Connecticut Light and Power Field Visit

AWC Operations Center (4/1/2026 @9am)

- Met with [redacted]
- 23 and 13.8KV is primary for distribution
- They are moving their 27KV to 23KV
    - They started this due to one of their 27KV transformers failing and 27KV transformers are harder for them to get
- As they are standardizing their distribution they are able to buy transformers in bulk
- This building was originally built in 1930
    - Major overhaul about 10 years ago
- Service all vehicles out of this building
- Grab as you go no signing out materials
- Several hundred people work out of this building daily

Van Dyke 12 Substation (4/1/2026 @9:30am)

- Met With [redacted]
- They rebuilt the switchgear in place 10-12 years ago
- High 2300 low 11KV
- 4 express feeders
- 4 transformers
- 100% network feeders
- All breakers are Moder Vacuum breakers
- 15-20 feeders underground
- Most network transformers were retro filled
- Used to direct bury but now put conduit on everything
- Added animal electrical fence around substation
- They are replacing the capacitor banks with ground mounted banks by 2027 at this sub

Northwest Hartford 2N Substation (4/1/2026 @10:30am)

- Met With [redacted]
- 115 to 23 KV
- 2 overhead transmission lines and one pipe type cable that feed this sub
- 3 transformers
- Originally built in late 50s
- Has availability for future load growth
- Battery banks are all checked annually
- Electromechanical is used as a backup for the microprocessors at this sub
- Use vacuum breakers and SF6

- Use animal guards
- 1 of the 3 transformers in newer vintage 2000

Northeast Simsbury 43F Substation (4/1/2026 @11:30am)

- Met With [redacted]
- Built 25 years ago
- Originally built with single transformer but added a second due to demand
- Uses noise barrier around transformer
- The original transformer is vintage 1965 and was moved from another substation
    - Last year had to regasket it due to leakage -> estimated $350K project
- 23KV substation

Northfield Substation (4/1/2026 @12pm)

- Met with [redacted]
- Was 27.6KV then converted to 23KV when the transformer failed
- All microprocessor controls
- One of the transformers vintage 2023
    - The other transformer is the sister transformer to the one that failed and is going to need to be replaced soon
- 4 total transformers on site