REPORT TO THE PLANNING COMMISSION

MEETING DATE: December 3, 2026

SUBJECT: Case #252357 - MLGW Electric Substation & Battery Storage

INTRODUCTION:

- Angel Bailey, on behalf of Memphis Light, Gas and Water (MLGW) is requesting a Conditional Use Permit (CUP) for battery storage uses in combination with the existing electric substation.
- MLGW forecasts these requested facilities will store up to 20 megawatts of electric energy, to enhance grid reliability and ensure efficient energy distribution.
- The subject property, zoned MPO: Medical Professional Office, includes six (6) separate tracts totaling 346.75 +/- acres located north of State Route 385 (SR385), south of Winchester Road, east of the City of Germantown, and west of Houston Levee Road (see Exhibit 1).
- Electrical substations and any related uses such as battery storage, are only allowed in the MPO District through the CUP process.
- The property is surrounded by other properties in the Town of Collierville zoned FAR: Forest – Agricultural – Residential, R-1: Low Density Residential, R-3: High Density Residential, and SCC: Shipping Center Commercial (see Exhibit 2). Adjacent Germantown zoning districts include R-E: Residential Estate and T5: Urban Center. A residential neighborhood to the north is zoned T-4: General Urban.
- Nearby developments include Gallina Centro Planned Development (PD), The Parke PD, Ironwood PD, and Viridian Place (in Germantown). Residential Uses exist or are planned in some of the developments.

BACKGROUND:

- The subject property was annexed in July 2000 by Collierville. The MLGW substation, which predates annexation, was expanded after annexation.
- In 2025, a separate application for rezoning the property from MPO to RI: Restricted Industrial (Ordinance 2025-11) was submitted when MLGW had plans to add an energy production facility (solar farm) to the substation property; however, the rezoning and energy production requests were withdrawn.

KEY POINTS:

1. Battery storage for an electrical substation warrants careful review to ensure potential impacts related to visual character, stormwater management, and environmental resources are appropriately mitigated, and the proposed use is compatible with surrounding land uses.

- Wetlands are present on the property and may require environmental review and permitting prior to site disturbance.
- The site is located adjacent to The Parke PD, which allows residential, retail, and institutional uses (i.e. churches and schools).
- The property directly abuts vacant properties and nonresidential uses within the City of Germantown. Viridian Place, a residential development, is being constructed to the north of the subject property.

2. Adding less than 2.0 acres of battery storage activities to the site will have a similar impact on the surrounding area as the existing substation.

- MLGW submitted a non-binding conceptual site plan along with examples of battery storage (see Exhibits 4 and 5).
    - The battery storage system will be on the north side of the property near the existing substation.
    - There will be no noise or emissions from the site impacting surrounding parcels.
    - The site has two existing access points for ingress and egress. No new access drives will be permitted unless approved by the Town Traffic Engineer.
- The existing substation equipment is highly visible from Winchester Road and developments to the north.
    - The subject property contains several existing trees, which should be saved along the perimeter in buffers to mitigate any impacts to adjacent properties.
    - The existing facility is not fully screened from Winchester Road. Additional screening is needed with this expansion (see conditions in Exhibit 2).
- At the site plan stage, staff will review the proposed as grading, fire safety plan, buffers, and setbacks.

3. The southernmost portions of the subject property are impacted by the floodplain and floodway along Nonconnah Creek, limiting development protentional on those portions of the site.

4. Town water and sewer service are available to the subject property. A Water and/or Sewer Availability request will be reviewed for any development applications for the subject property.

STAFF RECOMMENDATION: Approval of the CUP is recommended, subject to the conditions of approval. The applicants have demonstrated the use and site design can be made compatible with surrounding development and minimize any adverse impacts to adjacent property. The request is consistent with the Grounds for Issuance of a CUP (Exhibit 7).

ATTACHMENTS:
Exhibit 1 - Vicinity Map and Contact Info.pdf
Exhibit 2 - Example PC Conditions of Approval.pdf
Exhibit 3 - Cover Letter MLGW Substation with Battery Storage 11-3-26.pdf
Exhibit 4 -Conceptual Site Layout MLGW 11-2-26.pdf
Exhibit 5 - Battery Storage Examples MLGW 11-2-26.pdf
Exhibit 6 -Substation Subject Property Info 2026.pdf
Exhibit 7 - Staff Response to CUP Criteria 11-24-26.pdf

PROPOSED MOTION: To recommend approval of the Conditional Use Permit (CUP) for battery storage uses in combination with the existing electric substation on Winchester Road, subject to the conditions in Exhibit 2.