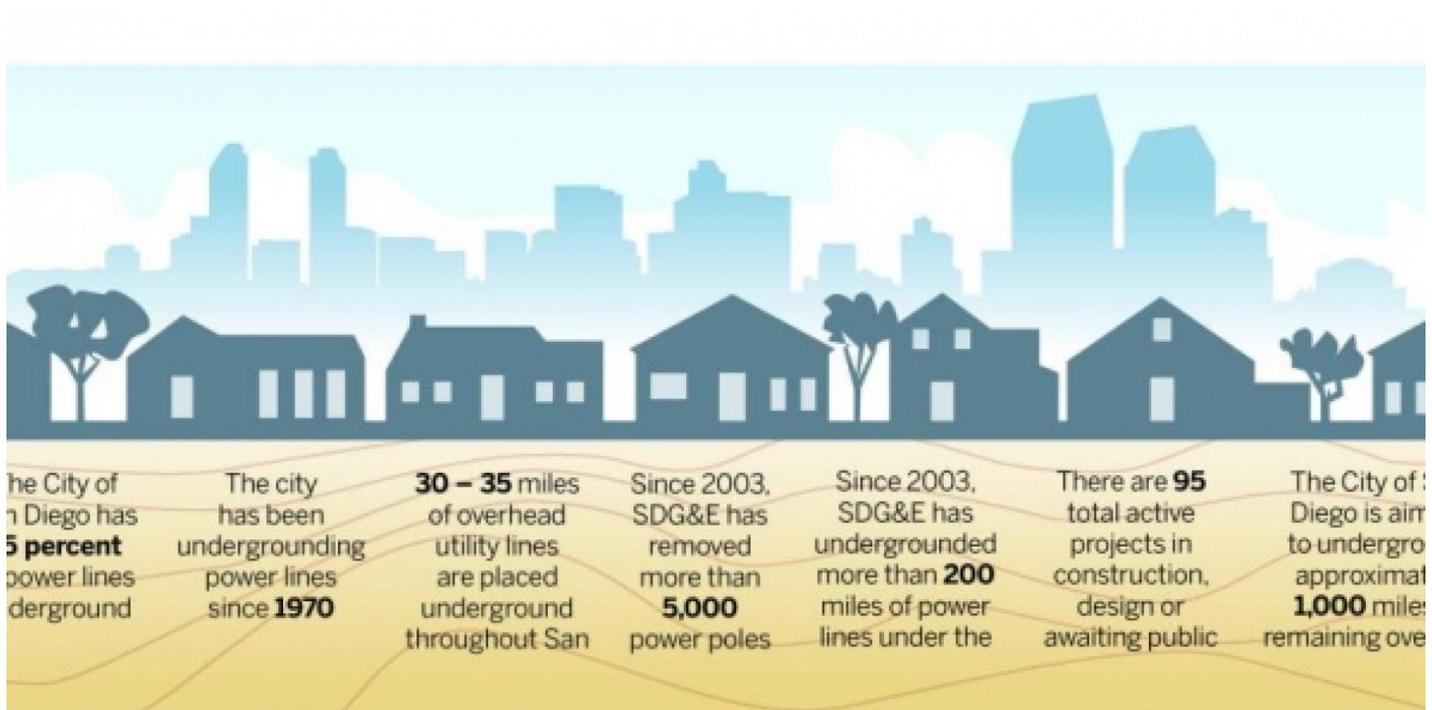


T&D WORLD MAGAZINE



INTELLIGENT UNDERGROUNDING

SDG&E and the City of San Diego Partner to Enhance Aesthetics and Reliability with Underground

Jul 29, 2014

To enhance the aesthetics and electric reliability in local neighborhoods, San Diego Gas & Electric (SDG&E) and the City of San Diego are partners in undergrounding power lines.

Undergrounding reduces the possibility of power lines being affected by car accidents, high winds during storms and other adverse factors. This strengthens the infrastructure of the region’s electric power system in order to further promote reliability and make the system more resilient under a variety of operating conditions. While undergrounding promotes reliability, it does come with a cost. It is more expensive than overhead electric power lines. Additionally, the cause of an outage can be more difficult to detect when a line is undergrounded, which can add to the power restoration timeframe. However, undergrounding is popular in the community because it improves neighborhood aesthetics.



SDG&E has the highest percentage of underground power lines of any investor-owned utility (IOU) in the state and SDG&E’s undergrounding percentage is three times the national average. SDG&E has more than 10,000 miles of underground distribution lines, which represents more than 60 percent of the system.

Since the City approved an innovative surcharge that funds this program in 2003, SDG&E has proactively removed more than 5,000 power poles and undergrounded more than 200 miles of power lines under the city’s direction. Approximately 75 percent of the power lines in the City of San Diego are now underground. All cities in SDG&E’s service territory have undergrounding programs, but on a smaller scale than San Diego’s. In total, these other programs have undergrounded more than 500 miles of power lines in the utility’s service territory.

Roles and responsibilities

The City of San Diego is the lead agency in the San Diego undergrounding program and SDG&E plays a key role.

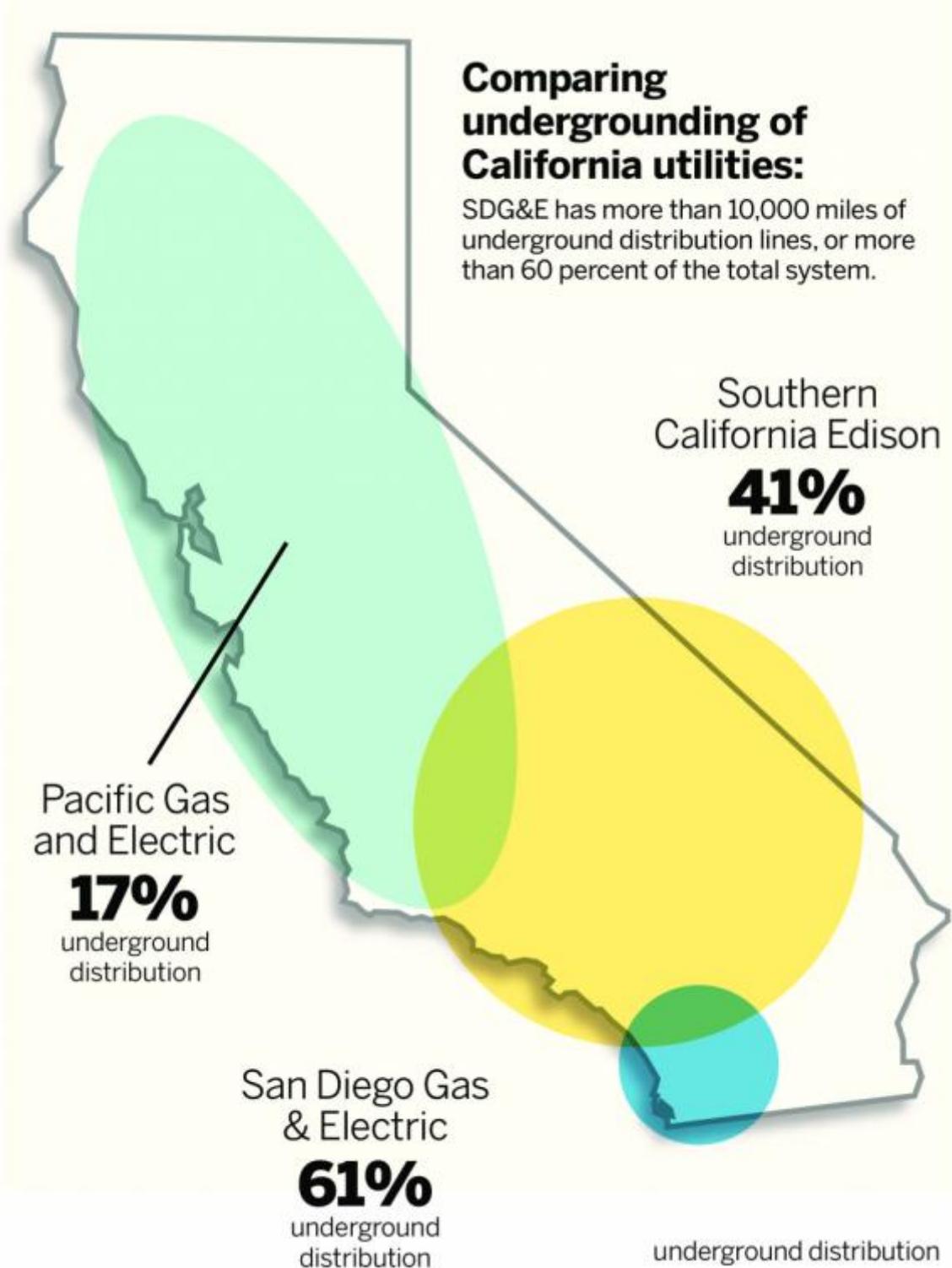
The City determines the project schedule for all undergrounding in the community. The City selects which neighborhoods will have their power lines undergrounded and the order that these projects are carried out. The City also manages the funds for the projects and how they are distributed through its surcharging program.

Within SDG&E's service territory, San Diego is the only city, to-date, to have established such an undergrounding surcharge program. This program is funded entirely by residents through a surcharge on utility bills as established by the City council and approved by the California Public Utilities Commission.

Once the City selects the project location and schedules the undergrounding, SDG&E provides the technical expertise and work crews to get the job done. SDG&E designs a feasible implementation plan and works diligently with the City and all community partners to construct the project safely and effectively.

Comparing undergrounding of California utilities:

SDG&E has more than 10,000 miles of underground distribution lines, or more than 60 percent of the total system.



Pacific Gas and Electric
17%
underground distribution

Southern California Edison
41%
underground distribution

San Diego Gas & Electric
61%
underground distribution

underground distribution

“SDG&E is proud to partner with San Diego and provide the technical know-how and crews to implement the City’s vision on the ground,” said John Sowers, vice president of electric distribution operations for SDG&E. “It takes careful planning and precise engineering to underground thousands of feet of wire and remove hundreds of power poles. The hard work put in by everyone involved has led to great results for San Diego. The views are better, the community has come together to

improve neighborhood aesthetics and all our customers continue to receive the reliable and safe electricity that lights and energizes their lives.”

Process

The undergrounding process consists of five stages:

- **Public hearing process** by the City Council
- **Design** features engineers from all the utilities involved and the City performing field surveys and developing the feasibility plan for the project
- **Notification** through public forums and City notices keeps the community informed about the undergrounding work and ensures they have a voice in the process
- **Construction** of underground facilities and the subsequent removal of overhead utility systems
- **Post-construction** work is conducted to finish the project, which includes replacing the street
- lights that once were attached to the wooden poles and resurfacing the roadway

When the project is done, the poles have been removed and the wires have been placed fully underground, and all that is left is a utility box. Utility boxes must remain at street level for safety and reliability reasons.

Collaborating with the community

In February 2014, the City Council approved a resolution to establish a Utility Undergrounding Advisory Committee. City of San Diego Council President Todd Gloria says that the purpose of the advisory group is to enhance the City’s undergrounding process by further engaging and seeking feedback from residents.

The committee is composed of 14 members, with seven nominated by Councilmembers, appointed by the Council President and confirmed by City Council; and seven members from the private utility companies with two representatives to

be designated by San Diego Gas & Electric, Cox Communications, and AT&T, and with one representative to be designated by Time Warner Cable. Committee meetings are held on the third Friday of the month from 8–10 a.m.

Source URL: <https://www.tdworld.com/underground-td/sdge-and-city-san-diego-partner-enhance-aesthetics-and-reliability-underground>