INDEPENDENCE
★ COMMUNITY DEVELOPMENT ★

Planning Commission
Staff Report

MEETING DATE: July 14, 2026

STAFF: Tom Scannell, Community Development Director

PROJECT NAME: UDO Amendment #80

CASE NUMBER / REQUEST: **Case 26-175-03 – UDO Amendment #80 – Data Centers & Battery Energy Storage Systems (BESS) –** A request to amend the Unified Development Ordinance relating to Data Centers and BESS.

APPLICANT: City of Independence

PUBLIC NOTICE:

- Public notice published in Independence Examiner – June 27, 2026

FURTHER ACTION:
Following action by the Planning Commission, this UDO Amendment is scheduled for first reading by City Council on August 3, 2026 and the public hearing/second reading on August 17, 2026.

RECOMMENDATION

Staff recommends **APPROVAL** of the proposed amendment to the Unified Development Ordinance.

PROJECT DESCRIPTION & BACKGROUND INFORMATION

PROJECT DESCRIPTION:
The City requests approval of amendments to the Unified Development Ordinance (UDO) to establish new regulations governing Data Processing and Hosting Facilities (commonly referred to as data centers) and Battery Energy Storage Systems (BESS). The proposed amendments create Article 14-429, Small Data Processing and Hosting; Article 14-430, Major Data Processing and Hosting; and Article 14-431, Battery Energy Storage Systems. These articles establish development, operational, buffering, design, safety, application, reporting, and decommissioning standards for these uses. The office, commercial, and industrial use tables and related use group definitions have also been updated. Additionally, a new Section 14-400-13, Accessory Data Processing and Hosting, has been created.

BACKGROUND:

Data processing and hosting facilities have emerged as a rapidly growing component of industrial and technology-related development throughout the United States. These facilities provide infrastructure for cloud computing, data storage, artificial intelligence applications, web hosting, and other digital services that support modern commerce and communications.

While data centers can represent significant private investment and contribute to local economic development, they also present unique land use considerations not commonly associated with traditional industrial development. These considerations include substantial electrical demand, water consumption, backup power generation, noise from mechanical equipment, large building footprints, visual impacts, and potential compatibility concerns with nearby residential neighborhoods and community facilities.

The City's current UDO does not contain use-specific regulations for data processing and hosting facilities. As interest in this development type continues to increase, staff believes additional standards are appropriate to provide clear expectations for future development while protecting surrounding properties and community resources.

As part of the amendment, staff established a tiered regulatory framework for data processing and hosting facilities to reflect their differing scales, operational impacts and infrastructure demands. Three use types have been created:

1. **Accessory Data Processing and Hosting Facility** – A subordinate use located within or attached to a principal structure, intended to support the primary use on the site.
2. **Small Data Processing and Hosting Facility (< 2.5 MW)** – A standalone or principal use facility with an electrical load of less than five megawatts, typically characterized by limited site impacts and compatibility with a broader range of zoning districts.
3. **Major Data Processing and Hosting Facility (> 2.5 MW)** – A high-capacity installation with an electrical load greater than five megawatts, generally requiring enhanced infrastructure, larger footprints, and elevated performance, siting, and buffering standards.

This tiered approach ensures that each facility type is regulated proportionately to its scale and potential effects on surrounding properties, public infrastructure, and community character.

Accessory Data Processing and Hosting UDO Amendment

The proposed amendment establishes a new Section 14-400-13, Accessory Data Processing and Hosting Facility, as a defined and regulated accessory use. The section includes standards for applicability, location, enclosed building and compliance with the City’s adopted building, fire, electrical, and mechanical codes. An accessory data processing and hosting facility is incidental and subordinate to the principal use of the property and is intended solely to support the operations of that principal use. It may not function as a standalone commercial data processing or hosting operation nor may it provide hosting or data processing services to third parties as its primary purpose. This new section further clarifies that all such facilities must comply with the City’s adopted building, fire, electrical and mechanical codes.

Small Data Processing and Hosting UDO Amendment

The proposed amendment establishes a new Section 14-429, Small Data Processing and Hosting and creates development standards that recognize the scale of small data processing and hosting facilities while ensuring compatibility with surrounding development and minimizing impacts associated with mechanical equipment, noise, lighting, cooling systems, and backup power generation. These facilities would be allowed subject to the requirements of Section 14-429 in the C-2, C-3, BP/PUD and I-1 districts and include the following key provisions:

Applicability
This section establishes the purpose of the regulations and clarifies when the standards apply. It also includes a grandfathering provision allowing projects that have already received development approvals to proceed under the regulations that were in effect at the time of approval, including approved phased developments. This protects vested property rights while ensuring that future projects comply with the new standards.

Setbacks
The setback provisions recognize that a small data processing and hosting facility could occupy existing industrial or commercial buildings where requiring additional setbacks would be impractical. Existing buildings are deemed compliant, while new construction and building additions must satisfy the setback requirements of the underlying zoning district. Mechanical equipment is generally required to meet the same setbacks as the principal structure, although limited flexibility is provided when enhanced screening or buffering can achieve equivalent visual and noise mitigation. This approach balances redevelopment opportunities with compatibility for adjacent properties.

Buffering and Screening
This section ensures that exterior equipment associated with these facilities is appropriately screened from neighboring properties and public rights-of-way. Existing developments are not required to construct additional buffer yards unless new exterior equipment is installed, while new construction and a building addition must comply with the City's existing landscape and screening standards. Screening requirements for generators, transformers, cooling equipment, loading areas, and other service areas reduce visual impacts and improve compatibility with surrounding development.

Parking
Small data processing and hosting facilities typically employ relatively few personnel compared to traditional industrial or office uses. The proposed parking requirement bases parking on the maximum number of employees working during a single shift rather than building size, resulting in parking that more accurately reflects operational demand. Existing parking areas may remain unchanged unless modified, while any new or reconfigured parking must comply with current setback and screening requirements.

Architectural and Design Requirements
This section requires compliance with the City's existing commercial and industrial building design standards for both existing buildings or new construction. This ensures consistency throughout the UDO while maintaining high-quality building materials and architectural appearance.

Lighting
Exterior lighting associated with these facilities must comply with the City's existing lighting standards. These requirements help reduce glare, minimize light trespass onto adjacent properties, and maintain safe site illumination while protecting nearby development.

Noise and Maintenance Requirements
Mechanical equipment and backup generators have the potential to generate noise that can affect neighboring properties. The proposed standards require compliance with the City's existing noise ordinance while also limiting routine generator testing to normal weekday business hours, establishing monthly testing limits, requiring sound attenuation, and maintaining annual generator testing records. These standards allow facilities to maintain emergency backup systems while minimizing operational impacts on surrounding properties.

Cooling Systems
Cooling systems represent one of the primary operational components of data processing facilities. The proposed regulation requires facilities to utilize closed-loop cooling systems or technologies that achieve equivalent or lower water consumption while ensuring that cooling-related water demand does not exceed the City's available utility capacity. These standards promote efficient water use and help protect long-term utility resources.

Decommissioning and Site Restoration
Should a facility permanently cease operations, this section requires submission of a decommissioning plan and restoration of the site for future industrial or commercial use. Rather than requiring demolition of the principal building, the regulations encourage adaptive reuse by requiring the removal of specialized data processing equipment while preserving buildings, parking, utilities and other infrastructure that can support future tenants. This reduces the likelihood of vacant buildings and promotes long-term economic reuse of developed sites.

Ongoing Compliance and Reporting
To ensure continued compliance after construction, operators must submit an annual report documenting compliance with noise standards, cooling systems, landscaping, stormwater maintenance and generator testing requirements. The City is also authorized to conduct inspections as necessary to verify ongoing compliance with the ordinance. These provisions provide accountability throughout the operational life of the facility rather than limiting review to the initial development process.

Violations and Enforcement
This section establishes that violations of the ordinance may result in enforcement actions authorized under the UDO. The provision provides the City with the authority necessary to address noncompliance and ensure that approved operational standards continue to be met.

Modifications
Future expansions or substantial modifications to a facility's mechanical systems, electrical infrastructure, or site layout are subject to City review. This ensures that operational changes

continue to meet the intent of the ordinance and are evaluated for potential impacts on surrounding properties.

Zoning Districts
As discussed above, Small Data Processing and Hosting uses are permitted in the C-2 (General Commercial), C-3 (Commercial Services), BP/PUD (Business Park/Planned Unit Development), and I-1 (Light Industrial) districts, subject to compliance with the standards established in Section 14-429.

These zoning districts are intended to accommodate commercial, office, technology and light industrial activities that are compatible with enclosed data processing operations. Small data processing and hosting facilities typically function with limited employees, minimal customer traffic and no outdoor storage or manufacturing activities. Their operational characteristics are generally consistent with other commercial and office-based uses permitted within these districts.

The standards contained in Section 14-429 ensure that potential impacts associated with these facilities including noise, mechanical equipment, screening, lighting, and utility infrastructure are appropriately addressed regardless of zoning district. Requiring compliance with these operational and development standards allows small data processing and hosting facilities to integrate into existing commercial and light industrial areas while protecting adjacent properties and maintaining compatibility with surrounding development.

Major Data Processing and Hosting UDO Amendment

PROPOSED AMENDMENT SUMMARY
The proposed amendment creates a new Section 14-430, Major Data Processing and Hosting Facilities, allows these uses in the I-1 District with approval of a special use permit and includes the following key provisions:

Applicability
The standards apply to all new major data processing and hosting developments but exempt projects that submitted building permits, received final site plan approval, or obtained other applicable development entitlements prior to the effective date. Approved phased developments may continue under previously granted entitlements.

Setbacks and Separation Requirements
All structures, equipment, and appurtenances including inverters, transformers, auxiliary systems, and substations must maintain a minimum setback of 100 feet. Additionally, no data processing and hosting facility may be located within 500 feet of residential uses, schools, parks, playgrounds, daycare facilities, nursing homes, hospitals, or religious assembly uses. Distances are measured property-line to property-line, without regard to intervening structures.

Buffering and Screening Standards
A minimum 100-foot buffer yard is required where the major data hosting facility abuts residential zoning or residential use. A high-impact screen per Section 14-503 is required, and planting quantities

must be increased by 25 percent. All mechanical yards, substations, switchyards, battery storage areas, and other exterior equipment must be fully screened from view from public or private streets, trails, and parks.

Parking Standards
Off-street parking adjacent to a public or private right-of-way must be set back at least 50 feet and screened using buildings, landscaped berms at least three feet in height, plantings, or combinations thereof. Screening must comply with Section 14-503. Data hosting facilities must provide a minimum of 1.5 off-street parking spaces per employee based on the maximum number of employees per shift.

Architectural Design Standards
Building design standards are included to address the visual appearance of large-scale facilities. These standards require enhanced façade treatments, architectural materials, building articulation, and design elements intended to reduce the appearance of large uninterrupted building walls. Buildings must incorporate at least four-sided façade design elements for every 500 feet of street-facing façade and at least two such elements for every 500 feet of other façades.

Lighting
All exterior lighting must comply with the standards of Section 14-508 of the UDO.

Noise and Generator Regulations
The proposed regulations require compliance with existing City noise standards and establish operational limitations for backup generators, including restrictions on testing frequency, testing hours, recordkeeping, and noise attenuation measures. Generator testing is limited to 10 hours per month and may occur only between 9:00 AM and 5:00 PM Monday–Friday, excluding federal holidays. Generators must be enclosed with sound-attenuating materials, and operators must maintain annual generator logs.

Water Usage and Cooling Systems
The amendment requires facilities to utilize closed-loop cooling systems or technologies with equivalent or lower water consumption and establishes a maximum average cooling-related water usage threshold.

Community Benefit Agreements
Facilities seeking public incentives would be required to enter into a Community Benefit Agreement (CBA) with the City. The agreement may address workforce development, local hiring, educational partnerships, infrastructure improvements, environmental sustainability measures, community investment, and other public benefits proportional to the requested incentives. Noncompliance may result in enforcement or the revocation of the incentive.

Neighborhood Meeting Requirement
A neighborhood meeting is required before any special use permit application is submitted. Notices are required to be mailed to all property owners within one mile at least 15 days prior to the meeting

and posted onsite using standard city notice signs. Applicants must provide proof of notification, including mailings, affidavits, and photographs of posted signs.

Decommissioning and Site Restoration
A facility that ceases operations for 12 consecutive months is considered abandoned and must be decommissioned. A decommissioning plan must be submitted with the building permit and include removal of equipment, hazardous materials, structures, foundations, and fencing, along with site stabilization and restoration. The City may require financial assurance (i.e., bond, letter of credit, escrow, etc.) to guarantee completion. The amendment requires submission of a preliminary decommissioning plan with the special use permit application. The regulations are intended to ensure the site remains viable for future industrial or commercial redevelopment.

Special Use Permit Application Requirements
The special use permit application must include a noise impact assessment, water and energy usage plans, emissions analysis, environmental justice review, detailed site plan, stormwater studies, civil layout, building elevations, photometric plan, preliminary decommissioning plan, ownership disclosure, and waste-heat mitigation documentation.

Annual Reporting and Compliance Monitoring
Operators would be required to submit annual compliance reports documenting adherence to applicable operational standards, including noise monitoring, cooling system operation, landscape maintenance, stormwater facility maintenance, and generator testing records.

Violations and Enforcement
Failure to comply may result in enforcement, including suspension or revocation of the special use permit.

Modifications
Any expansion or substantial modification of a data hosting facility must be reviewed under current regulations.

Zoning Districts.
As discussed above, major data processing and hosting facilities require approval of a special use permit in the I-1 Districts. This is the only zoning district where the use may be considered. Staff does not recommend permitting this use in the I-2 Heavy Industrial District. The I-2 District is intended to accommodate the City's most intensive industrial operations, including heavy manufacturing, processing, mining, and the production or storage of materials that may involve significant off-site impacts. While major data processing and hosting facilities can occupy large buildings and require substantial utility infrastructure, they do not involve heavy industrial manufacturing or processing activities and generally have a different operational profile. The I-1 District, together with the proposed use-specific development standards and Special Use Permit review process, provides an appropriate regulatory framework for evaluating these facilities without expanding the use into areas intended for the City's most intensive industrial activities.

Battery Energy Storage System (BESS) UDO Amendment

BACKGROUND
Battery Energy Storage Systems (BESS) are an emerging land use that support electrical grid reliability, renewable energy integration, peak demand management, and emergency power supply. While BESS facilities provide important infrastructure benefits, they also present unique land use, operational, and public safety considerations due to the storage of large quantities of electrical energy.

The City's current UDO does not contain use-specific regulations governing utility-scale Battery Energy Storage Systems. As a result, staff have prepared a new Article 14-431 to establish development standards, safety requirements, operational regulations, and decommissioning procedures for these facilities.

The proposed regulations were developed to provide a predictable review process for future projects while ensuring compatibility with surrounding land uses and protecting the public health, safety, and welfare.

PROPOSED AMENDMENT SUMMARY
The proposed amendment creates Article 14-431, Battery Energy Storage Systems (BESS), and establishes regulations addressing the siting, design, operation, maintenance, and eventual removal of utility-scale battery storage facilities. Key provisions of the proposed amendment include:

Applicability
This section establishes which battery energy storage systems fall under the new Article. It specifies that all utility-scale BESS facilities and battery storage buildings are subject to the requirements, while residential systems and small accessory systems under 600 kWh are exempt. It also clarifies that any BESS development that submitted for building permit or has been previously approved or authorized through site plans, building permits, or development plans or other applicable development approval or authorization may continue under prior entitlements, ensuring that the new regulations do not retroactively affect already-approved projects.

Setback and Separation Requirements
The Article establishes specific spatial requirements intended to minimize impacts on surrounding properties. All components of a BESS facility must maintain a minimum setback of 100 feet. Additionally, the facility must be located at least 100 feet from any property used or zoned for residential purposes or from sensitive public uses such as schools, parks, playgrounds, nursing homes, and hospitals. These distances are measured from property line to property line. The Independence Fire Department retains the authority to require additional setbacks in cases where the Hazard Mitigation Analysis identifies heightened risk.

Buffering and Screening

To reduce visual and aesthetic impacts, the Article requires significant buffering where BESS facilities abut residential properties. A 50-foot-wide buffer yard must be installed along shared boundaries, and high-impact screening must be used, supplemented with landscaping that exceeds standard requirements by 25 percent. Substations, mechanical yards, and similar exterior components must be fully screened from public streets, trails, and parks to ensure minimal off-site visibility.

Fencing and Security
Security provisions require that each BESS installation be enclosed by a minimum seven-foot-tall solid wall made of durable materials such as decorative concrete masonry or architecturally treated concrete panels. Walls may exceed typical height limits when needed for sound attenuation. Equipment must be fully screened unless a line-of-sight analysis confirms the wall height is sufficient. Gates must remain locked except during authorized access, and safety signage must clearly identify hazards, emergency contacts, and fire department access points.

Landscaping
Landscaping requirements are focused on the exterior of the facility, as no interior landscaping is required within the screening wall. Any applicable open-space landscaping requirements are fulfilled by the plant material placed outside the wall and within the required buffer areas.

Parking and Site Access
Parking needs are tailored to the operational nature of BESS sites. Facilities that include regular staffing must provide parking at a rate of 1.5 spaces per employee based on the highest shift level, with a minimum of three spaces. Even unstaffed sites must provide at least three dedicated parking spaces. All parking areas and access drives must be paved with asphalt or concrete consistent with City standards. Fire access roads and parking areas must be paved and constructed in accordance with City standards.

Fire Protection and Safety Standards
All BESS installations must comply with major building, fire, and electrical codes, including the International Fire Code, International Building Code, National Electrical Code, NFPA 855, NFPA 68, NFPA 69, and relevant UL testing requirements. The Fire Department may impose additional safety conditions during review. Operators must maintain all required permits throughout the life of the facility.

Lighting
Exterior lighting at BESS facilities must follow the standards set forth in Section 14-508 of the UDO, ensuring that lighting is properly shielded, directed, and controlled to minimize glare and off-site impacts.

Noise Requirements
Noise generated by the facility must always meet City noise ordinances. Backup generators must comply with strict operational rules, including testing only on weekdays between 9 a.m. and 5 p.m., limiting monthly testing to ten hours, and maintaining an enclosure that reduces noise. Operators must keep an annual generator testing log available for City review.

Hazard Mitigation Analysis
A Hazard Mitigation Analysis is required for each BESS proposal, prepared in accordance with the International Fire Code and NFPA 855. This analysis must be submitted for review by the Independence Fire Department at the same time as the Special Use Permit is considered.

Emergency Response Plan
Before the issuance of any building permit, the applicant must provide a detailed Emergency Response Plan meeting IFC and NFPA 855 standards. This plan must include system shutdown procedures, fire response measures, alarm protocols, inspection schedules, and training provisions for first responders. The Plan must be updated if facility operations materially change.

Decommissioning and Financial Assurance
The Article requires a comprehensive Decommissioning Plan prior to building permit issuance. The plan must describe the removal of equipment, recycling or disposal methods, site restoration procedures, and include a third-party engineer's cost estimate using current dollars. Financial assurance such as a surety bond or letter of credit—must be in place to cover all decommissioning costs and must be verified annually. The Article also defines abandonment triggers, establishes a 180-day timeline to begin decommissioning following abandonment, and requires full site restoration verified by a licensed engineer.

Application Process
Applicants for BESS facilities shall submit a variety of technical documents, including a Noise Impact Assessment, detailed site plan, building elevations, photometric plan, operations and maintenance plan, hazard mitigation analysis, preliminary emergency response plan, preliminary decommissioning plan, and ownership disclosure with the special use permit application. These materials supplement all other technical study requirements under Section 14-700-06.

Annual Compliance Certification
Facility operators must submit an annual certification prepared by a qualified professional engineer confirming continued compliance with approved plans, operational requirements, fire protection systems, and emergency response procedures.

Ownership/Operator Changes
If ownership or operational control of a BESS facility changes, the successor must formally assume all obligations, including compliance with the Decommissioning Plan and financial assurance requirements. Written notice and updated documentation must be submitted to the City within 30 days; failure to do so voids the project's approvals and requires reapplication.

Analysis
Data Processing and Hosting facilities and Battery Energy Storage Systems (BESS) represent evolving forms of industrial and utility-supporting infrastructure that present unique land use, operational, and public safety considerations not addressed by the existing UDO. Data Processing and Hosting

facilities vary significantly in scale and intensity, ranging from accessory facilities that support a principal use, to small standalone facilities, to major data centers with substantial utility demands, backup power systems, and mechanical equipment. Similarly, Battery Energy Storage Systems require specialized standards addressing fire protection, emergency response, operational safety and decommissioning.

The proposed amendment establishes a tiered regulatory framework for Data Processing and Hosting facilities by creating separate standards for Accessory, Small, and Major facilities based on their operational characteristics and potential impacts. This approach allows regulations to be appropriately scaled to the size and intensity of each use while ensuring that larger facilities are subject to additional review and operational standards. The amendment also establishes comprehensive regulations for Battery Energy Storage Systems that address site design, emergency preparedness, operational performance and long-term facility management.

Collectively, these amendments provide predictable, use-specific development standards that offer greater certainty to property owners, developers, neighboring residents, and City staff during the development review process. Rather than prohibiting these emerging uses, the proposed regulations establish objective performance standards intended to ensure facilities are designed, constructed, operated, and ultimately decommissioned in a manner that protects public health, safety and welfare while minimizing impacts on surrounding properties.

EXHIBITS

1. Section 14-429 Small Data Processing and Hosting
2. Section 14-430 Major Data Processing and Hosting
3. Section 14-431 Battery Energy Storage Systems (BESS)
4. Section 14-200-05 Commercial Use Group Category
5. Section 14-200-06 Industrial Use Group Category
6. Section 14-301-03 Office and Commercial Use Table
7. Section 14-302-03 Industrial Use Table
8. Section 14-400-13 Accessory Data Processing and Hosting