SENATE COMMITTEE ON ENERGY, UTILITIES AND COMMUNICATIONS

Senator Ben Hueso, Chair 2019 - 2020 Regular

Bill No: SB 584 **Hearing Date:** 4/10/2019

Author: Moorlach

Version: 3/27/2019 As Amended

Urgency: Yes Fiscal: Yes

Consultant: Nidia Bautista

SUBJECT: Electricity: undergrounding of electrical wires

DIGEST: This bill would make changes to programs that help fund conversion projects to replace overhead electrical infrastructure with underground electrical infrastructure in specified areas of the service territory of investor-owned electric utilities.

ANALYSIS:

Existing law:

- 1) Provides that the California Public Utilities Commission (CPUC) has regulatory authority over public utilities, including electrical corporations. (California Constitution, Article 12)
- 2) Declares that it is the policy of the state to achieve, whenever feasible and not inconsistent with sound environmental planning, the undergrounding of all future electric and communication distribution facilities which are proposed to be erected in proximity to any highway designated a state scenic highway and which would be visible from such scenic highways if erected above ground. (Public Utilities Code §320)
- 3) Under its existing authority, the CPUC requires electrical corporations to implement the California Overhead Conversion Program, Rule 20A, to provide financial assistance to local governments to facilitate projects that are in the public interest and that remove overhead infrastructure, replacing it with infrastructure in underground trenches.
- 4) Requires the CPUC to develop formal procedures to incorporate safety in a rate case application by an electrical corporation or gas corporations. (Public Utilities Code §750)

- 5) Requires each electrical corporation to construct, maintain, and operate its electrical lines and equipment in a manner that will minimize the risk of catastrophic wildfire posed by those electrical lines and equipment. Requires each electrical corporation to annually prepare and submit a wildfire mitigation plan to the CPUC for review and approval. Requires those wildfire mitigation plans to include specified information, including protocols for disabling reclosers and deenergizing portions of the electrical distribution system that consider the associated impacts on public safety, as well as protocols related to mitigating the public safety impacts of those protocols, including impacts on critical first responders and on health and communication infrastructure. (Public Utilities Code §8386)
- 6) Existing law, the California Global Warming Solutions Act of 2006, designates the California Air Resources Board (ARB) as the state agency charged with monitoring and regulating sources of emissions of greenhouse gases (GHG). The act authorizes the ARB to include the use of market-based compliance mechanisms in regulating those emissions. Requires all moneys, except for fines and penalties, collected by the ARB as part of a market-based compliance mechanism to be deposited in the Greenhouse Gas Reduction Fund (GGRF) and to be available for appropriation. (Health and Safety Code §§38500 et seq., 39710 et seq.)

This bill:

- 1) Requires the CPUC to require electrical corporations, by July 1, 2020, to develop and administer programs to provide matching funds to local jurisdictions for conversion projects to replace overhead electrical infrastructure with underground electrical infrastructure in Tier 3 Fire-Threat Districts or wildland urban interface area.
 - a) Requires a local jurisdiction to adopt a conversion program and establish an underground utility district to qualify for funding.
 - b) Requires the program to require an electrical corporation to provide matching funds, equaling 50 percent of the total project costs, to a local jurisdiction upon approval of an application for an eligible project.
 - c) Authorizes a local jurisdiction to use credits provided by Rule 20A and to borrow up to five years of future credit allocations to that program to fund its share of the total project costs.
 - d) Requires the CPUC to authorize electrical corporations to recover the costs incurred pursuant to this section from their ratepayers on a nonbypassable basis.

- 2) Authorizes the CPUC to require electrical corporations to replace overhead electrical infrastructure with underground electrical infrastructure in a Tier 3 High Fire-Threat District or wildland urban interface area that is destroyed as a result of a fire caused by overhead electrical infrastructure. Requires the CPUC to authorize an electrical corporation to recover the costs incurred for this effort from its ratepayers on a nonbypassable basis.
- 3) Requires the CPUC to direct electrical corporations to reallocate credits provided to a jurisdiction under the Rule 20A program for purposes of conversion projects in Tier 3 High Fire-Threat Districts and wildland urban interface areas, as specified.
- 4) Appropriates, beginning with the 2019–20 fiscal year and ending with the 2023–24 fiscal year, \$400,000,000 annually from the GGRF to the Department of Forestry and Fire Protection (CalFIRE) to provide grants to local jurisdictions undertaking conversion projects to move electrical infrastructure underground.
 - a) Limits the moneys provided to a local jurisdiction to no more than 15 percent of a project's total costs.
 - b) Requires CalFIRE to give preferences to projects based on fire risk determined by assessing specified criteria.
- 5) Declares that it is to take effect immediately as an urgency statute.

Background

Undergrounding of electric facilities. Undergrounding is the process of replacing overhead lines that provide services such as electricity or communications with lines located underground. Undergrounding is typically done for aesthetic or safety purposes in order to remove the visible overhead lines and poles or to reduce the risk of damage or fire from being exposed to the elements. Undergrounding is generally much more expensive relative to overhead infrastructure — on the order of ten times or more. However, operating costs may be less assuming the underground results in a reduced need to repair damaged lines. Nonetheless, the costs for undergrounding lines can vary depending on the location of the lines, rural, urban, or suburban communities.

California Overhead Conversion Program, Rule 20. The CPUC requires electrical corporations to allocate a certain amount of ratepayer funds each year for undergrounding conversion projects. The electric utility annually allocates funds via credits under Electric Tariff Rule 20 to communities, either cities or unincorporated areas of counties, to convert overhead electric lines to underground

facilities. The local jurisdiction may either accumulate their allocated credits, or borrow future undergrounding allocations for up to five years. Tariff Rule 20 provides three levels (A, B, and C) of progressively diminishing ratepayer funding for the projects, based on specified criteria. Once a project is completed, the electric utility records its costs in its electric plant account for recovery through the utility's rate base. The CPUC authorizes the utility to recover the costs from ratepayers until the project is fully depreciated. Since ratepayers contribute the bulk of the costs of Rule 20A programs through utility rates, the projects must be in the public interest, meeting specified criteria. The CPUC instituted the current undergrounding program in 1967 and has made mostly slight adjustments to the program over the 50 years.

San Diego Gas & Electric (SDG&E) Rule 20D. In 2014, the CPUC authorized SDG&E the ability to consider wildfires when converting electric facilities to underground. The CPUC agreed with SDG&E that undergrounding could mitigate the risks of wildfires in the more fire-prone areas of SDG&E's service territory. The CPUC approved a SDG&E specific version of Rule 20D that is modeled on Rule 20A, but targeted to the most fire-prone areas. Under Rule 20D, the governing body has determined that undergrounding will occur in the SDG&E Fire Threat Zone, as identified, and SDG&E has determined that undergrounding is a preferred method to reduce fire risk and enhance the reliability of the facilities to be undergrounded.

The table below notes the Electric Tariff Rule 20 programs and the ratepayer contribution for each:

Electric Tariff Rule 20			
Rule	Ratepayer Contribution	Municipality or Third Party Contribution	Criteria
20A	80-100%	Max. of 20% cost from street to meter	Public interest
		Min. 0% if use main line funds	
20B	20%	80%	N/A
20C	Minimal	100%	Typically small projects
20D	80%	Max. 20% cost from street to meter Min. 0% if use main line funds	Facilities within SDG&E Fire Threat Zone

CPUC Rule 20A staff report. In November 2016, the CPUC's Policy and Planning Division authored a staff report reviewing Rule 20A entitled, "Program Review: California Overhead Conversion Program, Rule 20A for Years 2011-2015." The staff report noted that there is a large balance of unclaimed credits of the Rule 20A allocations. According to the report, there are over a billion dollars of credits that have been allocated to local communities but had not yet been redeemed. The report made a number of recommendations, including a recommendation to have the electric utility suspend accounts for local jurisdictions that do not meet program criteria and do not plan to pursue any conversion projects in the next five to ten years.

The Improvement Act of 1911. Under the Improvement Act (Act), cities, counties and other municipal governments are authorized to designate areas within which public agencies officials and individual property owners may enter into contractual assessments to finance a wide range of public infrastructure projects. An assessment district is formed as an alternative method for financing public improvements by a sponsoring local government agency. One type of assessment district that the Act authorizes is an underground utility district (UUD), which is formed for the purposes of converting above ground infrastructure to below ground. UUDs are formed via petition or by a determination of the legislative body. Current law requires a legislative body to determine that the city or a public utility has voluntarily agreed to pay over 50 percent of all costs of conversion, excluding costs of users' connections to underground electric or communication facilities in order to initiate proceedings.

CPUC High Fire-Threat District. The CPUC's efforts to map high-fire threat stem from the catastrophic wildfires caused by utility infrastructure in San Diego County in the 2000s. The CPUC mapping efforts combine the Tree Mortality Taskforce Map with CPUC/CalFIRE Tier 2 and Tier 3 designations. Tier 2 fire-threat areas depict areas where there is an elevated risk (including likelihood and potential impacts on people and property) from utility associated wildfires. Tier 3 fire-threat areas depict areas where there is an extreme risk (including likelihood and potential impacts on people and property) from utility associated wildfires.

SB 901. As a requirement of the SB 901, electric utilities must file wildfire mitigation plans with specified information. In the recently filed plans, some of the electric utilities considered the potential to underground some lines as part of their wildfire mitigation efforts. However, in most instances, the electric utilities' wildfire mitigation plans included the potential to underground lines but recommended an assessment to identify what electric lines made sense to

underground. As one plan noted: "While underground systems can help reduce the risk of wildfires and increase reliability during high winds and storms, they also take longer and costs much more to construct, maintain, and repair – particularly in mountainous regions and those with steep terrain."

This bill. This bill proposes to establish a grant program to support the local match for underground conversion projects with \$400 million annually appropriated for five years from the GGRF. Additionally, this bill proposes to create a Rule 20D-like program across the service territories of all electrical corporations to address wildfire risks with ratepayers funding at least 50 percent of the costs for projects in Tier 3 High Fire-Threat District or wildland urban interface area. Moreover, this bill would require the CPUC to direct credit allocations to fund underground conversion projects from "inactive" jurisdictions (as defined) to benefit "active" jurisdictions. This bill would additionally authorize the CPUC to require an electrical corporation to replace overhead electrical infrastructure in a Tier 3 Fire-Threat District or wildland urban interface area funded by ratepayers through a nonbyapassable charge. Lastly, this bill requires the CPUC to direct an electrical corporation to reallocate unused credits provide under the Rule 20A program.

Need for amendments. As noted above, the costs to underground electrical facilities can be substantially more than maintaining overhead lines. Nonetheless, with the growing threats posed by wildfires, electric utilities are required to adopt wildfire mitigation plans, which include hardening the electrical system. Such strategies can include conductor covers, the replacement of wooden poles with composite or steel poles, as well as, undergrounding of lines, where it is feasible and preferable to other strategies. To help better target undergrounding conversion projects, the author and committee may wish to amend this bill to:

- Relevant to the grant program: Consistent with previous bills related to GGRF appropriations, remove reference to specific dollar amount; include additional criteria for preference to projects where the local jurisdiction has taken action to address their wildfire risks and undergrounding is a feasible and preferred method to reduce fire risks.
- Relevant to the new ratepayer funded conversion program and wildfire replacement program: narrow the project eligibility to Tier 3 areas, which pose the greatest risk for utility infrastructure ignitions and require a determination by the utility that undergrounding is a preferred and feasible method.
- Relevant to the reallocation of Rule 20A credits: authorize the CPUC to direct an electrical corporation to reallocate unused credits but confirm the local jurisdiction has not taken steps or plans to use the credits before reallocating them.

Double referral. Should this bill be approved by this committee, it will be rereferred to the Senate Committees on Natural Resources and Water for their consideration.

Prior/Related Legislation

SB 1463 (Moorlach, 2016) would have required the CPUC, in consultation with the CalFIRE, to prioritize areas where communities are subject to conditions that increase fire hazards associated with overhead utility facilities when determining areas which it will require enhanced mitigation measures for wildfire hazards posed by overhead electrical lines and equipment. The bill was vetoed.

SB 901 (Dodd, Chapter 626, Statutes of 2018) addressed numerous issues concerning wildfire prevention, response and recovery, including funding for mutual aid, fuel reduction and forestry policies, wildfire mitigation plans by electric utilities, and cost recovery by electric corporations of wildfire-related damages.

SB 1028 (Hill, Chapter 598, Statutes of 2016) required electric CPUC-regulated utilities to file annual wildfire mitigation plans and requires the CPUC to review and comment on those plans.

FISCAL EFFECT: Appropriation: Yes Fiscal Com.: Yes Local: Yes **SUPPORT:**

City of Laguna (Sponsor) City of Mission Viejo Laguna Canyon Foundation Town of Tiburon

OPPOSITION:

None received

ARGUMENTS IN SUPPORT: According to the author:

"Seeing large sections of California burn down in recent wildfires has been shocking. Many of the fires were caused by sparks from downed power lines that could have been prevented. I authored two bills in 2016 and 2018, both numbered SB 1463, to mitigate wildfires by hardening power lines and to use cap-and-trade funds for undergrounding to reduce the causes of

wildfires. Neither bill became law, but SB 1463 in 2016 reached Governor Brown's desk where it was subsequently vetoed.

In the last legislative session, the cap-and-trade idea was incorporated into SB 901 by Sen. Bill Dodd (D-Napa) which I supported. It included \$200 million in cap-and-trade funds for mitigating wildfires. Other funding resources, including Rule 20A, have proven to be effective methods for financing undergrounding projects. SB 584 works to extend this idea by using cap-and-trade funds and other revenue streams not being properly utilized, for the purpose of undergrounding overhead utility lines in an effort to prevent future disastrous fires."