant ever being exposed to the environment. A closed-loop system shall not use evaporative cooling. It may consist of methods including, but not limited to, air-cooled (dry) cooling, rear-door heat exchanger cooling, hybrid dry economizer cooling, direct-to-chip cooling, or immersion cooling.

“Commercial Cryptocurrency Mining” means the commercial process by which cryptocurrency transactions are verified and added to the public ledger, known as the block chain, and the means through which new units of cryptocurrencies are released through the use of server farms. Any equipment requiring a high-density load service, for the purposes of operating a cryptocurrency mining server farm, will constitute a commercial cryptocurrency mining operation.

“Commercial Solar Energy System” (C-SES) means a solar energy generation facility, solar collection system, or area of land comprised of a solar energy device, array of devices, or structural design feature, principally used to provide for the generation of energy distributed into

the electrical grid and not intended to primarily reduce on-site consumption of utility power with the following scales: Community/Commercial at 15 kW–1 MW and Utility-Scale at >1 MW.

“Commissioning” means a systematic process that provides documented confirmation that installed systems function according to the intended design criteria and comply with applicable code requirements.

“Community Noise Equivalent Level (CNEL)” means the 24-hour A-weighted average sound level from midnight to midnight, obtained after the addition of 5 dB to sound levels occurring in the evening from 7 PM to 10 PM and after the addition of 10 dB to sound levels occurring in the night between 10 PM and 7 AM.

“Cryptocurrency” means a digital currency in which encryption techniques are used to regulate the generation of units of currency and to verify the transfer of funds while operating independently of a central bank.

“Cryptocurrency Data Center (CDC)” means the leased or owned boundaries of floor space devoted to the operating data processing equipment for commercial cryptocurrency mining, excluding spaces for data centers not otherwise engaged in commercial cryptocurrency mining, commercial offices, storage, shipping and receiving, warehousing, or any other space that is not electronic processing.

“Cryptocurrency Mining or Production Installations associated with a Data Center” means a physical facility that uses computing and networking equipment to collect, store and process data, as well as distribute and access resources. It may also include supporting equipment such as batteries, back-up generators and cooling equipment.

“Cryptocurrency Server Farm” means three or more interconnected computers housed together in a single facility either air-cooled or water cooled, whose primary function is to perform cryptocurrency mining or associated data processing.

“Data Center (DC)” means a facility used primarily for the storage, management, processing, and transmission of digital data, which houses computer or network equipment, systems, servers, appliances and other associated components related to digital data operations. The facility may also include air handlers, power generators, water cooling and storage facilities, utility substations, and other associated utility infrastructure to support sustained operations at the Data Center.

“Data Center Accessory Use” means the ancillary uses or structures secondary and incidental to a Data Center use, including but not limited to: administrative, logistical, fiber optic, storage, and security buildings or structures; sources of electrical power such as generators used to provide temporary power when the main source of power is interrupted; electrical substations; utility lines, domestic and non-contact cooling water and wastewater treatment facilities; water holding facilities; pump stations; water towers; environmental controls (air conditioning or cooling towers; fire suppression, and related equipment), and security features, provided such Data Center Accessory Uses/structures are located on the same tract or assemblage of adjacent parcels developed as a unified development with a Data Center. The use shall not include

energy generation systems used or intended to be used to supply power to the Data Center during normal operations.

“Data Center Electrical Substation” means a facility used for the transformation or transmission and/or switching of voltages to distribution voltages which switches circuits and distributes usable/consumable electric power, specifically for Data Center users on the same or adjacent site, or on a site immediately across a road right-of-way.

“Data Center Principal Building” means a building that contains the office and/or data storage functions of a Data Center.

“Data Mining” means the commercial process by which volumes of data are analyzed to find patterns, discover trends, and gain insight into how the data can be used as a commercial data mining operation.

“Dedicated-Use Building (BESS)” means a building that is only used for BESS components and equipment, as defined in the NFPA 855 Standards for the Installation of Stationary Energy Storage Systems.

“Energy Storage” means any technology that can absorb electricity, storing the electricity for a period of time, and redelivering that electricity.

“Footcandle” means the amount of light to saturate a one-foot square with one lumen of light.

“High-density Load Service” means any individual service at or above 660 amps in which the energy use intensity (EUI) is calculated as greater than 250 kWh/Feet²/year in total for all operating square footage.

“Liquid Cooling System” means a method of cooling electronic components or other devices by circulating liquid coolant through them, to cool and absorb heat from components and then dissipate heat through a radiator.

“NEC” means the National Electric Code.

“NESC” means the National Electrical Safety Code.

“Non-commercial solar energy system (SES)” means a solar collection system consisting of one or more roof- and/or ground-mounted solar collector devices and solar related equipment, and is intended to primarily reduce on-site consumption of utility power. A system is considered a noncommercial solar energy system only if it supplies electrical or thermal power solely for on-site use at a scale of ≤ 15 kW, except that when a property upon which the facility is installed also receives electrical power supplied by a utility company, excess electrical power generated and not presently needed for on-site use may be used by the utility company.

“Non-participating Property” means any property that is not a participating property.

“Non-participating Residence” means any residence that is located on a non-participating property.

“On-site BESS” means a BESS that is intended primarily to serve the electricity needs of the applicant property but may, at times, discharge into the electric grid.

“Off-site BESS” means a BESS for the primary purpose of off-site use through the electric grid.

“Participating Property” means real property that is either owned by an applicant or that is the subject of an agreement that provides for the payment of monetary compensation to the landowner from the BESS owner (or affiliate) regardless of whether any part of the BESS system is constructed on the property.

“Public Utility” means a public utility as defined in the Iowa Code Chapter 476.1 and municipally owned waterworks or wastewater facilities, waterworks having less than two thousand customers, joint water utilities established pursuant to Iowa Code Chapter 389, rural water districts incorporated and organized pursuant to Iowa Code Chapters 357A and 504, cooperative water associations incorporated and organized pursuant to Iowa Code Chapter 499, districts organized pursuant to Iowa Code Chapter 468, or a person furnishing electricity to five or fewer customers either by secondary line or from an alternate energy production facility or small hydro facility, from electricity that is produced primarily for the person’s own use. Public utility does not include BESS facilities.

“Repowering” means the process of configuring, supplementing, or replacing some or all of the system components to increase the nameplate capacity (measured in megawatts).

“Sensitive Receptors” means schools; preschools; day care centers; in-home daycares; health facilities including, but not limited to hospitals, clinics, long term care facilities, retirement and nursing homes; community centers; places of worship; playgrounds; parks (excluding trails); campgrounds; prisons; dormitories; or any permitted residence.

“Thermal Runaway” means the rapid, uncontrollable increase in temperature often leading to catastrophic failure in electronic components or, specifically, batteries. It is a self-sustaining cycle where heat generation exceeds heat dissipation, resulting in an escalating temperature rise, potentially leading to fires, explosions, and the release of hazardous materials.

“Utility-Scale Tier 2 BESS (U-BESS)” means facilities that are typically standalone installations that store and dispatch energy to the electric grid (often at substation or transmission voltage level).

CHAPTER 88

LAND DEVELOPMENT REGULATIONS: GENERAL SITE PLANNING STANDARDS

9. Off-Street Loading Areas. In any district in connection with every building or part thereof hereafter erected having a gross floor area of 6,000 square feet or more, which is to be occupied by manufacturing, storage, warehouse, goods display, retail store, wholesale store, market, hotel, hospital, or other uses similarly requiring the receipt or distribution by vehicles of material or merchandise, there shall be provided and maintained on the same lot with such building at least one off-street loading space, plus one additional such loading space for each 20,000 square feet or major fraction thereof of gross floor area so used in excess of 10,000 square feet.

- A. Each loading stall shall not be less than 12 feet in width and 40 feet in length.
- B. Such space may not occupy all or any part of a required yard or open space. When adjacent to a residential district or residential use, it shall be set back 10 feet and screened from adjacent property by a planting screen not less than 10 feet in width and six feet in height or by a fence, wall, berm, or other comparable means. For CDC and DC uses, applicable setback requirements found in Chapter 90 must be satisfied.
- C. For CDC and DC uses, loading spaces/bays are only permitted to be located on one façade of the Data Center Principal Building.

Amend Table 88-5 Parking Ratios by Type to include the following

Land Use	Number of Maximum Spaces
<u>U-BESS</u>	<u>One space for each employee on the largest shift. If there are no shift employees, three spaces are permitted.</u>
<u>CDC or DC</u>	<u>One space per employee on the largest shift, plus an additional three visitor spaces.</u>

CHAPTER 86

LAND DEVELOPMENT REGULATIONS: DISTRICT REQUIREMENTS

Add the following as a Permitted Accessory Use in all zoning districts, except the GB/C district.

Tier 1 Battery Energy Storage Systems

CHAPTER 90

LAND DEVELOPMENT REGULATIONS: CONDITIONAL USES

6. Commercial WECS (C-WECS).

L. Noise. Audible noise due to C-WECS sites operations shall not exceed ~~60~~ **55** dBA for any period of time, when measured at any dwelling, school, hospital, church, or public library existing on the date of approval of any conditional use permit from the property line.

N. Discontinuation and Decommissioning. A C-WECS shall be considered a discontinued use after one year without energy production, unless a plan is developed and submitted to the Director outlining the steps and schedule for returning the C-WECS to service. All C-WECS and accessory facilities shall be removed to four feet below ground level within 180 days of the discontinuation of use. Each C-WECS shall have a decommissioning plan outlining the anticipated means and cost of removing C-WECS at the end of their serviceable life or upon becoming a discontinued use. The cost estimates shall be made by a professional engineer licensed in the State of Iowa. The plan shall also identify the financial resources that will be available to pay for the decommissioning and removal of the C-WECS and accessory facilities. The County reserves the right to verify that adequate decommissioning terms are contained in the landowner easement.

- (1) The applicant shall submit a copy of the decommissioning plan to all property owners within the Conditional Use Permit area. The property owners shall provide the County a signed affidavit stating their awareness and responsibility of decommissioning costs.
- (2) Decommissioning Fund Financial Security. The applicant shall must continuously maintain a financial assurance mechanism in the form of a performance bond and/or other security approved by the County Attorney, for the period of the life of the facility. The required amount of the security shall be 130 percent of the total decommissioning cost identified in the decommissioning plan, excluding any salvage value as amended by the Board of Adjustment. The financial assurance mechanism must ensure that funds will be available upon discontinuation and shall not include the future value, if any, of scrap. If a bond is posted to meet this requirement, the bond-issuing company must be agreed upon by both the applicant and County. All decommissioning, removal and remediation fund requirements shall be fully funded before a zoning permit is issued. The County shall have sole discretion with regard to the determination of the mode of financial assurance.
- (3) Every three (3) years from the first date of operations, or on the written request of the County, the Owner shall review and update the Decommissioning Plan and all appendices and provide the updated plan and appendices to the County on or before the date of each three-year anniversary of the first date of operations. As part of this review process, the Owner shall recalculate the total decommissioning cost and the decommissioning guaranty amount; and the financial assurance required shall be modified accordingly.

Q. Submittal Requirements. In addition to the submittal requirements defined for conditional use permit applications, all applications for C-WECS must submit the following information (as applicable).

(18) Pre-construction interconnection agreements.

8. Commercial – Solar Energy Systems (C-SES).

D. Ground Cover and Buffer Areas. Perennial vegetative ground cover shall be planted on the ground around and under solar arrays and in project site buffer areas, and the ground shall meet the following standards:

- (1) Top soils shall not be removed from the site during development unless the removal is part of a remediation effort pre-defined and approved through the Conditional Use Permit.
- (2) Soils shall be planted and maintained in perennial vegetation in accordance with subparagraph 3 below to prevent erosion, manage run-off, and build soil.
- (3) Seed mixes and maintenance practices must be approved by Story County Conservation prior to action by the Board of Adjustment.
- (4) Solar collectors and racking are not considered impervious cover if underlying ground is pervious vegetation, and the soil is not compacted.
- (5) The applicant shall submit a vegetative management plan prepared by a qualified professional or reviewed and approved by Story County Conservation. The plan shall identify:
 - a. The natural resource professionals consulted or responsible for the plan
 - b. The conservation, habitat, eco-system, or agricultural goals, which may include: providing habitat for pollinators such as bees and monarch butterflies, providing habitat for wildlife such as upland nesting birds and other wildlife, establishing vegetation for livestock grazing, reducing on-site soil erosion, and improving or protecting surface or ground water quality.
 - c. The intended mix of vegetation upon establishment.
 - d. The management methods and schedules for how the vegetation will be managed on an annual basis, with particular attention given to the establishment period of approximately three years.

E. Fencing. Ground-mounted solar energy device or combination of devices comprising a C-SES shall be enclosed by perimeter fencing at a height of eight feet to restrict unauthorized access. Security fences and gates must be maintained in good condition until the site is decommissioned.

- (1) Native/pollinator-friendly vegetation buffers or fencing to screen solar farms from adjacent homes/public roads is required.

L. Discontinuation and Decommissioning. C-SES shall be considered discontinued after one year without energy production, unless a plan is developed and submitted to the Director outlining the steps and schedule for returning the C-SES to service.

(1) Removal Requirements. Any C-SES which has reached the end of its useful life or has been determined to be discontinued pursuant to this section shall be decommissioned and removed within 180 days of the discontinuation of use.

(2) Decommissioning shall consist of:

- a. Physical removal of all large-scale ground-mounted solar photovoltaic installations, structures, equipment, security barriers and transmission lines from the site to four feet below ground level within 180 days of the discontinuation of use.
- b. Disposal of all solid and hazardous waste in accordance with local, State, and federal waste disposal regulations.
- c. Stabilization or re-vegetation of the site as necessary to minimize erosion. The Director may allow the owner or operator to leave landscaping or designated below-grade foundations in order to minimize erosion and disruption to vegetation.

(3) Decommissioning Plan and Financial Surety.

- a. C-SES shall have a decommissioning plan outlining the anticipated means and costs of removing the C-SES at the end of its serviceable life or upon becoming discontinued.
- b. The decommissioning plan shall identify financial resources that will be available to pay for decommissioning and removal of C-SES.
- c. The applicant ~~shall~~ **must** continuously maintain a financial assurance mechanism in the form of a performance bond and/or other security approved by the County Attorney, for the period of the life of the facility. The amount of the security shall be 130 percent of the total decommissioning cost identified in the decommissioning plan, without the salvage value. The financial assurance mechanism must ensure that funds will be available upon discontinuation and shall not include the future value, if any, of scrap. If a bond is posted to meet this requirement, the bond issuing company must be agreed upon by both the applicant and County. All decommissioning, removal and remediation fund requirements shall be fully funded before a zoning permit is issued. The County shall have sole discretion with regard to the determination of the mechanism of financial assurance.
- d. Property Owner Affidavit. The applicant shall submit a copy of the decommissioning plan to all property owners within the boundaries of the Conditional Use Permit area. The property owners shall provide the County a signed affidavit acknowledging receipt of the plan and their responsibility for decommissioning costs.
- e. Every three (3) years from the first date of operations, or on the written request of the County, the Owner shall review and update the Decommissioning Plan and all appendices and provide the updated plan and appendices to the County on or before the date of each three-year anniversary of the first date of operations. As part of this review process, the Owner shall recalculate the total

decommissioning cost and the decommissioning guaranty amount; and the financial assurance required shall be modified accordingly.

M. Monitoring and Maintenance. The owner or operator of C-SES shall maintain the facility in good condition. Maintenance shall include, but not be limited to, painting, structural repairs, and integrity of security measures. Internal circulation drives shall be maintained by the owner or operator to a level acceptable to the applicable fire chief and Story County Emergency Management Agency. The owner or operator shall be solely responsible for the cost of maintaining the C-SES and any internal access roads.

- (1) Agrivoltaics or Agrivoltaic Projects such as pollinator-friendly cover crops/livestock grazing on solar farm sites are permitted and encouraged to continue, to achieve co-benefits of solar energy and agriculture.

O. Submittal Requirements. In addition to the submittal requirements defined for conditional use permit applications, all applications for C-SES must submit the following information (as applicable).

- (22) Vegetative Management Plan.

CHAPTER 90
LAND DEVELOPMENT REGULATIONS: CONDITIONAL USES

Amendment to Table 90-1 – Table of Conditional Uses

All subject to supplemental standards, and in the C-LI and HI

- Utility-Scale Battery Energy Storage System (U-BESS)
(when such use is proposed conjunction with an application or major modification for a “Commercial Wind Energy Conversion Systems (C-WECS)”, “Commercial Solar Energy Systems (C-SES)”, or “Any land or building used by a utility service for the purpose of generating or converting power”, the U-BESS may be site on property zoned A-1, Agricultural and all supplemental standards for a U-BESS shall apply in addition to supplemental standards for “Commercial Wind Energy Conversion Systems (C-WECS)”, “Commercial Solar Energy Systems (C-SES)”, or “Any land or building used by a utility service for the purpose of generating or converting power”.)
- Cryptocurrency Data Center or Cryptocurrency Mining or Production Installations associated with a Data Center (CDC)
- Data Center (DC)

**This page through
the end of the
packet contains
proposed new
regulation.**

11. Utility-Scale (Tier 2) Battery Energy Storage Systems (U-BESS)

- A. The requirements of the Ordinance shall apply to all U-BESS proposed after the effective date of the Ordinance.
- B. Co-Located with Solar or Wind: When a U-BESS is proposed as part of a new solar farm or wind farm, the U-BESS is processed as a component of the new solar farm or wind farm's conditional use permit rather than requiring a separate conditional use permit. For an existing wind farm or solar farm that was permitted prior to the adoption of the standards for U-BESS wanting to add battery storage, such applications will be processed as a Major Modification to the existing conditional use permit.
- C. Setbacks and Separation Requirements. The following setbacks and separation requirements shall apply to all components of a U-BESS.
 - 1) U-BESS facilities shall comply with all applicable setbacks and separation distances as required by NFPA 855.
 - 2) Sensitive Receptors. Setbacks from the nearest Receptor use shall be 100 feet or greater, as measured from structure to structure. Setbacks shall be established allowing for no greater than 55dB(A) from the U-BESS occurring at an adjacent dwelling.
 - 3) Public Right-of-Way. Setbacks from public right-of-way shall comply with the applicable setbacks as defined by the base zone district.
- D. Screening and Landscaping
 - 1) U-BESS must be visually screened from the public right-of-way and from any Sensitive Receptors located within 100' of the U-BESS.
- E. Parking shall comply with the requirements defined in Section 88.08 Parking and Circulation Standards.
- F. Hazardous Materials and Environmental Protection
 - 1) The U-BESS shall comply with all applicable hazardous materials handling and reporting laws.
 - 2) Batteries shall be recycled or disposed of in accordance with environmental regulations upon decommissioning. The Decommissioning Plan must identify where the batteries will go.
 - 3) U-BESS installations must comply with the County's stormwater and erosion control ordinance.
 - 4) On parcels containing more than 50 percent of the gross acreage as lands identified with areas designated Natural Resource Areas on the Cornerstone to Capstone (C2C) Comprehensive Plan, the conditional use permit shall not be approved unless conditions protecting the identified areas are attached to the request, either split zoned with conservation or conservation easements.
 - 5) U-BESS shall not be located in the Special Flood Hazard Area.
- G. Fencing and Security Measures.
 - 1) A perimeter security fence up to eight (8) feet tall must be installed around the entire U-BESS, including the battery containers and electrical equipment.

- 2) Fencing may not be placed in front of landscaping adjacent to roads. There must be landscaping in front of any fence adjacent to public roads.
 - 3) Security fencing near electrical installations must be grounded and bonded to protect against electrical hazards as per the National Electric Code.
 - 4) For installations over 1,000 volts, a warning sign reading "DANGER – HIGH VOLTAGE – KEEP OUT" is required on locked or monitored enclosures.
 - 5) Warning signage such as high voltage, energy storage facility identification, emergency contact info, must be posted on the fence per the National Electric Code requirements.
 - 6) Security fences and gates must be maintained in good condition until the site is decommissioned.
 - 7) Battery energy storage systems shall also comply with specifications established in NFPA 855 relating to barriers and buffering.
- H. Signage. No signs other than appropriate warning signs, or standard manufacturers', operators', or installers' identification signage, shall be displayed unless permitted in accordance with Chapter 89.
- I. Access and Fire Safety. Battery energy storage systems shall comply with the latest published version of the National Fire Protection Association (NFPA) 855, Standard for Installation of Stationary Energy Storage Systems, at the date of the submission of the application.
- J. Lighting. Exterior lighting, including any security lighting, shall be the minimum necessary for safety and security, downward directed, shielded from adjacent properties, and comply with the requirements of Section 88.09, Site Lighting.
- K. Emergency Response Plan (ERP):
- 1) An ERP is to be prepared and submitted for review prior to the issuance of a zoning permit. At the time a conditional use permit application is submitted, a draft ERP per NFPA 855 **Section 4.3.2.1.4(4)** shall be included with the application materials. This shall include but not be limited to an evacuation plan, firefighting techniques, and responsibility assignments for each scenario in the ERP.
 - 2) Prior to commencing commercial operations, the applicant shall submit a plan as an appendix to the project permit application for offering site-specific training to the fire service and emergency personnel of all applicable jurisdictions.
 - 3) The ERP shall be reviewed annually by local emergency responders throughout the project's lifespan and modified for best safety practices if necessary.
 - 4) Routine maintenance shall be performed on the U-BESS equipment to ensure proper performance of the technology. The County and local emergency responders are to be contacted if there are concerns of failure to meet any ERP standards in the U-BESS performance.
 - 5) **The applicant must c** conduct and submit documentation of hazard mitigation analyses as required by NFPA 855. An ERP and necessary fire precautions must be in place prior to issuance of any zoning permits.
 - 6) Local first responders are to be trained and equipped to the extent current equipment is insufficient to respond appropriately to the selected battery technology for the U-BESS project, at the Owner's commercially reasonable expense, prior to the commencement of the operation. Refresher training to local first responders shall be required, at the Owner's commercially reasonable expense, at reasonable intervals, at least annually or as requested by the jurisdictional fire chief and Story County Emergency Management throughout the life of the project.
 - 7) Owner shall be responsible for the commercially reasonable costs of local first responders for any emergency event at the facility.

- 8) Owner shall provide confirmation that there will be remote monitoring of the U-BESS 24 hours daily, seven (7) days a week.
- 9) U-BESS operators are required to certify that the system is being maintained per safety standards and coordinate refresher training or drill with the applicable fire department. Annual proof to be provided to Story County Planning and Development no later than February 28 each year. Failure to comply annually with this may result in revocation of the conditional use permit.
- L. Noise Standards: Sound generated from the battery energy storage systems, components, and associated ancillary equipment, measured at the nearest sensitive receptor or a non-participating property shall not exceed 55 dB(A) (1-hour Leq) at the property line.
 - 1) These standards shall not apply to uses established after the U-BESS is permitted/started.
- M. Compliance with Applicable Codes and Certifications.
 - 1) State Building Code. All U-BESS shall meet all requirements of the current State Building Code.
 - 2) National Electric Code (NEC). All U-BESS shall comply with the National Electrical Code, current edition.
 - 3) Certification that all battery units meet national safety standards (e.g. UL 1973 for battery modules, and UL 9540 for the entire storage system). All U-BESS applications shall provide such certification.
- ~~N. Lighting. Exterior lighting at a U-BESS site shall be the minimum necessary for safety and security, downward directed, and shielded from adjacent properties and comply with the requirements of Section 88.09.~~
- N. Underground Installation of Utilities. Reasonable efforts shall be made to place all utility connections from ~~CDC or DC~~ **U-BESS** facilities underground, depending on appropriate soil conditions, shape and topography of the site, distance to the connection, or other conditions or requirements. Any above ground utility lines require an engineer's signed statement and explanation as to why buried utilities are not feasible.
- O. All U-BESS shall comply with Iowa Utilities Board rules and any state law requirements. Any required state or federal permits or approvals (such as IUB generator certificates for very large facilities) must be obtained, and copies provided to the County, prior to construction.
- P. Review of Augmentation Plans
 - 1) If augmentation was not considered in the approved permit application, then such augmentation shall be processed as an amendment to the approved conditional use permit.
- Q. Commissioning Plan and Report
 - 2) Prior to issuance of a zoning permit, U-BESS Applicants shall submit a commissioning plan in accordance with NFPA 855 that contains:
 - a. An electrical diagram detailing the battery energy storage system configuration, associated components, and electrical interconnection methods, compliant with applicable state or local electrical codes, including NEC and NESC.
 - b. A preliminary equipment specification sheet that documents the proposed battery energy storage system components, inverters and associated electrical equipment that are to be installed. A final equipment specification datasheet shall be submitted prior to the issuance of the zoning permit.
 - c. Name, address, and contact information of proposed or potential system installer and the owner and/or operator of the U-BESS. Such information of the final system installer shall be submitted prior to the issuance of final zoning permit.

- R. Discontinuation and Decommissioning. U-BESS shall be considered discontinued after it has not stored electrical energy for twelve (12) consecutive months, unless a plan is developed and submitted to the Director outlining the steps and schedule for returning the U-BESS to service.
- 3) Removal Requirements. Any U-BESS which has reached the end of its useful life or has been determined to be discontinued pursuant to this section shall be decommissioned and removed within one-hundred eighty (180) days of the discontinuation of use.
 - 4) Decommissioning shall consist of:
 - a. Physical removal of all above-surface facilities and infrastructure that have no ongoing purpose, from the site. All U-BESS and accessory facilities shall be removed to four (4) feet below ground level within one-hundred eighty (180) days of the discontinuation of use.
 - b. Disposal of all solid and hazardous waste in accordance with local, State, and federal waste disposal regulations.
 - c. Stabilization or re-vegetation of the site as necessary to minimize erosion. The Director may allow the owner or operator to leave landscaping to minimize erosion and disruption to vegetation.
 - 5) Decommissioning Plan and Financial Surety.
 - a. U-BESS shall have a decommissioning plan outlining the anticipated means and costs of removing the U-BESS at the end of its serviceable life or upon becoming discontinued.
 - b. The decommissioning plan shall identify financial resources that will be available to pay for decommissioning and removal of U-BESS.
 - c. The applicant must continuously maintain a financial assurance mechanism in the form of a performance bond and/or other security approved by the County Attorney, for the period of the life of the facility. The required amount of the security shall be 130 percent of the total decommissioning cost identified in the decommissioning plan, excluding any salvage value. The financial assurance mechanism must ensure that funds will be available upon discontinuation and shall not include the future value, if any, of scrap. If a bond is posted to meet this requirement, the bond issuing company must be agreed upon by both the applicant and County. All decommissioning, removal and remediation fund requirements shall be fully funded before a zoning permit is issued. The County shall have sole discretion with regard to the determination of the mechanism of financial assurance.
 - d. Property Owner Affidavit. The applicant shall submit a copy of the decommissioning plan to all property owners within the boundaries of the Conditional Use Permit area. The property owners shall provide the County with a signed affidavit acknowledging receipt of the plan and their responsibility for decommissioning costs.
 - e. Every three (3) years from the first date of operations, or on the written request of the County, the Owner shall review and update the Decommissioning Plan and all appendices and provide the updated plan and appendices to the County on or before the date of each three-year anniversary of the first date of operations. As part of this review process, the Owner shall recalculate the total decommissioning cost and the decommissioning guaranty amount; and the financial assurance required shall be modified accordingly.
- S. Monitoring and Maintenance. The owner or operator of a U-BESS shall maintain the facility in good condition. Maintenance shall include, but not be limited to, painting, structural repairs, and integrity of security measures. Internal circulation drives shall be maintained by

the owner or operator to a level acceptable to the applicable fire chief and Story County Emergency Management Agency. The owner or operator shall be solely responsible for the cost of maintaining the U-BESS and any internal access roads.

- 6) Following the initial completion of the project and the project commissioning, Owner shall notify the County, in writing, of any battery enclosures before being removed or installed at the project. Such notification shall be at least thirty (30) days in advance of the removal or installation, except in cases of emergency, when Owner shall notify the County as soon as practicable. No batteries shall be stored on the premises outside of battery enclosures, with the exception of batteries stored for future use, and any such used for future use shall be stored to NFPA 855 standards.
- T. Ownership Changes. If the owner of the U-BESS changes or the owner of the property changes, the conditional use permit shall remain in effect, provided that the successor owner or operator assumes in writing all of the obligations of the conditional use permit, site plan approval, and decommissioning plan. A new owner or operator of the U-BESS shall notify the Story County Planning and Development Department in writing of such changes in ownership or operations within sixty (60) days of the change.
- 7) The conditional use permit and all other local approvals for the U-BESS may be considered void if a new owner or operator fails to provide written notification to the Story County Planning and Development Department within the required timeframe. Reinstatement of a void conditional use permit will be subject to the same review and approval processes for new conditional use permits.
- U. Third-Party Reviewer
- 8) The County may seek the services of a third-party reviewer with expertise in the U-BESS technology field to assist with the following services (if the conditional use permit is approved by the County).
 - a. Review of the site and architectural plan, battery technology, compliance with NFPA 855, and with other applicable regulatory standards and codes not specifically identified in these regulations.
 - b. Assist with the review of the ERP, completed noise study, decommissioning plan and review of decommissioning financial security agreement.
 - 9) The County shall make their best effort so that the Third-Party Review does not unreasonably delay the project's zoning permitting or construction process. The Owner shall be responsible for reimbursing the County for the commercially reasonable costs incurred for the services of said Third-Party Reviewer. Said costs shall be mutually agreed upon by the County and Owner prior to the County's commencement of plan review for the zoning permit.
- V. Avoidance and Mitigation of Damages to Public Infrastructure.
- 10) Roads. Applicant shall identify all roads to be used for the purpose of transporting components and/or equipment for construction, operation or maintenance of the U-BESS and obtain applicable weight and size permits from the impacted road authority prior to construction.
 - 11) Existing Road Conditions. Applicant shall conduct a pre-construction survey, in coordination with the impacted local road authority to determine existing road conditions. The pre-construction survey shall include photographs and a written agreement to document the condition of the roads and applicable public facilities. The applicant is responsible for on-going road maintenance and dust control measures identified by the Story County Engineer during all phases of construction.
 - 12) Drainage System. The applicant shall be responsible for immediate repair of damage to public drainage systems stemming from construction, operation, or maintenance of the U-BESS.

- 13) Required Financial Security. The applicant shall be responsible for restoring or paying damages as agreed to by the applicable road authority sufficient to restore the roads and bridges to preconstruction conditions. Financial assurance mechanisms in the form of a performance bond and/or other security approved by the Story County Attorney's Office shall be submitted to the Planning and Development Department covering 130 percent of the costs of all required improvements prior to final issuance of the conditional use permit by the Board of Adjustment. This requirement may be waived by the Board of Adjustment upon recommendation from the Story County Engineer.

W. Submittal Requirements. All U-BESS applications must submit the following information in addition to submittal requirements defined for conditional use permit applications.

- 1) The names of the project applicants.
- 2) The names of the project owners.
- 3) The legal description and address of the project.
- 4) The names of the landowners.
- 5) Pre-construction survey and proposed routes.
- 6) Proposed changes to the landscape of the site, grading, vegetation clearing and planting, exterior lighting, and screening vegetation or structures.
- 7) A detailed site plan drawing showing the layout of the U-BESS facility on the property including the battery enclosures/containers, inverters and electrical equipment, transformers, access roads, parking or turnaround areas for maintenance vehicles, proposed fencing and gates, landscape buffers (if any), and setback distances from property lines and existing structures, and identifying any adjacent uses (homes, public roads, etc.), floodplain, rights-of-way and zoning district designations. For co-located U-BESS at a solar/wind farm, the U-BESS components should be clearly identified on the overall project site plan as defined in Section 90.08.6 Commercial WECS (C-WECS) and 90.08.8 Commercial Solar Energy Systems (C-SES).
- 8) Project Narrative and Specification Sheets describing the U-BESS project, including the type of battery technology (e.g. lithium-ion, flow battery, etc.), the nameplate energy capacity (in MW and MWh), the intended charge/discharge regime (e.g. daily cycling, emergency backup), and whether the system is stand-alone or tied to a generation facility. The applicant should provide manufacturer's spec sheets for the battery units and associated equipment, to verify dimensions and compliance with safety standards (such as UL listings).
- 9) Statements of Compliance with Applicable Codes and Certifications.
- 10) Emergency Response Plan.
- 11) Site Safety and Security Plan: A detailed plan outlining on-site safety features such as thermal monitoring systems, ventilation and explosion-proof construction features and describing how the site will be secured against unauthorized access like fencing, locking cabinets, lighting, alarms, etc.
- 12) Project development timeline.
- 13) Existing Resources Inventory as defined in [Chapter 85](#).
- 14) Documentation of actual or prospective access and traffic control of the project site.
- 15) Operation and maintenance plan of the U-BESS, which shall include measures for maintaining safe access to the installation, storm water controls, as well as general procedures for operation and maintenance of the installation.
- 16) Proof of liability insurance.
- 17) Applicable Fee

- 18) Decommissioning plan without salvage value calculated into the security bond amount.
- 19) Acknowledgement of Third-Party Reviewer process and potential costs.

12 Cryptocurrency Mining or Production Installations Associated with a Data Center (CDC); Data Centers (DC)

- A. The requirements of the Ordinance shall apply to all CDC or DC proposed after the effective date of the Ordinance.
- B. Maximum Height. Building height shall not exceed forty (40) feet and shall not include any additional rooftop equipment, which may not exceed a maximum height of thirty (30) feet.
 - 1) Any mechanical rooftop equipment, including but not limited to heating, air conditioning, ventilation, generators, and other similar equipment, shall be screened with a parapet wall, false roof, or other building elements that shall provide one hundred (100) percent screening of mechanical equipment from the adjacent roadways, properties, and waterways.
 - a. The parapet wall, false roof, or building element shall be constructed of the same materials used in the construction of the principal building or structure and shall be designed to be architecturally integrated with the building's overall design.
 - b. No screening shall be required for renewable energy infrastructure equipment, including but not limited to solar energy systems, wind energy systems, and other power generation equipment.
 - c. No screening shall be required for any green infrastructure, including but not limited to green roofs, rooftop cisterns, and other bioretention equipment.
- C. Setbacks
 - 1) All principal buildings, accessory structures, and Data Center Electric Utility Substations shall be set back at least two hundred (200) feet from all property lines or not exceeding 60dB(A).
 - 2) If located on the ground, any equipment for cooling, ventilating, or otherwise operating the facility, including any power generator or other power supply equipment, must either be:
 - a. Located at least one hundred (100) feet or not exceed 60 dB(A) from the lot line of a property with a residential zoning classification or an existing dwelling; or
 - b. Separated from the lot line of a property with a residential zoning classification or an existing dwelling by the principal data center building.
- D. Site Layout. Buildings shall be sited and oriented to:
 - 1) Minimize visual impacts of the bulk of the building when examined on a line-of-sight basis from adjacent public streets and Sensitive Receptor areas.
 - 2) Provide safe and convenient vehicular access to the site, including sufficient on-site queuing areas at security gates.
 - 3) Accommodate parking area.
 - 4) Minimize impacts to natural resources.
 - 5) Incorporate appropriate stormwater management practices.
- E. Utility Connections: Reasonable efforts shall be made to place all utility connections from CDC or DC facilities underground, depending on appropriate soil conditions, shape and topography of the site, distance to the connection, or other conditions or requirements. Any above ground utility lines require an engineer's signed statement and explanation as to why buried utilities are not feasible.
- F. Screening
 - 1) Substations, electrical yards, mechanical yards, and any other exposed equipment shall not be located between the building and a publicly accessible road or right-of-way and shall be screened from any adjacent publicly available accessible street, private street, trail, or park.

- 2) All cooling, ventilation, and other electrical equipment used to operate the facility shall not be located between the building and publicly accessible rights-of-way.
 - 3) CDC or DC must be visually screened from the public right-of-way and from any Sensitive Receptors located within 100' of the CDC or DC. A landscape buffer is required to be installed and maintained during the life of the operation. The following plant unit percentages apply to each property line where the buffer is required:
 - a. A maximum of twenty (20) percent of the required plant units may be a combination of shrubs, ornamental grasses, and perennials.
 - b. A minimum of forty (40) percent and a maximum of seventy (70) percent of the required plant units must be evergreen trees that are a minimum of eight (8) feet in height at the time of planting.
 - c. A maximum of thirty (30) percent of the required plant units may be small deciduous trees.
 - d. A maximum of thirty (30) percent of the required plant units may be large deciduous trees.
 - e. Buffer Substitution Using Topography and Vegetation. Use of the natural topography and preservation of non-invasive existing vegetation, supplemented by new vegetation, if needed, may be substituted for the above requirements if determined by the Story County Board of Adjustment to provide screening at the density, depth, and height equivalent to that outlined above.
- G. Signage: Each CDC or DC operation shall provide 24-hour emergency contact signage visible at the access entrance. Signs shall include company name, owner/representative name, telephone number, and corresponding local power company and telephone number. All additional signage must adhere to the requirements in Chapter 89.
- H. Lighting: Exterior lighting, including any security lighting, shall be the minimum necessary for safety and security, downward directed, and shielded from adjacent properties and comply with the requirements of Section 88.09, Site Lighting.
- I. Noise/Vibration
- 1) The CNEL at the boundary of the property containing a Sensitive Receptor shall not exceed 55 dB(A) within three hundred (300) feet.
 - 2) The CNEL at the boundary of any developed property not containing a Sensitive Receptor shall not exceed 70 dB(A).
 - 3) Sound that is produced for not more than a cumulative period of one (1) minute in any hour may exceed the standards above by up to 10 dB(A).
 - 4) In the event audible noise operations contains a steady pure tone, such as a whine, screech, or hum, the standards for audible noise set forth shall be reduced by 5 dB(A).
 - 5) The maximum sound levels listed above do not apply to emergency alerts, emergency work to provide electricity, water, or other public utilities when public health or safety is involved, snow removal, or road repair.
 - 6) A noise reduction barrier or device may be required at the discretion of the Board of Adjustment when it is inconclusive that noise level tests do not conform to acceptable noise levels.
 - 7) The limitations of this section shall not apply to any Sensitive Receptor that is established adjacent to the CDC or DC after the date of issuance of a final zoning permit for the applicant's operation.
 - 8) In the event the noise levels resulting from CDC or DC operations exceed the criteria listed above, a waiver to said levels may be granted by the Board of Adjustment provided that the following has been accomplished.

- a. Written waiver from the affected property owners has been obtained stating that they are aware of the CDC or DC and the noise limitations imposed by these Regulations, and that consent is granted to allow noise levels to exceed the maximum limits otherwise allowed; and,
 - b. If the applicant wishes the waiver to apply to succeeding owners of the property, a permanent noise impact easement shall be recorded in the Office of the Story County Recorder which describes the burdened properties and which advises all subsequent owners of the burdened property that the noise levels in excess of those permitted by these Regulations may exist on or at the burdened property.
 - c. Any generators on the property shall comply with the U.S. Environmental Protection Agency (EPA) New Source Performance Standards (NSPS) of at least Tier 4 emissions. Testing for these generators shall not exceed ten (10) hours per month unless a power outage occurs. Generators shall be enclosed by a sound attenuation for noise reduction and to reduce pollution.
 - d. Except for generator testing or commissioning activities, generator use is limited to backup/emergency use only.
- J. Foundation. All structures shall have concrete foundations.
 - 1) Foundations shall not be defective, decayed, or corroded.
 - 2) The use of cargo containers, railroad cars, semi-truck trailers, and other similar storage containers for any component of the operation are prohibited.
- K. Cooling Systems. CDC or DC shall be required to have a liquid cooling system.
 - 1) A closed loop cooling system is required.
 - 2) The application shall include an estimate of annual water consumption for the site to include an assessment for annual replacement or replenishment of water in the closed loop.
 - 3) The application shall include a description of the intended source of water for the development, and documentation from the Iowa Department of Natural Resources along with Story County Environmental Health affirming sufficient water resources exist to serve the site.
 - 4) All necessary permits must be obtained from Story County Environmental Health and the Iowa Department of Natural Resources.
- L. Equipment. All servers, computers, processors, materials, and equipment must be enclosed within buildings.
- M. Electrical Power. The applicant shall provide written verification from the power provider that the applicant has calculated the maximum potential electrical consumption of the proposed use and has verified the utility supply equipment and related electrical infrastructure is sufficiently sized and can safely accommodate the proposed use during the power provider's peak consumption hours.
- N. Hazardous Materials and Environmental Protection.
 - 1) The CDC or DC shall comply with all applicable hazardous materials handling and reporting laws.
 - 2) All CDC or DC must comply with the County's stormwater and erosion control ordinance.
 - 3) On parcels containing more than 50 percent of the gross acreage as lands identified with areas designated Natural Resource Areas on the Cornerstone to Capstone (C2C) Comprehensive Plan, the conditional use permit shall not be approved unless conditions protecting the identified areas are attached to the request, either split zoned with conservation or conservation easements.
 - 4) CDC or DC shall not be located in the Special Flood Hazard Area.

O. Ice Mitigation Report: All CDC or DC shall ensure that the amount of heat that is dissipated by the mining activity shall be monitored when the average daily temperature is 40 degrees Fahrenheit or less to ensure that there is no buildup of ice on neighboring properties and roadways.

- 1) In the instance that condensation and ice occur, there shall be an agreement between the facility's operational contact, owners of neighboring properties (to mitigate ice buildup on dwellings), and the County Engineer to mitigate ice on public right of way.

P. Safety.

- 1) The equipment used in any CDC or DC operation shall be housed in a metered, electrically grounded, and pre-engineered metal-encased structure with a fire rating designed to resist an internal electrical fire for at least 30 minutes. The containment space shall contain baffles that automatically close in the event of fire, independent of a possible electric system failure.
- 2) Any CDC or DC using ~~proposing~~ **proposed** battery storage or any other device or group of devices capable of storing energy in order to supply electrical energy at a later time, whether the energy is stored for use on-site or off-site, shall demonstrate compliance with NFPA Standard 855, Installation of Stationary Energy Storage Systems, or similar standards and must include fire suppression systems designed specifically for battery storage.
- 3) A clean agent fire protection system must be provided and maintained in good working order within any structure which contains a server farm. High sensitivity smoke detectors shall be installed and operational in order to activate the clean agent fire suppression system.

Q. Power Lines and Electric Utility Substations.

- 1) CDC or DC Electric Utility Substations must include year-round opaque landscaping or a screen wall a minimum of eight (8) feet in height to minimize visual impact.
- 2) Electric Utility Substations on the same property as the CDC or DC they serve must be located on the side or rear of a principal building so they are screened from public view and must not be in a required front yard. On-site substations do not require a buffer or screening between the Data Center Principal Building and the substation.
- 3) Burying power lines serving the property is required. On-site power lines of 34.5 kV and below must be buried. Any above ground utility lines require an engineer's signed statement and explanation as to why buried utilities are not feasible.
- 4) The CDC or DC Electric Utility Substation shall be subject to applicable zoning district setback requirements. Setbacks shall be measured from the edge of the compound containing the substation to the property boundary of the lot it occupies.

R. Emergency Contact Information.

- 1) Each CDC or DC operation shall provide 24-hour emergency contact signage visible at the access entrance. Signs shall include the company name (if applicable), the owner/representative's name, the telephone number, and the corresponding local power company's name and telephone number.

S. Compliance with Applicable Codes and Certifications. Statements of Compliance with Applicable Codes and Certifications below ~~is~~ **are** required at the time of submittal for a conditional use permit.

- 1) State Building Code. All CDC or DC shall comply with all requirements of the current State Building Code.
- 2) National Electrical Code (NEC). All CDC or DC shall comply with the National Electrical Code, current edition.
- 3) Certification that all battery units meet national safety standards (e.g. UL 1973 for battery modules, and UL 9540 for the entire storage system).

- T. Commissioning Plan and Report. Prior to issuance of a zoning permit, CDC or DC Applicants shall submit a commissioning plan that demonstrates:
- 1) An electrical diagram detailing the configuration, associated components, and electrical interconnection methods, compliant with applicable state or local electrical codes, including NEC and NESC.
 - 2) Name, address, and contact information of proposed or potential system installer and the owner and/or operator of the CDC or DC. Such information of the final system installer shall be submitted prior to the issuance of final zoning permit.
- U. Discontinuation and Decommissioning. CDC or DC shall be considered discontinued after twelve (12) months without active and continuous use unless a plan is developed and submitted to the Director outlining the steps and schedule for returning the CDC or DC to service.
- 1) Removal Requirements. Any CDC or DC which has reached the end of its useful life or has been determined to be discontinued pursuant to this section shall be decommissioned and removed within one-hundred eighty (180) days of the discontinuation of use.
 - 2) Decommissioning shall consist of:
 - a. Physical removal of all above-surface facilities and infrastructure that have no ongoing purpose from the site. All CDC and DC and accessory facilities shall be removed to four (4) feet below ground level within one-hundred eighty (180) days of the discontinuation of use.
 - b. Disposal of all solid and hazardous waste in accordance with local, State, and federal waste disposal regulations.
 - c. Stabilization or re-vegetation of the site as necessary to minimize erosion. The Director may allow the owner or operator to leave landscaping or designated below-grade foundations in order to minimize erosion and disruption to vegetation.
 - 3) Decommissioning Plan and Financial Surety.
 - a. The CDC or DC shall have a decommissioning plan outlining the anticipated means and costs of removing the CDC or DC at the end of its serviceable life or upon becoming discontinued.
 - b. The decommissioning plan shall identify financial resources that will be available to pay for decommissioning and removal of a CDC or DC.
 - c. The applicant must continuously maintain a financial assurance mechanism in the form of a performance bond and/or other security approved by the County Attorney, for the period of the life of the facility. The required amount of the security shall be 130 percent of the total decommissioning cost identified in the decommissioning plan, excluding any salvage value. The financial assurance mechanism must ensure that funds will be available upon discontinuation and shall not include the future value, if any, of scrap. If a bond is posted to meet this requirement, the bond issuing company must be agreed upon by both the applicant and County. All decommissioning, removal and remediation fund requirements shall be fully funded before a zoning permit is issued. The County shall have sole discretion with regard to the determination of the mechanism of financial assurance.
 - d. Property Owner Affidavit. The applicant shall submit a copy of the decommissioning plan to all property owners within the boundaries of the Conditional Use Permit area. The property owners shall provide the County with a signed affidavit acknowledging receipt of the plan and their responsibility for decommissioning costs.

- e. Every three (3) years from the first date of operations, or on the written request of the County, the Owner shall review and update the Decommissioning Plan and all appendices and provide the updated plan and appendices to the County on or before the date of each three-year anniversary of the first date of operations. As part of this review process, the Owner shall recalculate the total decommissioning cost and the decommissioning guaranty amount; and the financial assurance required shall be modified accordingly.
- V. Monitoring and Maintenance. The owner or operator of a CDC or DC shall maintain the facility in good condition. Maintenance shall include, but not be limited to, painting, structural repairs, and integrity of security measures. Internal circulation drives shall be maintained by the owner or operator to a level acceptable to the applicable fire chief and Story County Emergency Management Agency. The owner or operator shall be solely responsible for the cost of maintaining the CDC or DC and any internal access roads.
- W. Ownership Changes. If the owner of the CDC or DC changes or the owner of the property changes, the conditional use permit shall remain in effect, provided that the successor owner or operator assumes in writing all of the obligations of the conditional use permit, site plan approval, and decommissioning plan. A new owner or operator of the CDC or DC shall notify the Story County Planning and Development Department in writing of such changes in ownership or operations within sixty (60) days of the change.
 - 1) The conditional use permit and all other local approvals for the CDC or DC may be considered void if a new owner or operator fails to provide written notification to the Story County Planning and Development Department within the required timeframe. Reinstatement of a void conditional use permit will be subject to the same review and approval processes for new conditional use permits.
- X. Third-Party Reviewer.
 - 1) The County may seek the services of a third-party reviewer with expertise in the CDC or DC field to assist with the following services (if the conditional use permit is approved by the County).
 - a. Review of the site and architectural plan, battery technology, compliance with state and federal regulations, and with other applicable regulatory standards and codes not specifically identified in these regulations.
 - b. Assist with the review of the ERP, completed noise study, decommissioning plan and review of decommissioning financial security agreement.
 - 2) The County shall make their best effort that the Third-Party Review does not unreasonably delay the project's zoning permitting or construction process. The Owner shall be responsible for reimbursing the County for the commercially reasonable costs incurred for the services of said Third-Party Reviewer. Said costs shall be mutually agreed upon by the County and Owner prior to the County's commencement of plan review for the zoning permit.
- Y. Avoidance and Mitigation of Damages to Public Infrastructure.
 - 1) Roads. Applicants shall identify all roads to be used for the purpose of transporting components and/or equipment for construction, operation or maintenance of the CDC or DC and obtain applicable weight and size permits from the impacted road authority prior to construction.
 - 2) Existing Road Conditions. Applicant shall conduct a pre-construction survey, in coordination with the impacted local road authority to determine existing road conditions. The pre-construction survey shall include photographs and a written agreement to document the condition of the roads and applicable public facilities. The applicant is responsible for on-going road maintenance and dust control measures identified by the Story County Engineer during all phases of construction.

- 3) Drainage System. The applicant shall be responsible for immediate repair of damage to public drainage systems stemming from construction, operation, or maintenance of the CDC or DC.
 - 4) Required Financial Security. The applicant shall be responsible for restoring or paying damages as agreed to by the applicable road authority sufficient to restore the roads and bridges to preconstruction conditions. Financial assurance mechanisms in the form of a performance bond and/or other security approved by the Story County Attorney's Office shall be submitted to the Planning and Development Department covering 130 percent of the costs of all required improvements prior to final issuance of the conditional use permit by the Board of Adjustment. This requirement may be waived by the Board of Adjustment upon recommendation from the Story County Engineer.
- Z. Submittal Requirements. All CDC or DC applications must submit the following information in addition to submittal requirements defined for conditional use permit applications.
- 1) The names of the project applicants.
 - 2) The names of the project owners.
 - 3) The legal description and address of the project.
 - 4) The names of the landowners.
 - 5) Pre-construction survey and proposed routes.
 - 6) Proposed changes to the landscape of the site, grading, vegetation clearing and planting, exterior lighting, and screening vegetation or structures.
 - 7) A detailed site plan drawing showing the layout of the CDC or DC on the property including structures, access roads, parking or turnaround areas for maintenance vehicles, proposed fencing and gates, landscape buffers (if any), and setback distances from property lines and existing structures, also identification of any adjacent uses (homes, public roads, etc.).
 - 8) Project Narrative and Specification Sheets describing the CDC or DC project.
 - 9) Statements of Compliance with Applicable Codes and Certifications.
 - 10) Emergency Response Plan.
 - 11) Site Safety and Security Plan: A detailed plan outlining on-site safety features such as thermal monitoring systems, ventilation and explosion-proof construction features and describing how the site will be secured against unauthorized access like fencing, locking cabinets, lighting, alarms, etc.
 - 12) Project development timeline.
 - 13) Existing Resources Inventory as defined in [Chapter 85](#).
 - 14) Documentation of actual or prospective access and traffic control of the project site.
 - 15) Operation and maintenance plan of the CDC or DC, which shall include measures for maintaining safe access to the installation, storm water controls, as well as general procedures for operation and maintenance of the installation.
 - 16) Proof of liability insurance.
 - 17) Application Fee.
 - 18) Decommissioning plan without salvage value calculated into the security bond amount.
 - 19) Acknowledgement of Third-Party Reviewer process and potential costs.
 - 20) Landscaping plan to be approved by Story County Conservation.