

CITY OF CORAL GABLES

Consideration of Citywide Undergrounding of Utilities

UPDATE TO THE CITY COMMISSION

January 11, 2022

Goals and Objectives of Today's Presentation

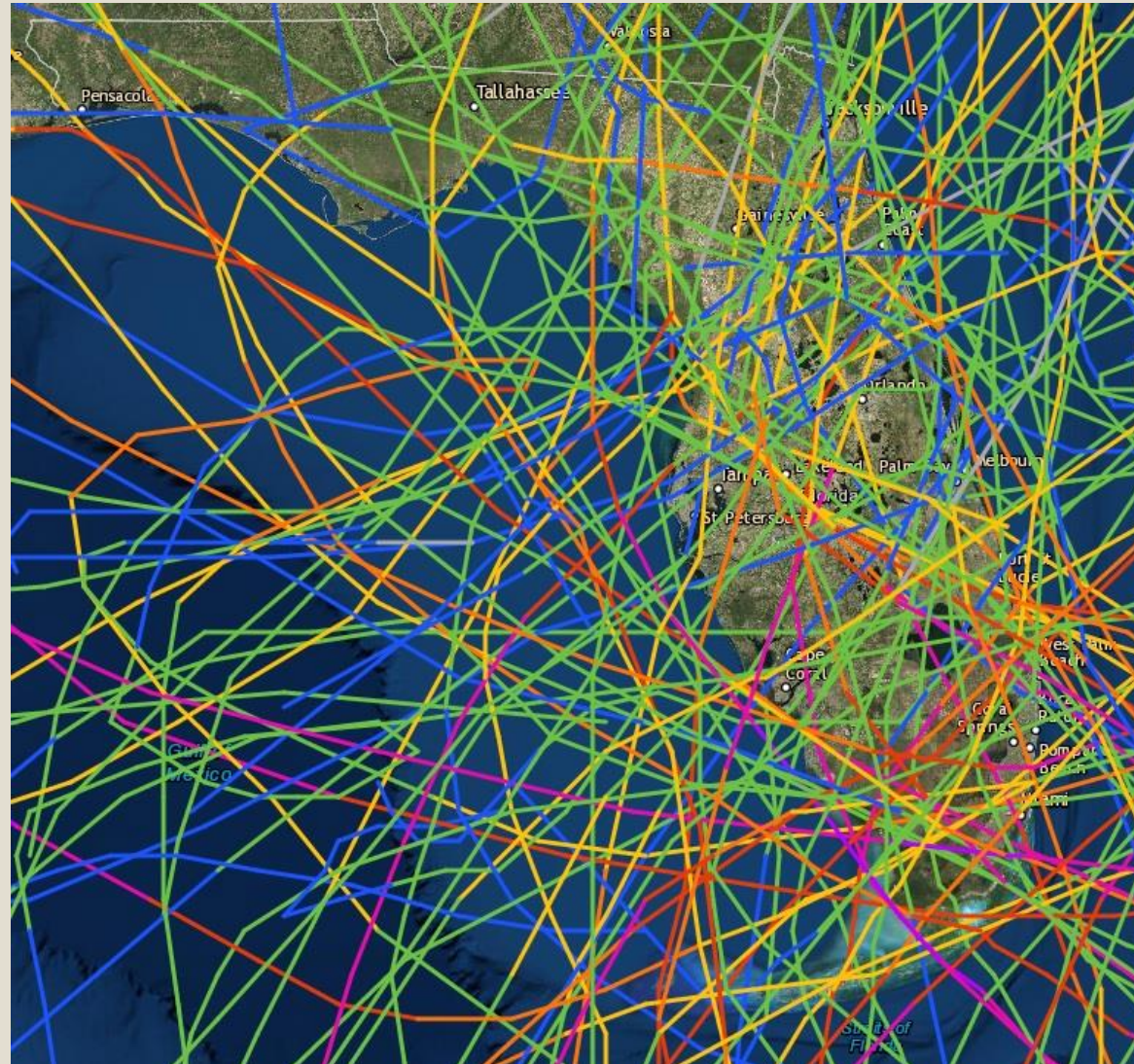
- Provide an update by the Project Lead Team to the City Commission regarding the action plan pertaining to the city-wide undergrounding of electric and communications utilities.
- Seek City Commission guidance and policy input on how best to move forward to determine timing, project scope, and execution given recent positive developments/opportunities.

Climate and Storm Related Issues

- 40% of Americans live in places that experienced a climate-related disaster in 2021. (Source: *Washington Post*, 1/5/2022)
- Florida is more susceptible to major tropical weather events than any other state in the country.
 - 40% of all hurricanes that hit the U.S. since being recorded have struck Florida. (Of 292 hurricanes, 120 have made landfall in Florida.)
 - South Florida, in particular, is the region of the state most likely to experience major tropical weather events. (50 of those hurricanes directly hit Southeast Florida, 16 of which were Category 3, 4, or 5.)
 - Coastal Miami-Dade County is one of the top three areas of the nation for major storm activity growth due to climate change.
- The incidence and likelihood of major weather events affecting Coral Gables are increasing over time and will continue to do so.

(Source: Universal Property & Casualty Insurance website)

Every Named Storm (Tropical Storm or Hurricane) That Has Hit Florida in the Past 100 Years



Source: NOAA 2020

Summary of Recent City Commission Actions and Project Lead Team Activity

- **2019 - 2021:** At the City Commission's direction, the Project Lead Team has been pursuing how the City might best be able to convert its electric and communication utility infrastructure from overhead to underground to vastly improve reliability and performance, enhance aesthetics of properties and tree canopies, and improve safety and business and community continuity after major storm and climate-related events.
 - ✓ Financial analyses, cost estimates, and project funding sources
 - ✓ Engineering analyses
 - ✓ Preliminary community stakeholder engagement
 - ✓ Discussions with FPL, AT&T, and Comcast
 - ✓ Legal, regulatory, and legislative issues
 - ✓ Critical path timeline for potential project
- **April 2020:** Due to COVID-19, plans for large-scale community stakeholder engagement was suspended.
- **June 8, 2021:** The City Commission, including its newly elected members, was briefed on the project. Direction was given to proceed with community stakeholder engagement with an anticipated Commission decision point in June 2022 as to whether to bring the question of whether to issue bonds to finance overhead-to-underground conversion to voters in November 2022.

Activity and Recent Positive Developments Since June 2021

- **July 2021 - present:**

- The Project Lead Team has had ongoing discussions and meetings with FPL regarding several matters, including the potential conversion of electric utilities from overhead to underground.
- Recent Florida legislation and Florida Public Service Commission approval have allowed FPL to recently establish a Storm Secure Underground Pilot Program (“SSUPP”), which permits FPL to underground neighborhood lateral lines at no cost to the converted customers or locality. Rather, the cost is absorbed through the general rates paid across FPL’s service territory.
- Discussions and negotiations with FPL have been recently fruitful, and FPL has now informally offered to conduct the SSUPP program for the entire City over a 30-year period, with approximately 40% of neighborhood homes’ service connections and overhead wires being converted to underground in the next 10 years, and the remainder in the 20 years thereafter.

What is included and what is not in FPL's SSUPP offer

- The SSUPP program's scope includes conversion of individual homes'/businesses' service connections and remove the electric wires, replacing them with underground electric equipment and pad-mounted transformers in accordance with FPL's standards.
- FPL's plans and order of conversions are based solely on the performance of lateral lines; that is, FPL would do the conversion work prioritizing the worst-performing laterals and, over the course of 30 years, complete the project for the entire city.
- The SSUPP does NOT include converting the main feeder lines throughout the City, leaving that infrastructure overhead and subject to reliability, aesthetic, and safety concerns that have been at the forefront of the City's desire to convert from overhead to underground. That said, FPL would plan to "harden" existing overhead feeder lines over 10 years, which would provide some reliability improvement; but feeder poles and lines would remain overhead.
- The SSUPP program does NOT address conversion of the other utilities (AT&T and Comcast) that co-locate on the poles, thus leaving that infrastructure overhead.
- The SSUPP program does remove poles because AT&T and Comcast equipment is co-located there and their lines would remain overhead, requiring the poles to connect the wires.

City Options (1 of 3)

- Option #1: Proceed with the FPL SSUPP project only
 - No cost to the City.
 - 30-year timeframe.
 - Some improvement in electric reliability, but full benefits and protection against storms and other weather events are not achieved. (Reliability would be improved, but significantly less than the potential if both lateral AND feeder lines were converted).
 - The full benefits of improving the City's electric and communications reliability, safety, and home/business continuity after climate events would not be realized because main feeder lines, including those up to the substations, would not be buried.
 - Hybrid system with electric pad-mounted transformers existing above-ground as well as poles and overhead lines remaining for overhead AT&T and Comcast.

City Options (2 of 3)

- Option #2: Proceed with the FPL SSUPP project at FPL's expense PLUS Conversion of overhead FPL feeders up to the substations at the City's expense
 - No cost to the City for SSUPP. City would pay for feeder work, but the City is exploring opportunities for potential credits. The City is awaiting an estimate from FPL for this smaller, limited project. The City expects the cost to be in the tens of millions, not the hundreds of millions the original project would have cost.
 - 30-year timeframe. FPL would like to do all the work together under its project scope prioritizing the worst-performing areas first. The City is exploring options to potentially expedite the feeder work.
 - Full benefits of electric reliability achieved. (Based on FPL data, electric reliability for the worst-performing homes or businesses could be 10 times better than it is currently if feeders are underground, with minimal likelihood of outages from storm events.
 - Full benefits of improving the City's electric reliability, safety, and home/business continuity after climate events would be realized.
 - Hybrid system with electric pad-mounted transformers existing above-ground as well as poles and overhead lines remaining for overhead AT&T and Comcast. Tree canopy and tree trimming requirements would remain.

City Options (3 of 3)

- Option #3: FPL SSUPP project + Conversion of overhead FPL feeders up to the substations at the City's expense + Conversion of AT&T and Comcast from overhead to underground
 - No cost to the City for SSUPP. City would pay for feeder work (awaiting estimate from FPL). Cost to the City of conversion of AT&T and Comcast equipment is being researched.
 - 30-year timeframe.
 - Full benefits of electric, telephone and cable communication reliability achieved with newest equipment and technologies for all utilities, providing best-in-class infrastructure for the City.
 - The full benefits of improving the City's reliability, safety, and home/business continuity after climate events would be realized: overhead poles and wires completely removed, providing beautification and full tree canopies with no utility tree trimming required.
 - City's infrastructure would serve as a model of best practices for decades to come.

Project Lead Team Recommendations

- Obtain information and analyses that remain outstanding:
 - FPL's estimate of the cost of converting feeders from overhead to underground up to the substations serving the City.
 - Research on cost and other options for the City concerning AT&T and Comcast as to costs of labor and materials.
- Return to the City Commission within two months with the additional details and full complement of recommendations on how best to proceed with one of the Options.
- Proceed for now with the assumption the City will not be bringing a bond issue to the voters in November 2022 (which could have been a \$350–400 million bond issuance); rather, determine whether the City could absorb the cost of either Option 2 or Option 3 within the capital expenditure (CapEx) budget capacity of the City without the need for a separate bond issuance burdening City taxpayers.
- Continue to explore federal or other grant opportunities that might mitigate some of the costs of Option 2 or Option 3.
- Continue to negotiate with FPL and gain formal commitments as to the SSUPP proposal and the terms, timing, and costs of feeder conversions.

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.

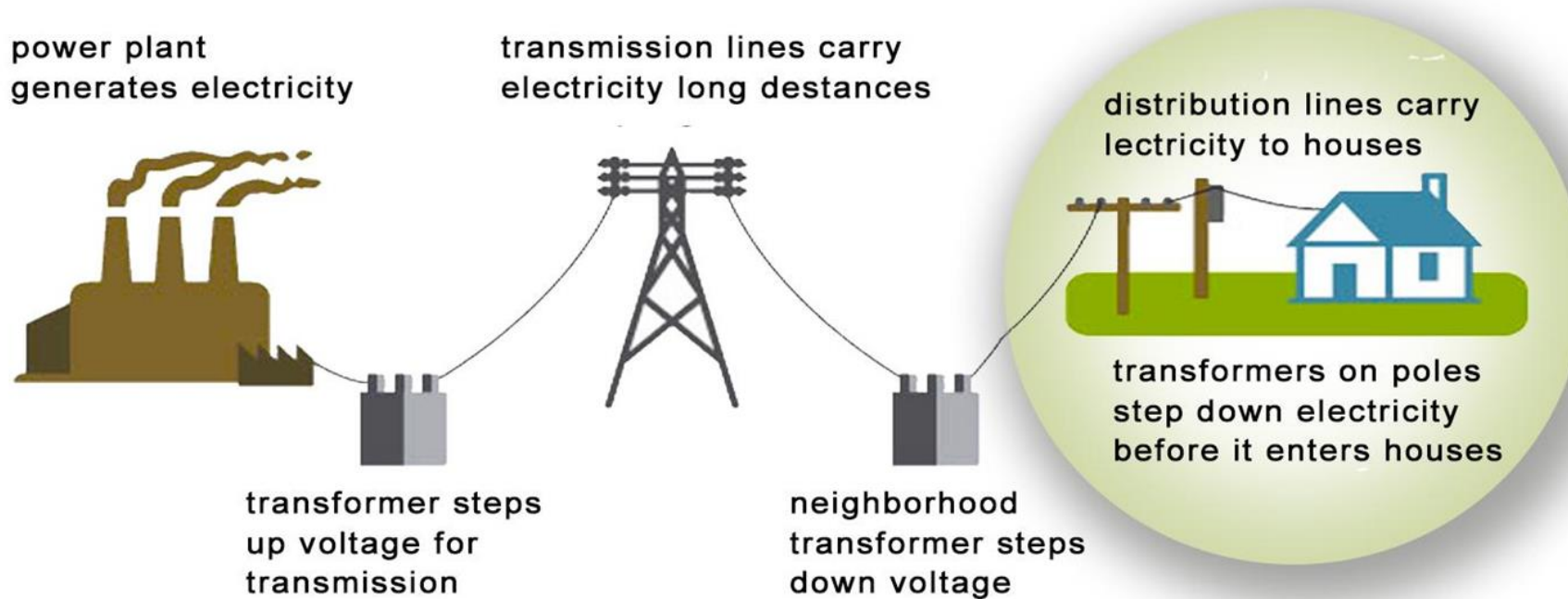
The City's Current Utilities Infrastructure

- 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

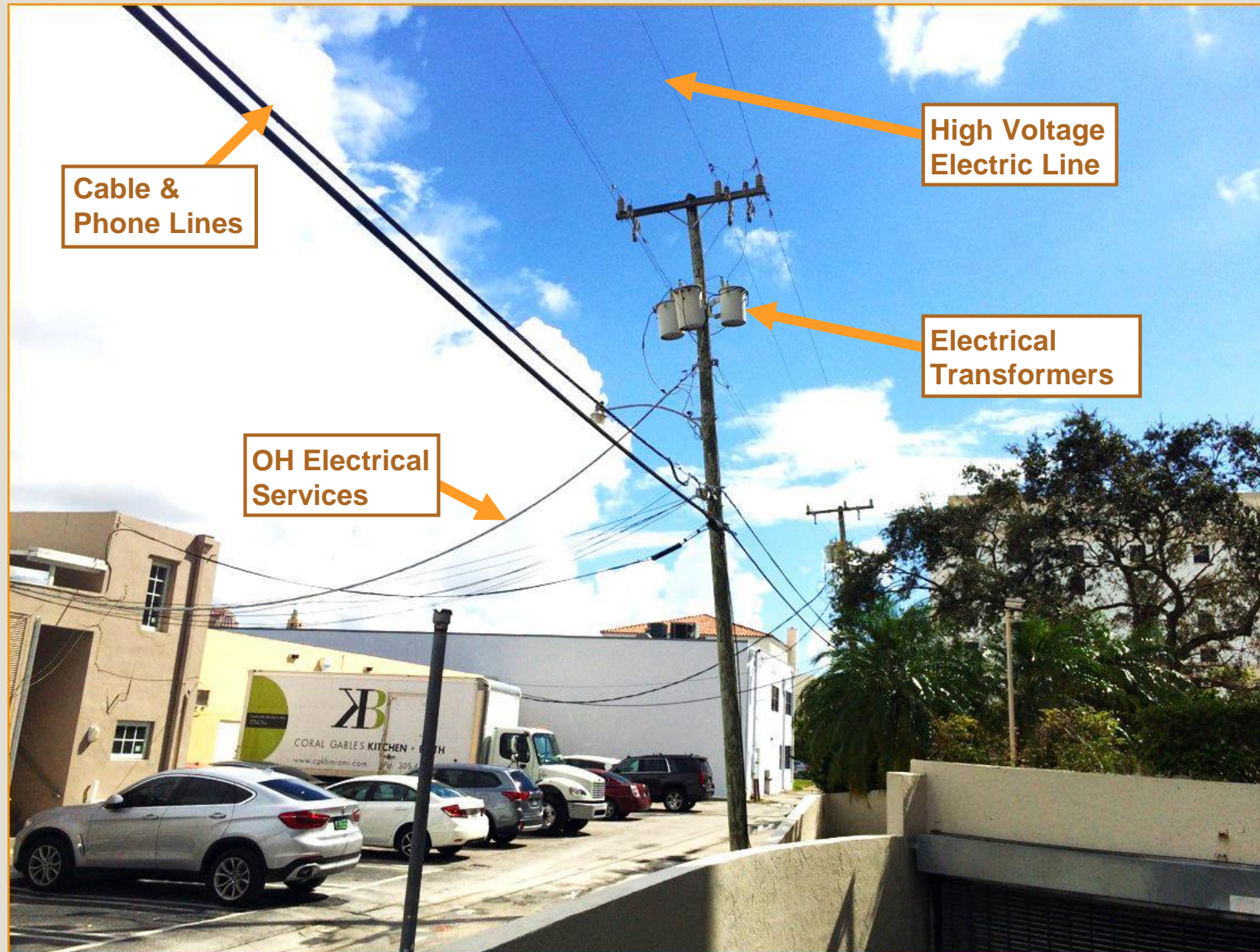
- Generation
- Transmission
- Distribution (FLaTS: Feeders, Laterals, Transformers, Singles)

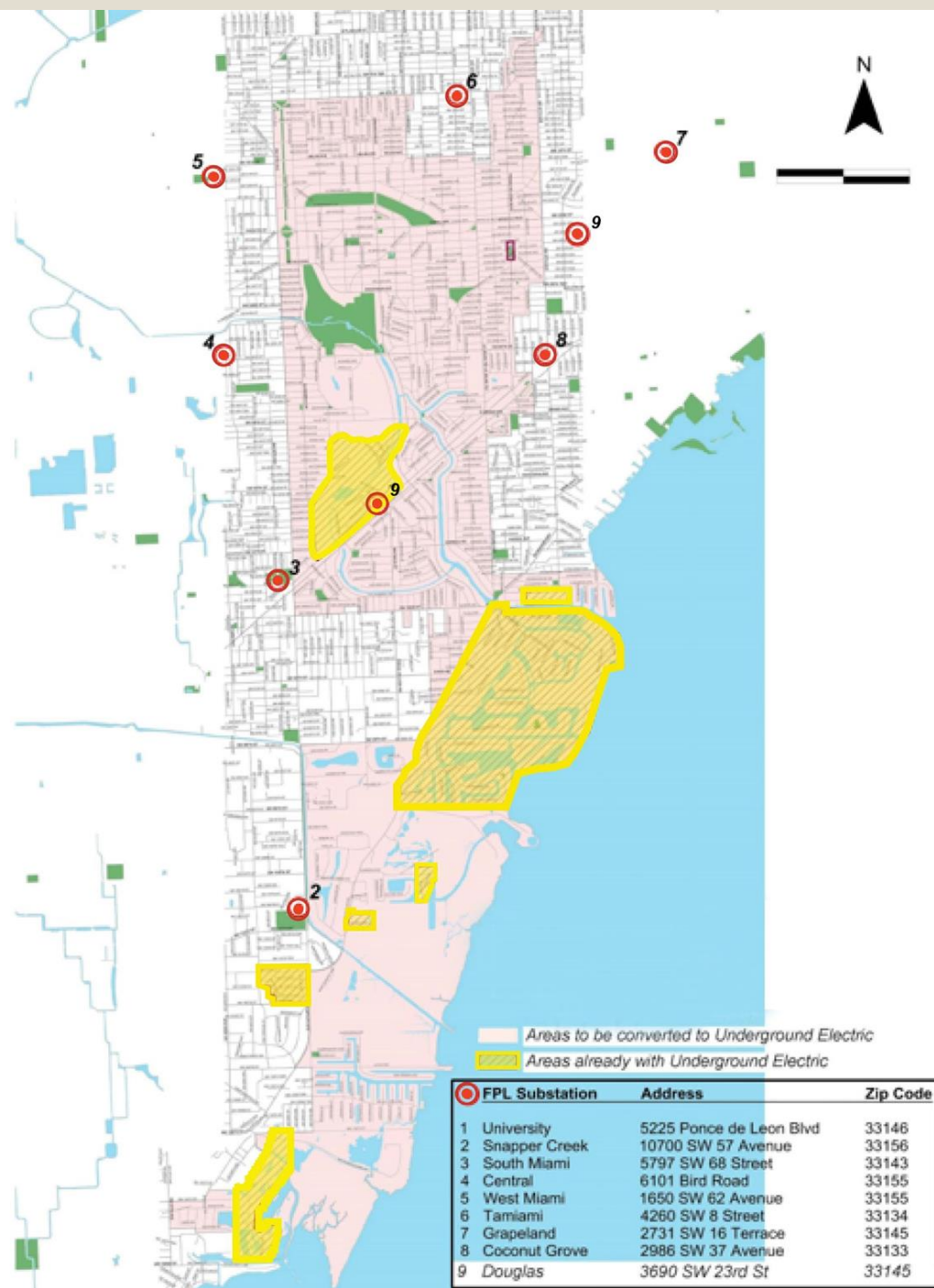
Electricity Generation, Transmission, and Distribution



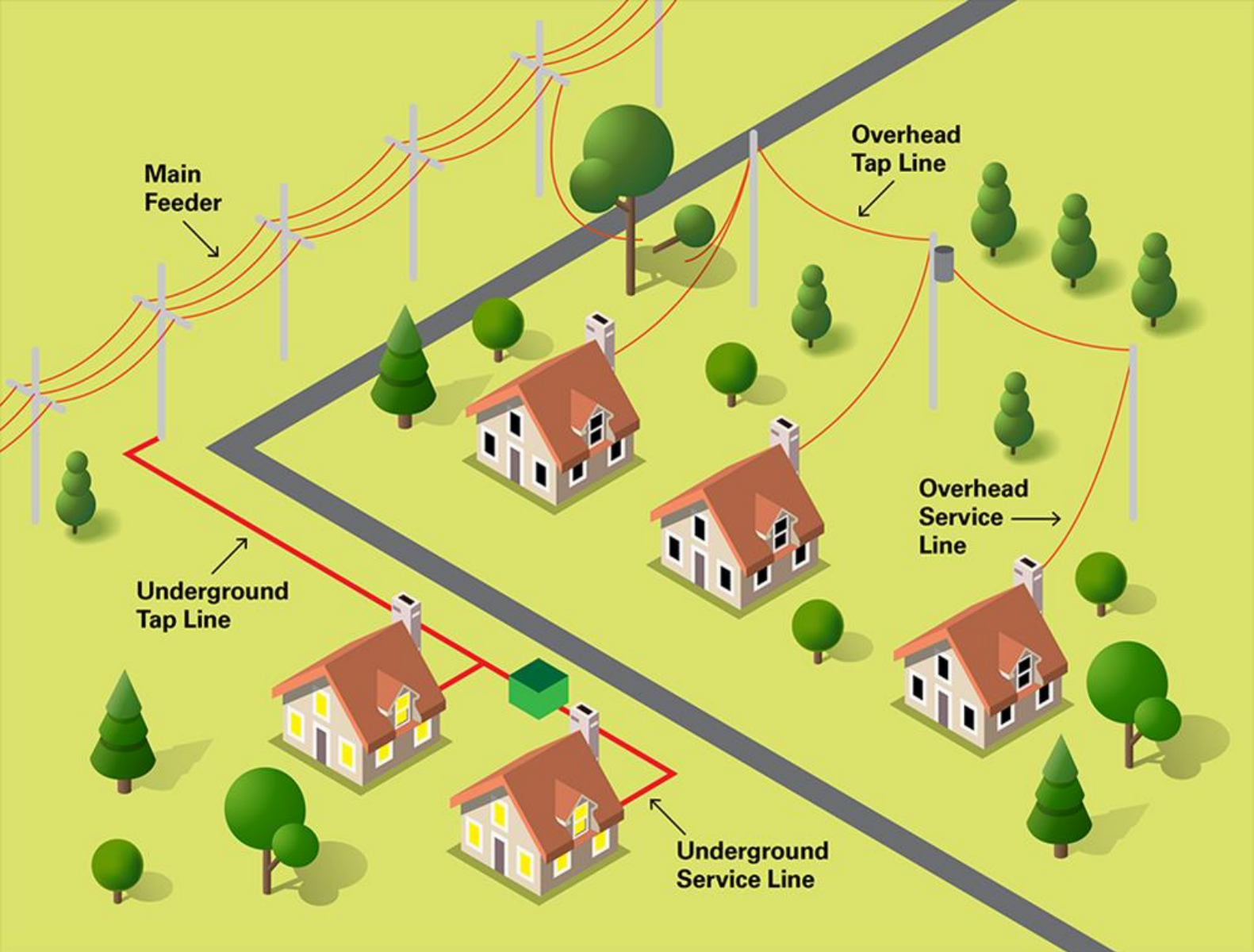
Source: Adapted from National Energy Education Development (public domain)

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.