CoM Public

Data Center

Any building, structure, or collection of buildings, together with associated infrastructure, that is specifically designed, constructed, or used primarily for the housing, operation, processing, storage, management, or transmission of digital information through electronic computing equipment.

A data center may include, without limitation, servers; computer systems; artificial-intelligence computing equipment; telecommunications and network equipment; data-storage equipment; electrical systems; substations; backup generators and other power systems; battery-energy-storage systems; cooling and other environmental-control systems; mechanical equipment; and other infrastructure necessary to support the operation of the computing equipment.

DATA CENTERS & THE PUBLIC RECORD: KEY METRICS SUMMARY

DISTINCT PRESENTERS

27



Experts, leaders, and representatives across 39 meetings.

TOTAL APPEARANCES

54



Scheduled testimony, with focus on MLGW and City officials.

PUBLIC-COMMENT APPEARANCES

~80



Citizen speakers, peaking at key milestones.

PROPOSED ORDINANCES

7



Legislative actions, from tax allocations to zoning moratoriums.

21 Days of Listening

- Community felt blindsided
- What’s in it for us?
- Air and Noise pollution
- Property assessment impact
- Address the misinformation
- Action and accountability
- Rate payer protections



Impacted Communities Boxtown/ Whitehaven

- **Home repairs**
- **Construction traffic**
- **Potholes due to dump trucks**
- **Air/Noise pollution**
- **Unexplained land clearing**
- **Deer crossing signs**
- Poor cell and Wi-Fi coverage
- Water quality, aging pipes
- Need sidewalks in specific areas

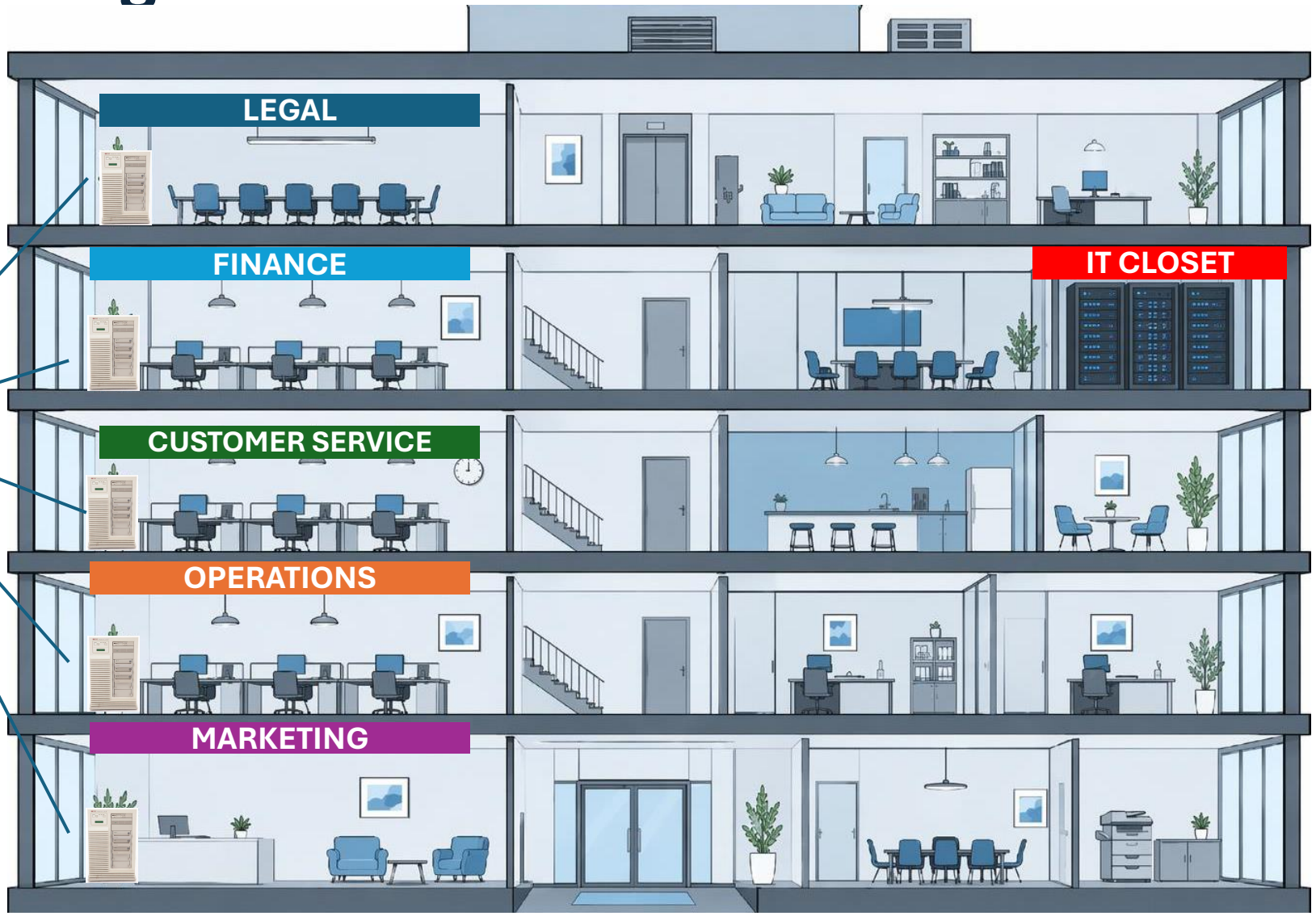
Executive Order (3-2026)

- **Update the Unified Development Code**
  - to include considerations for large and hyperscale data centers, such as evaluating the appropriate required distance between large and hyperscale data centers and residential properties and schools
- **Protecting our Infrastructure**
  - updating standards regarding the required engineering review of the impact of large and hyperscale data centers on infrastructure, stormwater, sanitary sewer connections, traffic controls, and landscaping requirements
- **Protecting our Air**
  - establishing clear standards for consideration by the Shelby County Health Department and other responsible agencies to fully exercise their permitting, monitoring, and enforcement authority; and
- **Protecting our Water and the Aquifer**
  - establishing standards for consideration by Memphis Light, Gas & Water around water use and alternatives such as treated wastewater for industrial cooling; and
- **Protecting our Power**
  - establishing standards for consideration by Memphis Light, Gas & Water relating to grid capacity, peak demand, demand response and appropriate rate structures so large users do not negatively affect other customers or shift costs to other customers; and
- **Noise standards**
  - defining acceptable noise levels and mitigation recommendations for consideration by the Shelby County Health Department and other responsible agencies.

Small Office Building

HP NetServer





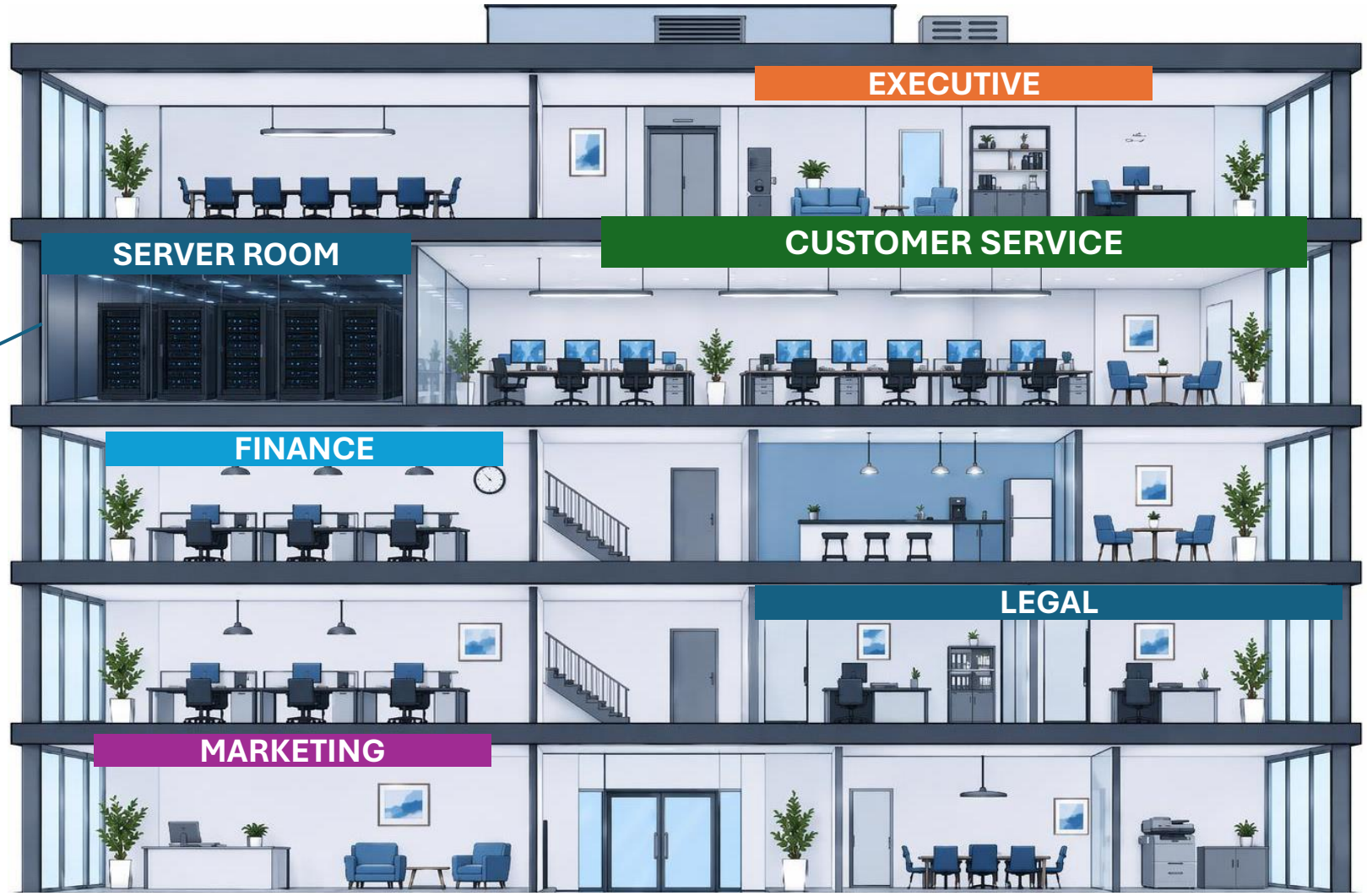
Challenge:

- Consistent Power
- Proper Cooling
- Reliability

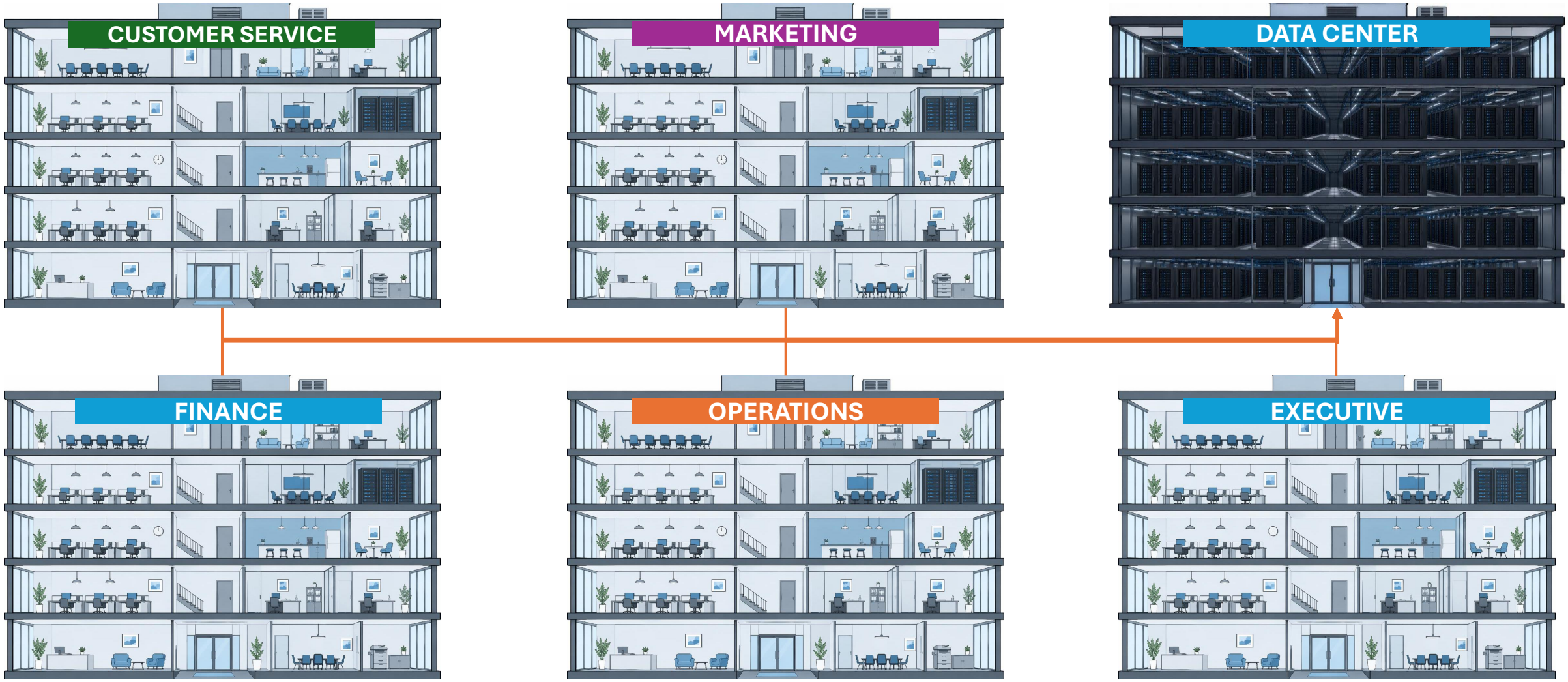
Office Building (Small)

Rackmount Server

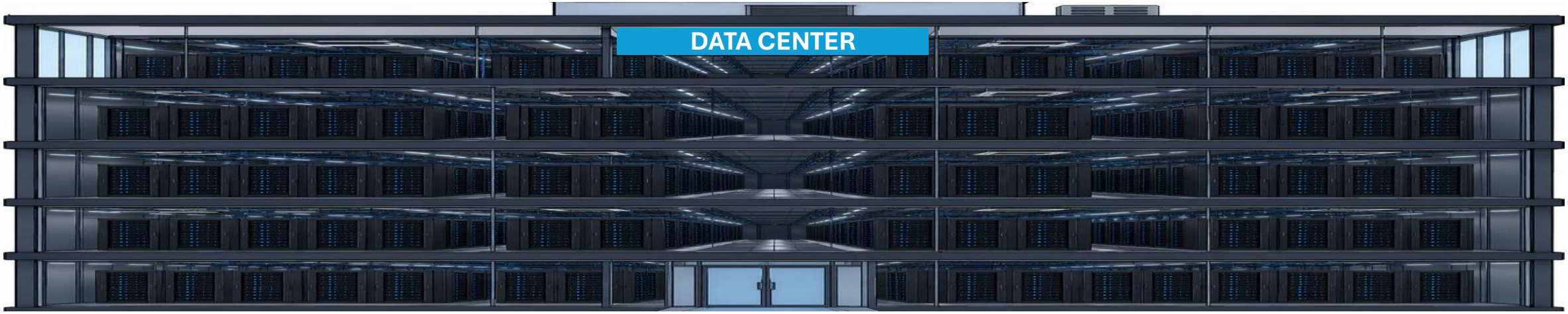




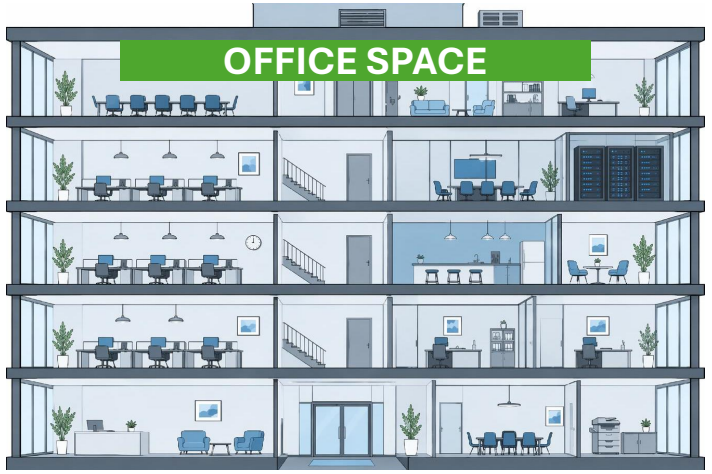
Corporate Campus (Medium-sized Office)

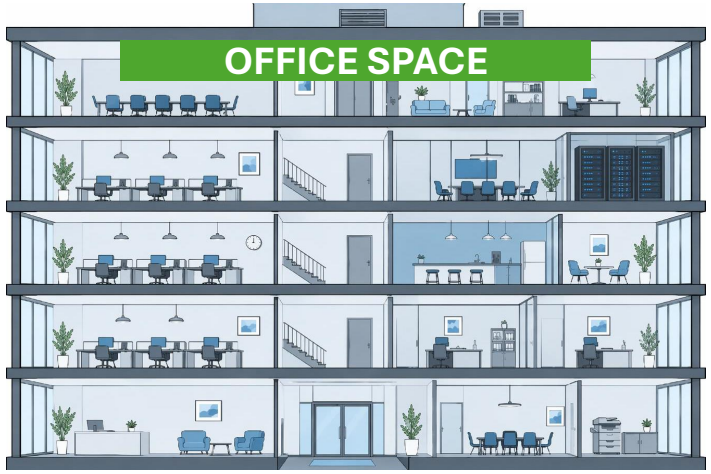


Social Media, E-commerce, Cloud Services, SaaS (Large-scale)









Current Unified Development Code

2.5.2 Use Table (current code, through ZTA 24-2)

Key: Blank Cell = Not Permitted ■ = Permitted ☐ = Special Use Approval

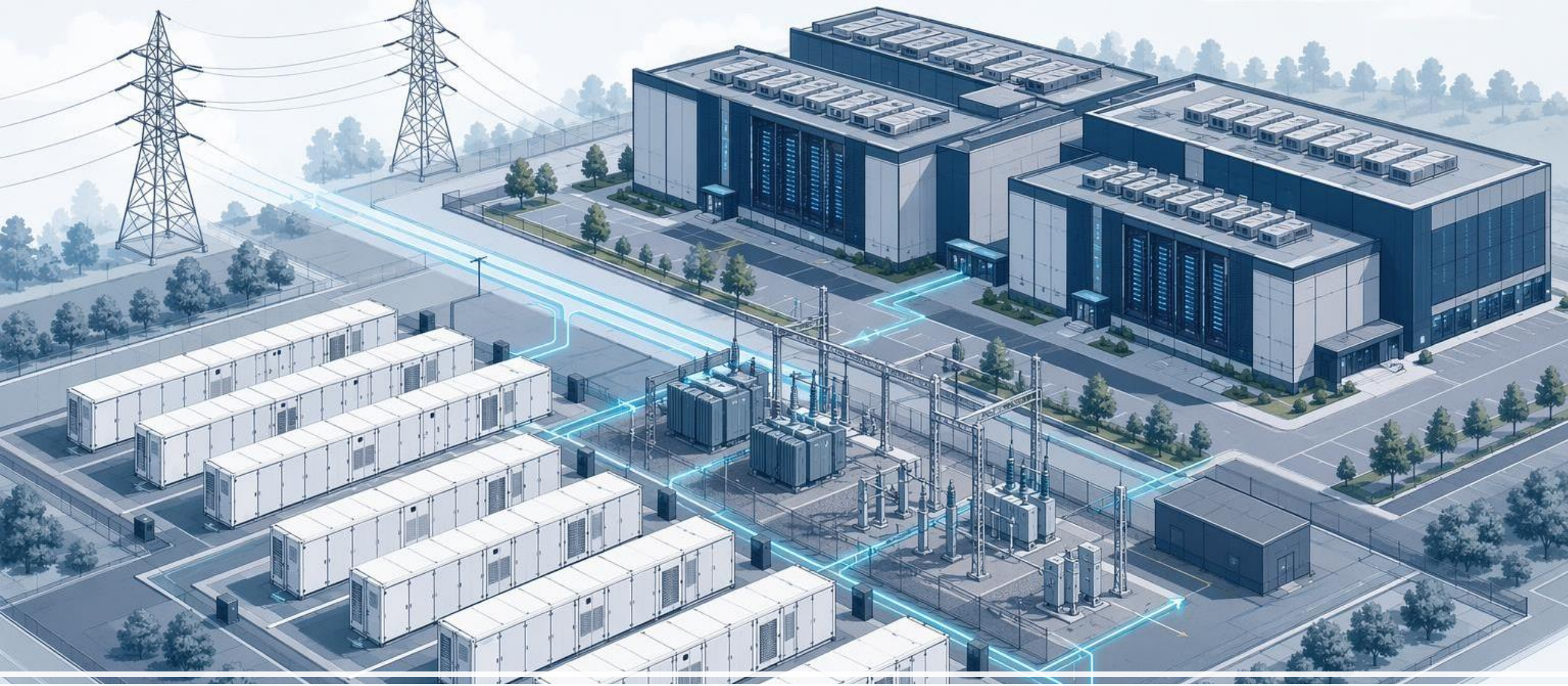
Use Category	Principal Use	OG	CMU-1	CMU-2	CMU-3	CMP-1	CMP-2	EMP	WD	IH
Office	**All offices, except as listed below** (includes data processing, Section 2.9.4B)	■	■	■	■	■	■	■	■	■
	Radio, TV, or Recording Studio: same symbols in all nine districts (not repeated).									

Source: Memphis and Shelby County Unified Development Code through ZTA 24-2, Section 2.5.2, p. 25; Section 2.9.4B.
Other districts permitting offices: R-W, MU*, CBD (permitted); R-15, R-10, R-8, R-6, R-3, RU-1, RU-2 (+ = Significant Neighborhood Structure Conditional Use Permit); RU-3, RU-4, RU-5 (special use approval).

Office, Data Processing

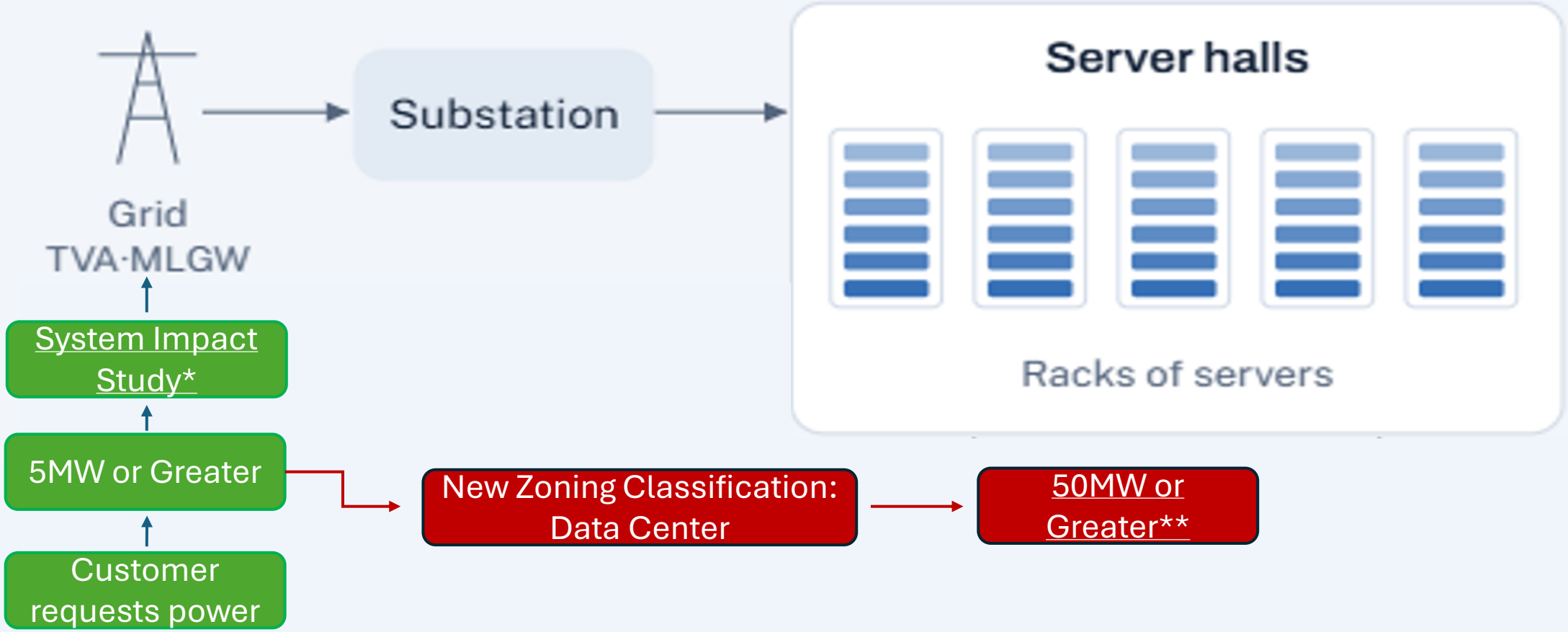


This is an Office



This is not an Office

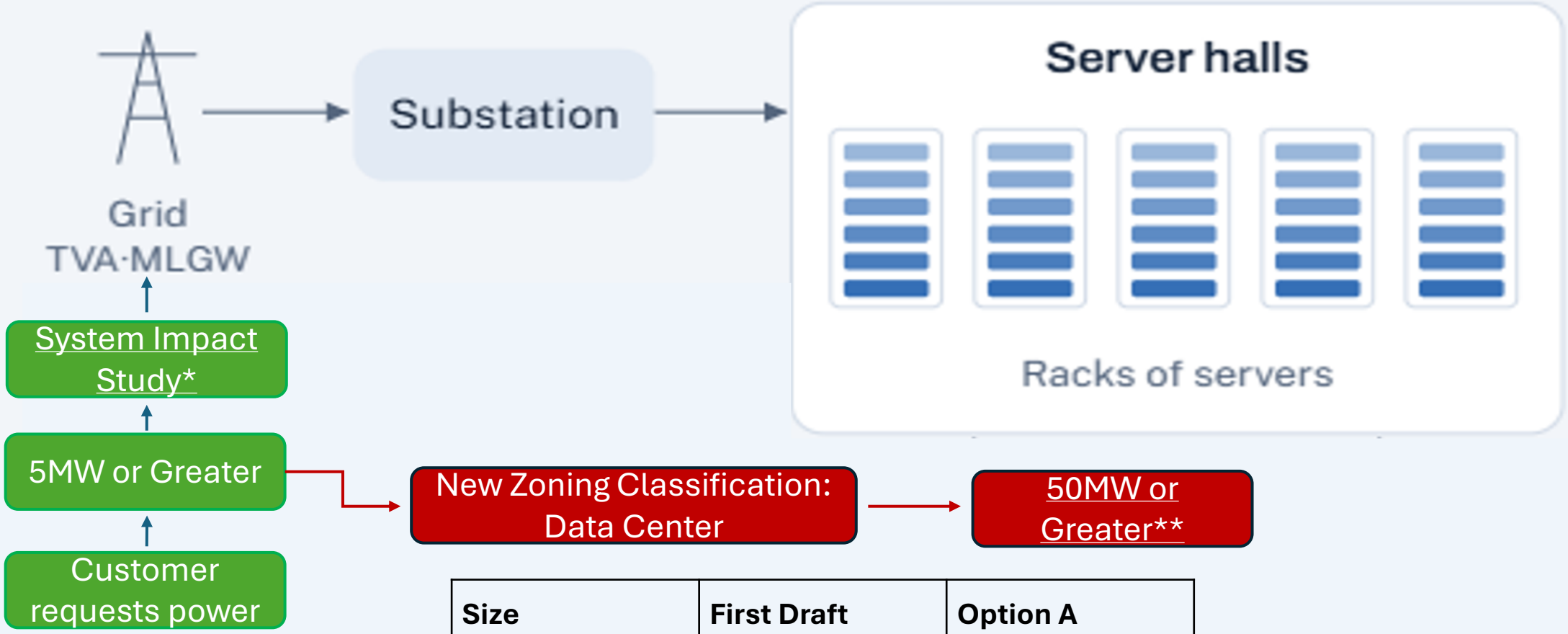
Power



*When a customer is seeking a "large electric load" which we define as 5MW or higher, MLGW and TVA both require a system impact study, which is paid for by the requesting party. *MLGW does not have any authority over alternative power "behind the meter" such as turbines or solar panels*.

**Public Chapter 961: projected to have a peak electric demand of fifty megawatts (50 MW) or more during the first three (3) years of operation, a municipality or electric utility shall not pay, or otherwise absorb, the cost of electrical infrastructure incurred to serve a data center.

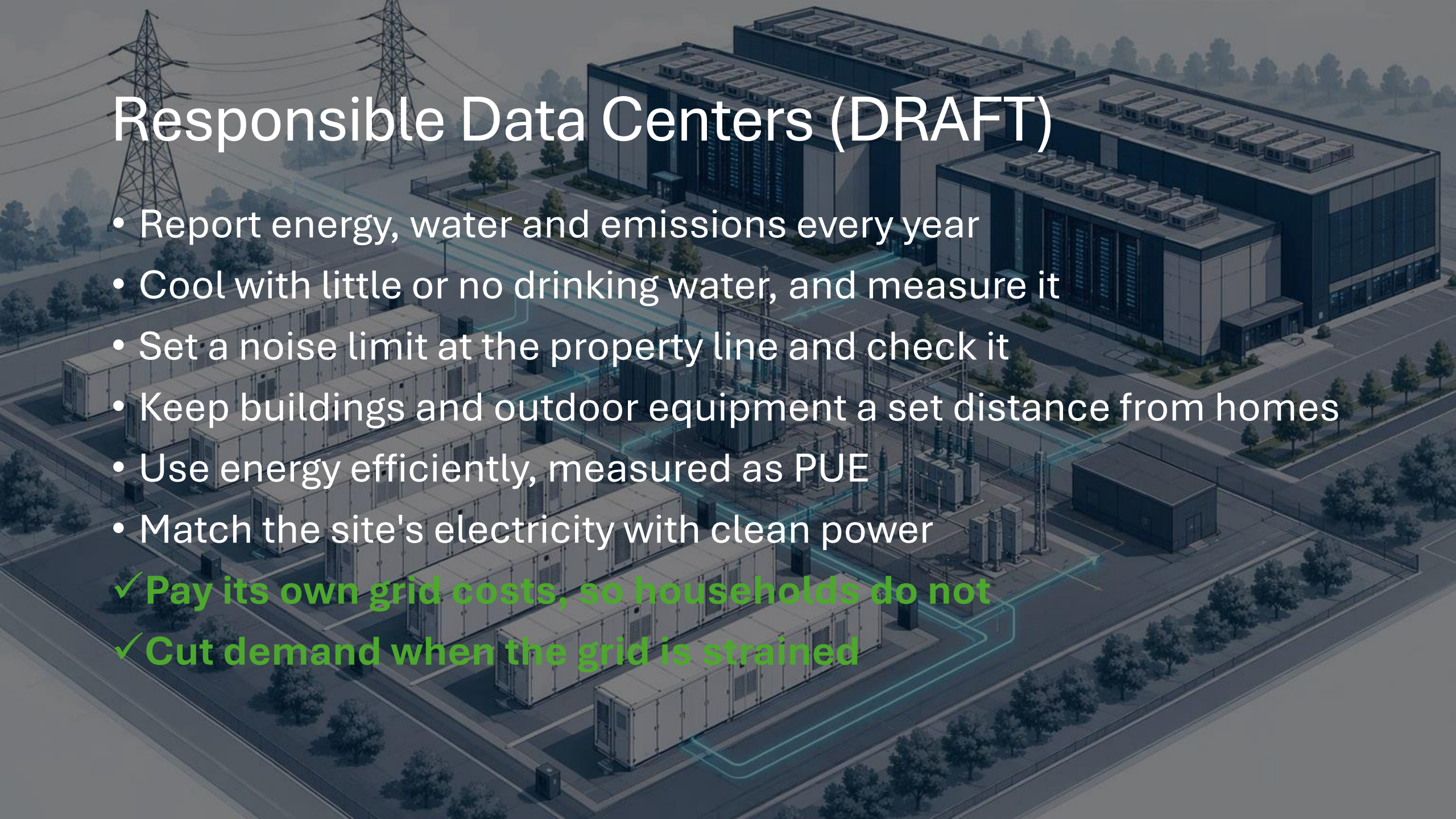
Power



Size	First Draft	Option A
Office	<2 MW	N/A
Small	2-10	0-5
Medium	10-20	5-50
Large	20-100	50-100
Hyperscale	100+	100+


Responsible Data Centers

Responsible Data Centers (DRAFT)



- Report energy, water and emissions every year
- Cool with little or no drinking water, and measure it
- Set a noise limit at the property line and check it
- Keep buildings and outdoor equipment a set distance from homes
- Use energy efficiently, measured as PUE
- Match the site's electricity with clean power

✓Pay its own grid costs, so households do not

✓Cut demand when the grid is strained



Timeline

EO 3-2026

Issued 10/9/2027

UDC Recommendation

Draft approach for Data Center

Produce 90-day Study

1/7/2027

Hear/Help Impacted Communities

Boxtown & Whitehaven

Build Responsible Data Center framework

Work with local and national SMEs