

CITY OF CORAL GABLES

Consideration of Citywide Undergrounding of Utilities

PROJECT LEAD TEAM UPDATE
TO THE CITY COMMISSION

August 24, 2022

Goals and Objectives of Today's Presentation

- Provide an update regarding the progress pertaining to the city-wide undergrounding of electric and communications utilities.
- Present action items pending and certain recommendations
- Seek City Commission guidance and policy input on project scope, timing, and execution

Background

- Since Hurricane Andrew (1992), the City began discussing how to improve its electric reliability.
- After seven (7) named storms in 2004 and 2005, the City began earnest examination of options as to how to improve and underground electric infrastructure.
- In 2017, after Hurricane Irma, the City Commission formally proceeded with examining a potential project to underground above-ground electric and communication lines.
- The Project Lead Team, under the direction of the City Manager and City Attorney, have reviewed options and have been communicating with FPL (and previously with AT&T and Comcast) to determine the best path forward.
- We now have the outline of an action plan—with some remaining items to resolve—to present to the City Commission for policy guidance and input.

City Strategic Priorities

ASPIRATIONAL OUTCOMES - THE CITY SEEKS:

- Improved Citywide electric reliability and performance
- Improved Citywide safety with critical infrastructure (e.g., police, fire stations), hospitals, and main intersections having electricity after major weather events
- Citywide business and lifestyle continuity after major weather events: gas stations, banks, schools, businesses in central business district and along major corridors having electricity
- Citywide aesthetic: reduce or eliminate overhead lines and poles (FPL, AT&T and Comcast)
- Citywide improved reliability and performance of communication services (AT&T, Comcast)
- Availability of electric vehicle (EV) charging station service capability at individual business, residential, and off-street parking locations

City Strategic Priorities

IN ACHIEVING THE DESIRED OUTCOMES, THE CITY SEEKS TO AVOID, ELIMINATE, AND REDUCE:

- Financial burden on City taxpayers (residents and businesses)
- Financial strain on City CapEx budget
- Burdening City voters with the political question of whether or not to have to approve general obligation bonds to pay for all or part of the project
- Requiring inordinate City resources to administer and manage the project
- Protracted time period to complete the Citywide overhead to underground conversion

Where We Began

- In 2020, after examining financial, engineering, and other considerations, and based on non-binding ballpark estimates provided by FPL, AT&T, Comcast for Citywide electric and communication infrastructure overhead to underground conversion, the best total project scenario involved:
 - A 10-12 year conversion project once construction commences
 - A total project cost to City taxpayers in excess of \$400 million for FPL, AT&T, and Comcast overhead to underground conversion. If the FPL conversion were conducted alone, the stand-alone cost (including, e.g., labor and materials, engineering, project management, legal, and bond financing) would exceed \$240 million in 2022 dollars.
 - Requiring voter approval of general obligation bonds
 - Burdening the typical residential property owner with a \$1,200-\$2,500 assessment per year added to their tax bill for 30 years
 - Inordinate City resources to administer and manage the project, including property-by-property administration and liaison work

Where We Are Today

After discussions and negotiations with FPL, as well as legislative and regulatory accomplishments and strategic milestones of benefit to the City:

LATERAL (NEIGHBORHOOD) LINES:

- FPL plans to seek approval from the Florida Public Service Commission (FPSC) to convert all remaining above-ground neighborhood (lateral) lines, poles, and individual residential and business service connections Citywide from overhead to underground, under its Storm Secure Underground Pilot Program (SSUPP).
 - Because the SSUPP approved by the FPSC only extends for 10 years, the City acknowledge FPL can only formally plan to convert 40% of the remaining overhead lateral (neighborhood) lines, poles, and individual residential and business service connection lines by year 10.
 - FPL plans to pursue timely FPSC approval to convert the remaining 60% of overhead lateral (neighborhood) lines from overhead to underground.

Where We Are Today

MAIN (FEEDER) LINES:

- FPL plans to complete overhead hardening (not conversion of overhead to ground) of above-ground main (feeder) lines within the next five years. FPL anticipates some (up to 15%) of the feeders being hardened may involve conversion from overhead to underground, not just overhead hardening.
- FPL will work with the City to find the opportunity to convert main (feeder) line sections along the City's signature streets where there are engineering and vegetation management issues that validate the need for undergrounding rather than overhead hardening.
E.g., Bird Road, Old Cutler Road, etc.

Where We Are Today (cont.)

- **NO COST TO THE CITY** – the City avoids costs that would have exceeded \$240 million for the Citywide FPL conversion.
- **No need for bond issuance that would have cost property owners thousands of dollars every year for 30 years.**
- 30-year timeframe with a significant portion of work completed within 10 years (and the remaining portion over the following 20 years).
- Electric reliability (frequency and duration of outages) should improve by 60-90%.
- The electric conversion project is, for the most part, “turn-key” for the City. FPL will manage the project and lead communications with individual property owners. The City will have an assist and coordination role.
- Much of the conversion work will involve directional boring without the need for major excavations (albeit with exceptions). Minimal adverse effect on tree roots.
- The City continues to analyze how the state law passed in 2021 addressing pole attachments might apply to AT&T and Comcast lines and attachments to FPL poles – and whether communication infrastructure could be undergrounded as well. **This remains an open issue, and we plan to report back to the City Commission with further information and recommendations.**
- New service connections should have sufficient capacity for residents who choose to pay to independently install electric vehicle charging stations.

Outstanding “Pieces of the Puzzle”

- Formalize expectations from FPL as to SSUPP completion percentage within 10 years and 20 years thereafter.
- Formalize expectations from FPL to convert portions of overhead feeders along City’s signature streets, corridors, and intersections.
- We are examining legal and regulatory options available to require communications infrastructure (AT&T, Comcast) to be removed upon conversion of any area of the City from overhead to underground AND to require them to coordinate their undergrounding conversion with FPL.
- We have been reviewing and examining Federal grant monies available to the City under Transportation, Energy, and Commerce departments to potentially support and enhance the undergrounding efforts as well as beautification.
- We are and will be holding further discussions with FPL, its preferred vendors, and other potential vendors to determine what options might be available regarding electric vehicle (EV) charging station installations.

What We Accomplish re City Strategic Priorities

AS TO THE CITY'S ASPIRATIONAL OUTCOMES:

- Improved Citywide electric reliability and performance **YES 60-90%**
- Improved Citywide safety with critical infrastructure (e.g., police, fire stations), hospitals, and main intersections having electricity after major weather events **YES 60-90%**
- Citywide business and lifestyle continuity after major weather events: gas stations, banks, schools, businesses in central business district and along major corridors having electricity **YES 60-90%**
- Citywide aesthetic: reduce or eliminate overhead lines and poles (FPL, AT&T and Comcast) **YES IN PART; TBD BASED ON OUTCOMES WITH AT&T AND COMCAST**
- Citywide improved reliability and performance of communication services (AT&T, Comcast) **TBD BASED ON OUTCOMES WITH AT&T AND COMCAST**
- Availability of electric vehicle (EV) charging station service capability at individual business, residential, and off-street parking locations **YES AS TO NEW SERVICE CONNECTIONS**

What We Accomplish re City Strategic Priorities

IN ACHIEVING THE DESIRED OUTCOMES, THE CITY SEEKS TO AVOID, ELIMINATE, AND REDUCE:

- Financial burden on City taxpayers (residents and businesses) **ELIMINATED (NO COST)**
- Financial strain on City CapEx budget **ELIMINATED (NO COST)**
- Burdening City voters with the political question of whether or not to have to approve general obligation bonds to pay for all or part of the project **ELIMINATED**
- Requiring inordinate City resources to administer and manage the project **REMOVED**
- Protracted time period to complete the Citywide overhead to underground conversion **MITIGATED BY FPL'S PLANS TO FRONT-END MUCH OF THE WORK**

Project Lead Team Recommendations

- **Today**
 - Seek the views, guidance, and policy direction of the City Commission on our progress and next steps
 - Authorize the City Manager and City Attorney to move forward with the FPL conversion project as recommended as well as opportunities for conversion of AT&T and Comcast infrastructure and facilities
- **Later this year** – once we have outstanding issues clarified:
 - Report back to the City Commission to address remaining strategic, legal, regulatory, engineering, and other issues
 - Partner with FPL on Citywide communications to explain the project, scope, timing, and other details to ensure residents and businesses are fully informed
 - Present potential City legislation to address issues regarding removal of overhead utility and communication equipment and facilities

ADDITIONAL SLIDES:

A Primer on the City's Utility Network
and Infrastructure

Utilities Serving the City

- The following utilities serve the City:
 - ✓ Electrical
 - Florida Power & Light Company (FPL)
 - ✓ Communications
 - AT&T (telephone and communications)
 - Comcast (cable communications)

There are some areas served by other communications utilities, which we have accounted for.

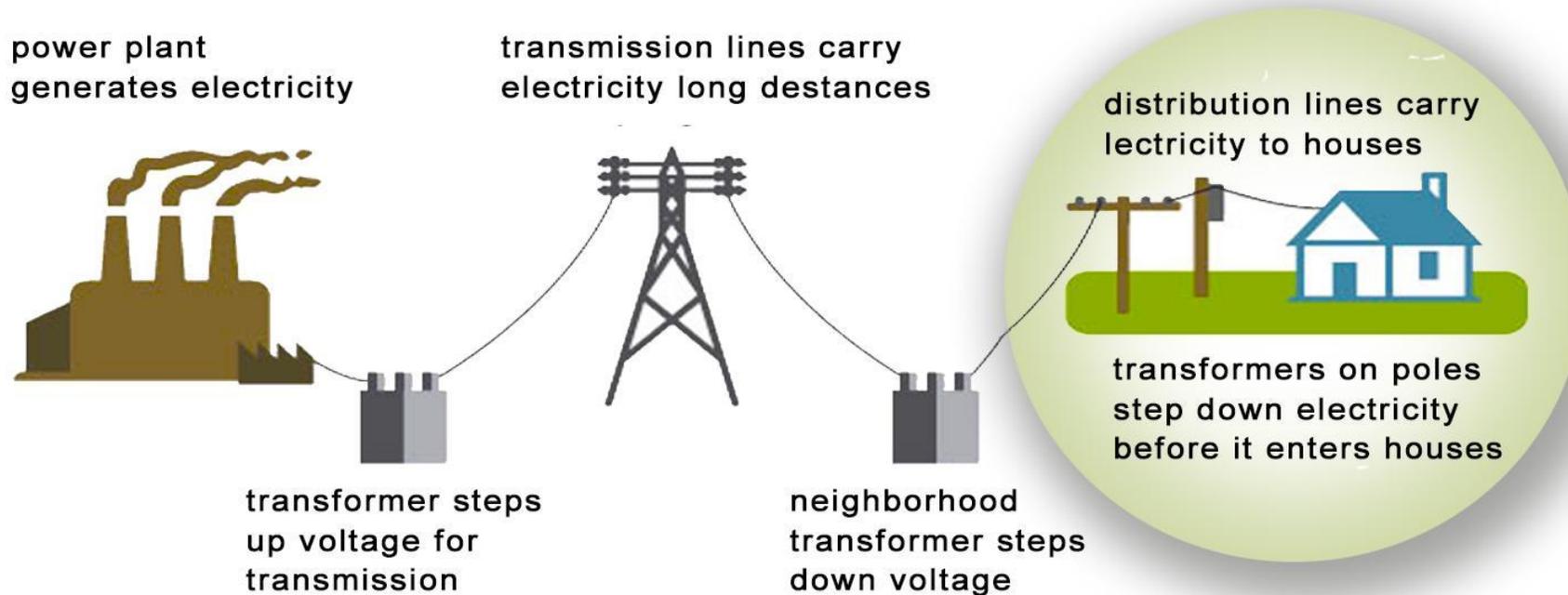
The City's Current Utilities Infrastructure

- The City currently has about **20,000 properties** (residential and non-residential).
- **Overhead utilities currently serve over 80% of the City.**
- **FPL owns nearly all the utility poles.** Other utilities (AT&T and Comcast) “co-locate” on FPL's poles (i.e., they use FPL poles to place their facilities and equipment under agreement with FPL).
- There are **nine (9) electric distribution substations** that service the City. All but one (that at the University of Miami) are located outside the City limits. These substations are “upstream” from the City limits, and they run electric feeder lines leading from these substations downstream to the City and FPL customers (City residences, businesses, and other locations) with the City.

The Electrical System

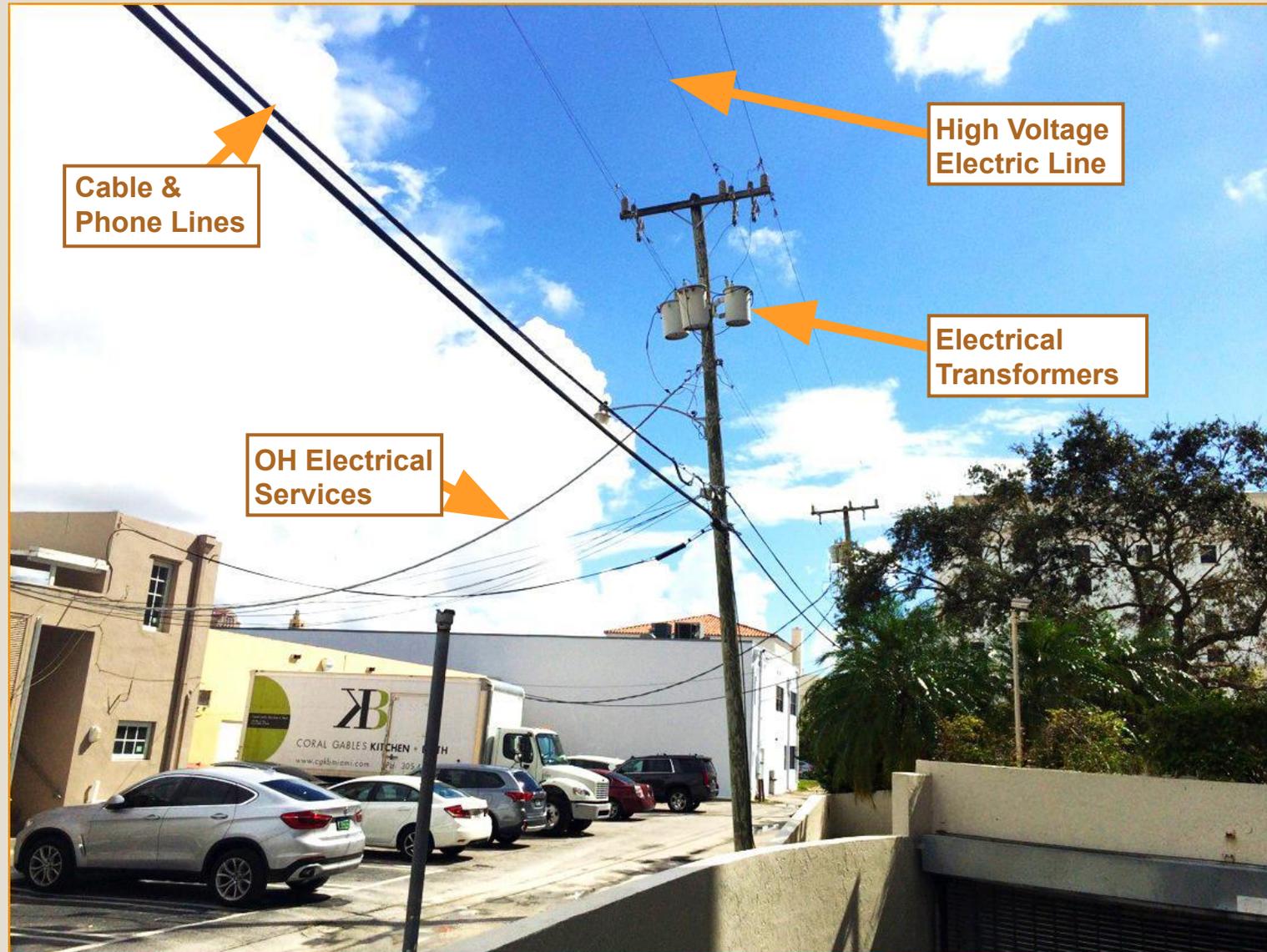
- Generation
- Transmission
- Distribution (FLaTS: Feeders, Laterals, Transformers, Singles)

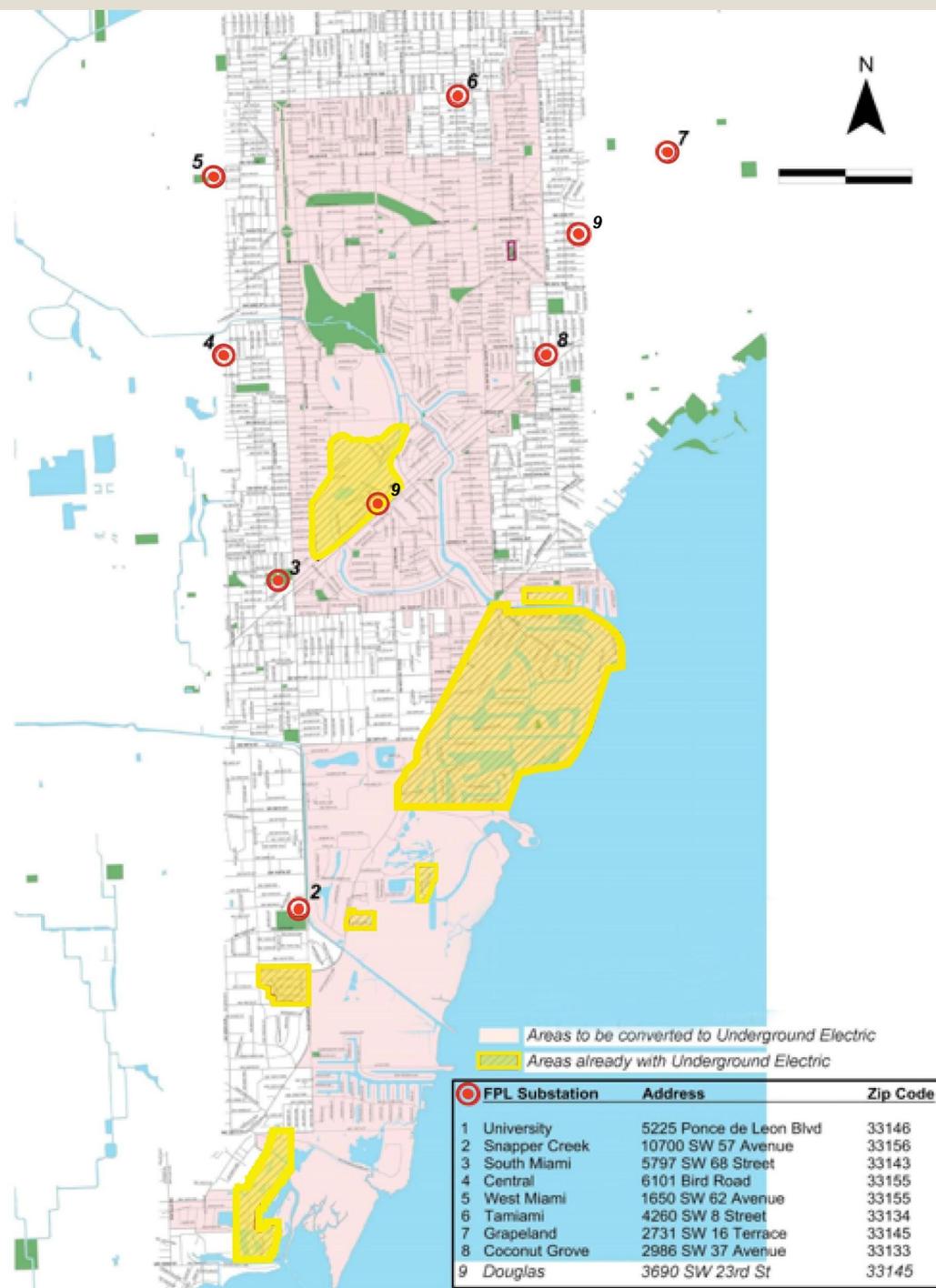
Electricity Generation, Transmission, and Distribution



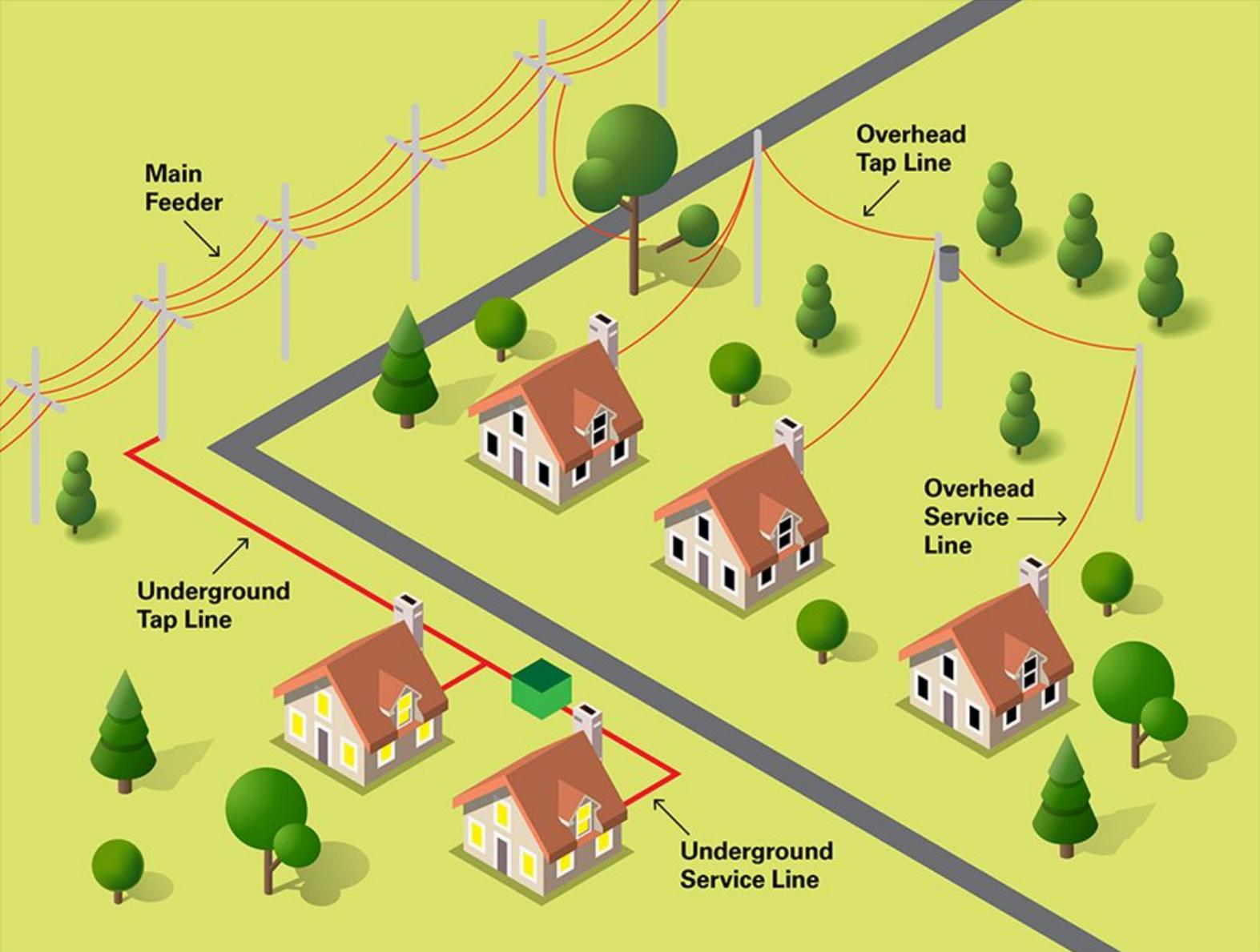
Source: Adapted from National Energy Education Development (public domain)

Typical Overhead (OH) Facilities





Converting Your Property from Overhead to Underground



Typical Ground/Pad-Mounted Transformer



Typical Ground/Pad-Mounted Switch Equipment



Installation of Conduits, Pull Boxes, and Pads



Typical Home Conversion to Underground



Overhead Service



Underground Service

Questions?

THANK YOU.