

TOWN OF CORNWALL

PLANNING & ZONING COMMISSION

Memorandum- Battery Energy Storage Systems and Data Centers

Prepared by Janell Mullen, dated August 11, 2026 and updated for September 8th, 2026

BACKGROUND

This issue is becoming one of the most significant emerging land-use challenges facing Connecticut Planning & Zoning Commissions. Battery Energy Storage Systems (BESS) and large-scale data centers are moving from being niche infrastructure projects to major land-use developments that can have profound impacts on local zoning, public safety, utilities, environmental resources, and the scenic quality of a small town like Cornwall, CT.

DEFINITIONS-

A. Battery Energy Storage System (BESS) is defined as:

A stationary system or facility designed to store electrical energy using rechargeable batteries or similar technologies for later use, whether as a principal use or accessory use. Such systems include all associated components and infrastructure, including but not limited to:

- Battery modules, racks, or containers;
- Power conversion systems, including inverters and transformers;
- Thermal management and cooling systems;
- Fire detection and suppression systems;
- Control systems and associated equipment;
- Fencing, screening, and security infrastructure.

This definition includes grid-scale, commercial, and utility-owned energy storage facilities, whether standalone or co-located with renewable energy systems or substations.

BESS are large-scale facilities that store electricity and discharge it when needed. Utility-scale systems can occupy several acres and contains hundreds of lithium-ion battery cabinets.

B. Data Center is defined as:

A facility, structure, or campus of structures primarily used for the storage, processing, and distribution of digital data and information, including cloud-based services and network operations. Data Centers typically include:

- High-density server and data storage equipment;
- Telecommunications and networking infrastructure;
- Mechanical systems for cooling, including HVAC or liquid cooling systems;
- On-site electrical substations, backup generators, and/or battery storage systems;
- Security, monitoring, and operational support infrastructure.

This definition includes hyperscale, colocation, and enterprise data centers, but does not include small-scale server rooms or equipment that are clearly incidental and accessory to a permitted principal use.

Traditional Data Centers were often 25,000-100,000 square feet. Modern AI facilities can exceed:

- 500,000 square feet
- 100+ MW electrical demand
- Tens of millions of gallons of cooling water annually

WHY CT IS VULNERABLE

Connecticut is actively encouraging both industries.

The state has established tax incentives and a dedicated office to attract data center development. Connecticut law provides significant tax benefits for qualified data centers and state agencies are actively marketing Connecticut as a data center infrastructure destination.

At the same time, the state's electric grid modernization efforts and renewable energy goals are driving demand for utility-scale battery storage facilities.

Many CT towns are beginning to realize they have little or no zoning language addressing either use.

Connecticut offers:

- Strong electric infrastructure
- Fiber connectivity
- Proximity to New York and Boston
- Tax incentives
- Available land

WHAT CT TOWNS ARE DOING

Morris – Two-year moratorium

Groton- One-year moratorium on data centers and developed regulations governing their location and operation.

NEXT STEPS

During the regular meeting of the Town of Cornwall Planning & Zoning Commission that took place on August 11, 2026, the Commissioner members present unanimously supported an outright prohibition of both Battery Energy Storage System Facilities and Data Centers.

To prohibit these uses, the P&Z will need to amend their regulations defining both terms and then expressly prohibiting them.

Suggested Language

Add the following two definitions within **Article 3 Definitions & Interpretations**:

Battery Energy Storage System (BESS)

A stationary system or facility designed to store electrical energy using rechargeable batteries or similar technologies for later use, whether as a principal use or accessory use. Such systems include all associated components and infrastructure, including but not limited to:

- Battery modules, racks, or containers;
- Power conversion systems, including inverters and transformers;
- Thermal management and cooling systems;
- Fire detection and suppression systems;
- Control systems and associated equipment;
- Fencing, screening, and security infrastructure.

This definition includes grid-scale, commercial, and utility-owned energy storage facilities, whether standalone or co-located with renewable energy systems or substations.

Data Center

A facility, structure, or campus of structures primarily used for the storage, processing, and distribution of digital data and information, including cloud-based services and network operations. Data Centers typically include:

- High-density server and data storage equipment;
- Telecommunications and networking infrastructure;
- Mechanical systems for cooling, including HVAC or liquid cooling systems;
- On-site electrical substations, backup generators, and/or battery storage systems;
- Security, monitoring, and operational support infrastructure.

This definition includes hyperscale, colocation, and enterprise data centers, but does not include small-scale server rooms or equipment that are clearly incidental and accessory to a permitted principal use.

Add Section **4.8 Prohibited Uses** and include:

1. Battery Energy Storage Systems
2. Data Centers