Date of Hearing: April 17, 2024

ASSEMBLY COMMITTEE ON UTILITIES AND ENERGY
Cottie Petrie-Norris, Chair
AB 2221 (Juan Carrillo) – As Amended March 21, 2024

SUBJECT: Broadband projects: electric power design approval

SUMMARY: Establishes timelines for electric utilities, private and public, to approve and energize a broadband project, and grants the broadband project automatic approval should the utility not take action within the timeline. Requires electric utilities to publish all rules and standards necessitated in project applications, and to only subject applications to those rules and standards that were published 12 months before the date of the application's submission to an electric utility for review.

Specifically, **this bill**:

1) Requires electric utilities make easily accessible to the public all rules, requirements, and standards for broadband project applications submitted to the electric utility. Prohibits an application from being subject to any standard that had not been published 12 months before its date of submission.

2) Establishes timelines for electric utilities to review and energize broadband projects. Allows timelines to be extended or otherwise modified upon written, mutual agreement of the electric utility and the broadband provider. The timelines include:

    a. Issuing a written notice of incompleteness, which shall specify every item and any information missing from the application, within 10 days from the application's date of submittal, if needed.

    b. Approval or denial of a complete application within 45 days of receiving the application. If a notice of incompleteness is provided to the applicant within the first 10 days, the countdown would pause and resume when the applicant resubmits.

    c. A cost estimate for any utility work necessary to accommodate the broadband project within 14 days of the approval.

    d. Energization within 30 days of receiving notice of the applicant's completion of all required work for the broadband project.

3) Establishes timelines for broadband providers to respond to electric utilities. The timelines include:

    a. Resubmission of an application deemed incomplete within 30 days of the notice, otherwise the application will be canceled.

    b. Acceptance or rejection of the utility's cost estimate within 45 days from when it is provided.

4) Specifies that if an electric utility does not approve or deny within the 45-day period, the application shall be automatically deemed approved.

EXISTING LAW:

1) Requires local publicly owned electric utilities (POUs) to make ready infrastructure for use by a broadband service provider within 45 days of the date of receipt of the request, or 60 days if the request is to attach to more than 300 utility poles. Also requires POUs to provide a cost estimate within 14 days of a request's approval. (Public Utilities Code § 9511)

2) Requires the California Public Utilities Commission (CPUC) to determine criteria for timely service for electric customers by January 1, 2025 that shall include timely start of service for new connections, timely fulfillment of requests for increased load, and reenergization of customers following a power outage. (Public Utilities Code § 933.5)

3) Establishes guidelines for the design, cost allocation, and responsibilities of a project applicant and a utility for electric distribution line extensions necessary to finish permanent electric service. (Electric Rule 15)

4) Establishes guidelines for the design, cost allocation, and responsibilities of a project applicant and a utility for the extension of electric service from an investor-owned utility (IOU) distribution line (Electric Rule 16)

5) Requires cities and counties to process broadband projects within a reasonable period of time in accordance with the time periods and procedures established by applicable Federal Communications Commission (FCC) rules. (Government Code § 65964.1)

FISCAL EFFECT: Unknown. This bill is keyed fiscal and will be referred to the Committee on Appropriations for its review.

BACKGROUND:

Broadband for All – California has been focused on providing universal access to broadband since at least 2007, when the state established the California Advanced Services Fund to incentivize broadband providers to build out projects to unserved and underserved areas. In 2021, the state redoubled its efforts to close the digital divide by enacting SB 156 (Committee on Budget and Fiscal Review, Chapter 112, Statutes of 2021), which committed $6 billion to build out broadband infrastructure. The $6 billion was appropriated from both the state's general fund and from the federal American Rescue Plan Act (ARPA).[1] The federal funds presently left over are available for allocation until 2024 and for encumbrance and liquidation until the end of 2026. The CPUC is expected to make grant awards, prioritizing the nearly $600 million left in federal funds, as seen in Table 1, by the end of June 2024.[2] Meanwhile, the state has allocated more to the General Fund in support of Broadband for All since 2021, and has extended deadlines for the allocation and encumbrance of these funds. Utilizing the federal dollars before the 2026 deadline

[1] LAO; "The 2021-22 California Spending Plan: Broadband Infrastructure"; October 2021.
[2] Governor's 2024-2025 Budget Plan proposes to extend $1.25 million in funding for the Middle-Mile Network in FY 2025-26. LAO; "The 2024-25 Budget: Broadband Infrastructure"; February 2024.

has given many in the broadband space a sense of urgency, and resulted in vocal concerns when any project delay arises.

Table 1. Broadband Infrastructure Spending Plan as of the 2023-24 Budget Act (in Millions)[2]

Program or Project	Fiscal Year	Funding Source GF	FF	TF
Middle-Mile Network	Prior Years	$887[a]	$2,363[b]	$3,250
	2023-24	300	73[c]	373
	2024-25	250	—	250
	2025-26	—	—	—
	2026-27	—	—	—
Subtotals		($1,437)	($2,436)	($3,873)
Last-Mile Projects Grants	Prior Years	$647[d]	$550[e]	$1,197
	2023-24	253	—	253
	2024-25	200	—	200
	2025-26	200	—	200
	2026-27	150	—	150
Subtotals		($1,450)	($550)	($2,000)
LLRF	Prior Years	—	—	—
	2023-24	$175	—	$175
	2024-25	300	—	300
	2025-26	275	—	275
	2026-27	—	—	—
Subtotals		($750)	(—)	($750)
All Programs and Projects	Prior Years	$1,534	$2,913	$4,447
	2023-24	728	73	801
	2024-25	750	—	750
	2025-26	475	—	475
	2026-27	150	—	150
Totals		**$3,637**	**$2,986**	**$6,623**

[a] Pursuant to Control Section 11.96 of the *2022-23 Budget Act*, the Department of Finance shifted $887 million for the middle-mile network from ARP fiscal relief funds to GF in 2021-22.
[b] The remaining $2.363 billion in FF for the middle-mile network in 2021-22 is state ARP fiscal relief funds.
[c] Chapter 189 of 2023 (SB 104, Skinner) appropriated a $73 million award of federal funds in 2023-24 from the IIJA's Enabling Middle Mile Broadband Infrastructure Program.
[d] Pursuant to Control Section 11.96 of the *2022-23 Budget Act*, the Department of Finance shifted $522 million for last-mile projects from ARP fiscal relief funds to GF in 2021-22.
[e] The remaining $550 million in FF for last-mile project grants in 2021-22 is the state's allocation from the ARP's Coronavirus Capital Projects Fund.

GF = General Fund; FF = federal funds; TF = total funds; LLRF = Loan Loss Reserve Fund; ARP = American Rescue Plan; SB = Senate Bill; and IIJA = Infrastructure Investment and Jobs Act.

Connecting Broadband – The newest generation of mobile networks being deployed by broadband providers today, 5G, offers higher speeds and connectivity than its predecessors.[3] The rollout of 5G relies on "small cell" technology, which are installed on existing infrastructure – typically utility poles – rather than needing large cellular towers to be built. Simplified, there are 3 main steps to getting a small cell up and running:

1) Power design – this is the engineering blueprint in which broadband providers lay out the details of a project, including, among a host of others, construction drawings and pole loadbearing (weight and electrical capacity) calculations;
2) Attachment to utility infrastructure;
3) Energization – this is the act of physically connecting the equipment to the grid and powering the equipment.

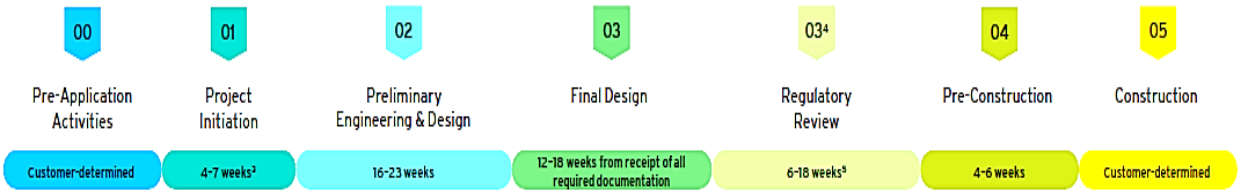
In 2011, the Legislature passed AB 1027 (Buchanan, Chapter 580, Statutes of 2011), establishing timelines for POUs to make infrastructure ready for Step 2. However, some small cell technologies, such as small cell radios on a city street lamp,[4] may not need utilities for Steps 2 or 3. Other small cell technologies may need Steps 1 and 3, but not Step 2. Since "shot clocks" that

[3] MIT Lincoln Laboratory; "Field campaign assesses vulnerabilities of 5G networks"; August 2023.
[4] The Verge; "AT&T begins testing and deployment of discreet 5G radios on city street lamp posts"; February 2022.

set specified time limits have only been statutorily mandated for Step 2, broadband providers have voiced concern over delays that may occur with regards to Steps 1 and 3.

Moreover, these steps and timelines can vary greatly depending on utility territory, system upgrades necessitated by the project application, or events outside the utilities' control such as supply chain delays, weather, or pending customer application information or permit completion, among others. Projects can take anywhere from a month to years depending on these various factors. As shown in Figure 1, there are many steps – and thus many opportunities for delay – in the customer energization lifecycle.

Figure 1: Customer Project Lifecycle (for complex projects)[5]



Timelines for electric lines – The demands for new service connections and/or upgrades to existing distribution lines have been increasing, especially as California advances policies to deploy more infrastructure to charge electric vehicles, shift from natural gas to electricity in buildings, and increase the housing supply.[6] These projects, alongside broadband, all rely on access to the electrical grid and often require upgrades to the distribution system. Additionally, the COVID-19 pandemic has created supply shortages and challenges affecting many sectors of the economy, including limiting access to electrical equipment, such as transformers, needed to connect new customers or expand energy load.[7] Taken together, electric utilities currently face a big backlog of energization projects. While utilities have taken internal steps to attempt to better manage their project queue, the Legislature passed a pair of bills last year, AB 50 (Wood, Chapter 317, Statutes of 2023) and SB 410 (Becker, Chapter 394, Statutes of 2023), requiring the CPUC to step in and create criteria for timely energization by January 1, 2025. The CPUC opened a rulemaking (R. 24-01-018) in January 2024 to solicit public comment and host workshop discussions of energization timeline issues, and is expected to release a decision in September 2024.

The FCC's 2018 Wireless Deployment Order – In 2009 and 2014, the FCC adopted orders to lower barriers to wireless facility deployment and reduce permitting delays at the local level. As part of the 2009 and 2014 orders, the FCC established shot clocks on a local government's review of a wireless facility permit application:

1) 60 days for a project that is an "eligible facilities request," which is defined by the FCC as a collocation on an existing facility that does not substantially change its physical dimensions;

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[5] Example provided by SDG&E and representative of their territory. Timelines and activities reflect those for complex projects (e.g., subdivisions, developments involving design by SDG&E). Requests that do not involve SDG&E design tend to have shorter timelines. Duration of the project phases are estimates only and represent activities managed by SDG&E; i.e., do not include time for activities that are the customer responsibility.
[6] California Energy Markets; "Interconnection Delays Disrupting Housing Markets, Causing 'Chaos'"; March 2023.
[7] San Francisco Chronicle; "Big holdup for new Northern California housing? PG&E"; March 2023.

2) 90 days for a project that is a collocation that substantially changes the dimensions of the facility, but does not substantially change its size; and
3) 150 days for projects that are new sites for wireless facilities.

Following the FCC's 2014 order, the Legislature passed AB 57 (Quirk, Chapter 685, Statutes of 2015). Amongst other permit streamlining changes, AB 57 codified the above-detailed shot clocks.

In 2018, the FCC updated its wireless deployment orders related to local government permitting. As part of this update, the FCC expanded the types of wireless facilities covered by the FCC's permit streamlining rules and also shortened the shot clocks for local government permit application reviews. The 2018 order adopted the following shot clocks:

1) 60 days for applications for installations on existing infrastructure
2) 90 days for all other applications

AB 537 (Quirk, Chapter 467, Statutes of 2021) updated state statute to reflect the more recent FCC rules regarding wireless permit timelines by replacing references to the 2009 and 2014 orders with a reference to the 2018 FCC rules.

COMMENTS:

1) *Author's statement.* According to the author, "Billions in public and private funding for broadband projects are trying to be built as fast as possible in 2024, 2025 & 2026 to help close the digital divide. $6 billion in federal broadband dollars need to be allocated by the end of 2024 and projects need to be built by the end of 2026 or we risk sending money back to D.C. The legislature has enacted laws in recent years ensuring that local governments streamline broadband deployment and process broadband permits within 60-90 days. Electric utilities don't have any required timeframes for broadband application timelines and typically take between 7-12 months to process the initial power design application then another 7-12 months to connect power to the broadband project. California won't be able to meet its Broadband for All objectives unless legislation is passed creating a consistent and transparent process for public and private utilities to follow when processing broadband project applications. AB 2221 creates reasonable procedures and timelines for both utilities and applicants to follow so broadband applications can be handled efficiently in a reasonable amount of time."

2) *Front of the line.* As alluded to above, utilities receive energization requests for a wide variety of projects. Utilities have reported to this committee that annual completed requests range from around 4,500 to 8,000 depending on how many distinct project types are counted.[8] Yet the utilities report these numbers represent less than a third of projects that are requested, as many energization requests drop out during various stages of the project pipeline. Utilities are required to consider these requests in a "first in, first out" basis, without bias. Since the timelines this bill establishes would only be applicable to broadband projects, this bill would effectively put all broadband projects at the front of the queue. Moreover, the timelines in this bill jump ahead of the CPUC's energization proceeding, which seeks to establish energization timelines for all project types.

[8] Per data request to the committee on April 21st, 2023 from PG&E, SCE, and SDG&E.

The author motivates the need for broadband-specific shot clocks by noting the 2024 and 2026 deadlines SB 156 (Committee on Budget and Fiscal Review, Chapter 112, Statutes of 2021) obligated to allocate and liquidate, respectively, the $6 billion committed to broadband projects. But similar concerns have been expressed about being unable to meet other state goals in time as a result of electric utility backlog, such as the target for 60% renewable energy resources by 2030 established under SB 100 (de León, Chapter 312, Statutes of 2018). In conversations with the committee, the sponsor has indicated that they have been a party in the CPUC's rulemaking proceeding to establish energization timelines, suggesting that the venue is open to considering broadband's specific concerns. Moreover, statute mandates the CPUC must consider "project types that justify unique or extended energization timelines,"[9] by which broadband could make the case for its unique status. As noted by the author, this bill does establish more shot clocks for specific steps in the project application timeline than what is currently required for the CPUC to establish per statute. However, it is unclear how this measure's timelines would work in concert with those determined by the CPUC, particularly if the CPUC establishes an energization shot clock greater than that enacted in this bill, 30 days. Since the CPUC is actively working towards a decision, *the committee recommends amending the specified 30-day energization timeline called for in this bill to instead be tied to the forthcoming timeline that the CPUC will establish in their existing rulemaking (R. 24-01-018).*

3) *Shot clock mismatches*. This bill would require electric utilities to provide to an applicant written notice of incompleteness, specifying each and every piece of information missing from the application, within 10 days of the application's date of submission. Although 45 days for review and approval of broadband project applications by electric utilities would mirror the guidelines the Southern California Joint Pole Committee follows in reviewing joint pole authorizations,[10] electric utilities would effectively have only 10, not 45, days accorded by this bill to review an entire power design application. Given the variable degrees of complexity between projects and the high level of technicality inherent to a power design, it is unclear if the level of "completeness" of an application can be captured without scrutiny of the accuracy in design and calculations that may be involved, leading to skepticism that neither 10 nor 45 days may be enough time for an electric utility to review some applications. Though the bill provides a clause for electric utilities and broadband providers to flex timelines in mutual agreement, it is impossible to predict how often a mutual agreement may be reached. In such cases where a mutual agreement cannot be reached, the electric utilities would have to challenge through litigation, which could siphon resources away from other responsibilities, including the timely processing of the energization queue that this bill seeks to support. Since incompleteness or inaccuracy of an application could be due to the fault of the applicant, *the committee recommends striking the provisions requiring utilities to notify applicants of incompleteness within 10 days of submittal and waiving any additional fees for a resubmission.*

   Additionally, the shot clocks outlined in this bill seem to provide more latitude to broadband providers than afforded to the utilities. Where the utility companies would get 10 days to review and provide a written notice of every item that the broadband

[9] PUC § 933.5(a)(1)(B)
[10] Southern California Joint Pole Committee; https://scjpc.net/.

companies missed in an application, the broadband companies would get 30 days to fix and resubmit. Where the utility companies are accorded 14 days to provide a cost estimate, the broadband companies are accorded 45 days to approve the cost estimate.

Following FCC guidelines, local governments in California have 60 to 90 day shot clocks to review and approve broadband projects. It is unclear to this committee why local governments received double or triple the amount of time to review broadband applications than what is provided to utilities under this measure. Given these considerations, *the committee recommends amending the review timelines for electric utilities to be in alignment with local governments, according 60 days to approve or deny a complete application involving installation on existing infrastructure and 90 days for all other applications. The committee additionally recommends amending the timelines around cost estimation to create parity between applicants and utilities, namely 30 days.*

As mentioned above, AB 1037 establishes timelines for POUs to make utility poles ready for a broadband provider. While utilities are granted 45 days from the receipt of a request for most applications, applications requesting attachment to more than 300 poles yield an additional 15 days to utilities, given the greater volume of work. Since AB 1037 provides a distinction between requests to prepare less than 300 utility poles versus more, presumably a request for attachment (i.e. Step 2) would mirror its power design application (i.e. Step 1), indicating that a power design application could also involve more than 300 poles. Since more complications can arise in bigger projects, *the committee recommends similarly providing 15 and 30 extra days in the review timelines for applications involving installation on existing infrastructure and for all others, respectively, should the application involve more than 300 sites of attachment.*

4) *Safety first.* This bill seeks to create transparency of the rules, requirements, and standards utilities use to evaluate broadband project applications. Rules governing the ability of new projects to connect to the electric distribution grid are generally determined by statute, CPUC rules, and tariffs for each of the IOUs.[11] While POUs are not regulated by the CPUC, they must meet applicable federal, state, and industry standards, and they have in many instances aligned with the rules set forth by the agency, such as on General Order 95,[12] which governs the design, construction, and maintenance of overhead electrical supply and communication facilities. These standards do not stay static. For example, GO 95 was initially promulgated in 1941 and has been updated approximately 60 times since then – most recently in January 2020.[13] Adherence to these standards is critical to ensuring a safe and reliable electric system. Exempting broadband applications from any rules and standards that were not published by the electric utility 12 months prior to its submission – as put forward by this measure – could, in effect, allow a project to circumvent safety requirements. This could have dire consequences for utilities and ratepayers as utilities would be liable for any blackouts, fires, or other disasters that originate from their grid systems.

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[11] Documents that specify rates, charges, rules, and conditions under which an IOU will provide service.
[12] LADWP; *Wildfire Mitigation Plan*; June 2022.
[13] Davis Wright Tremaine LLP; "Obligations for Owners of Overhead Communications and Electric Facilities in California"; January 2022.

Los Angeles Department of Water and Power (LADWP) has reported to this committee that out of about 900 installations for 5G small cell site installations since 2019, 754 were incorrectly installed.[14] Non-compliant attachments may increase safety risks for fire and electric shock to the linemen and to the public. LADWP projects to spend 270 hours per week between September 2023 and July 2024 to de-energize poles and allow correction of non-compliant installations. However, the 5G provider, Crown Castle, has noted that these infractions were due to new rules implemented after LADWP had already inspected and energized the projects. They refute that their applications were incorrect, or that safety was compromised. These disparate accounts show how communication between applicant and utility is critical in ensuring correct and safe installations, especially in circumstances involving a rule change. Regardless, all seem to agree that safety and reliability standards are updated to the benefit of worker and public safety, and should be implemented as expediently as possible. As such, *the committee recommends striking the provision exempting broadband project applications from any rules, requirements, or standards that had not been published 12 months prior to the date of its submission.*

This bill also proposes to remedy any instances where electric utilities do not approve or deny a permit design application within 45 days by automatically "deeming approved" those applications. The author notes that the Legislature passed a similar remedy, AB 537, for broadband applications undergoing local government review**.** However, this "deemed approved" clause only narrowly applies to collocation or siting applications and if the following conditions are met:

- The city or county fails to approve or disapprove the application within the reasonable time periods in the FCC rules;
- All required public notices have been provided regarding application; and
- The applicant has provided a notice to the city or county that the reasonable time period has lapsed.

A local government is also allowed to challenge the operation of the applicant's notice to the local government that the reasonable time period has lapsed and the application is deemed approved. This bill does not grant these guardrails to electric utilities, instead providing a blanket "deemed approved" for all power design applications when the shot clock winds down. Although the sponsor has claimed, in conversations with the committee, that local government applications are broader in scope and therefore more difficult to review, it is unclear to this committee if it is reasonable to assume that electric utility applications are indeed less demanding. As mentioned previously, the complexity of broadband projects can vary greatly, raising doubt for this committee as to whether 10 or 45 days is enough for electric utilities to comprehensively review some applications for all safety concerns. Again, this can have significant consequences for utilities and ratepayers. Thus, *the committee recommends tailoring when "deemed approved" may be appropriate to be in alignment with local governments, and providing recourse for electric utilities to seek judicial review.*

With ever-evolving safety standards and an ever-growing multitude of participants and projects needing to be energized, the CPUC routinely audits utility electric systems to

[14] Per data request to the committee on March 25th, 2024 from LADWP.

ensure all construction and maintenance, including non-utility attachments, comply with GOs 95 and 128.[15] Most recently, the CPUC audited Southern California Edison's system in the Wildomar District and Pacific Gas and Electric's system in the Sacramento Division, and found in both cases – as seems normal in most audits – several violations.[16] Utilities have 30 days to respond to the audit summary with a plan to correct all noted violations; if these infractions are in regards to non-utility attachments, the utilities subsequently notify the owner of the attachment. Writing in opposition to this measure, the Coalition of California Utility Employees questions if allowing any possibility of "deemed approved" could "perpetuate the proliferation of serious health and safety violations." Although this committee maintains concerns that mutual agreement between electric utilities and broadband providers may not be reached in some or many circumstances, it may be prudent to address the Coalition of California Utility Employees' concern and provide additional control to utilities for the safety of linemen, whom are employed by the utilities. As such, *this committee recommends affording latitude to utilities to flex or suspend shot clocks in the power design application phase until outstanding safety violations by the applicant are addressed.* However, safety violations can be unequal in severity; they can vary in degree (e.g. an update to a fuse vs. a downed power line) and relevance to a specific area (e.g. Sacramento is a low-wildfire risk area compared to the Sonoma Valley).

5) *Prior legislation.*

AB 965 (Carrillo) requires local governments to utilize batch broadband permit processing. Status: Chapter 553, Statutes of 2023.

AB 50 (Wood) requires the CPUC to determine the criteria for customers to receive timely electricity service when requesting new service connections or upgraded service. Also proposes several policies to address delays in connecting customers to the electrical grid, including improved information sharing with local governments and reporting by IOUs. Status: Chapter 317, Statutes of 2023.

SB 410 (Becker) establishes targets by which electrical utilities are to energize and authorizes such a utility to annually recover the costs of energization from its ratepayers. Status: Chapter 394, Statutes of 2023.

AB 537 (Quirk) updates existing law establishing a timeline and process through which broadband applications will be deemed approved. Status: Chapter 467, Statutes of 2021.

SB 378 (Gonzalez) prohibits local governments from denying microtrenching projects for fiber installation. Status: Chapter 677, Statutes of 2021.

AB 1027 (Buchanan) requires local publicly owned electric utilities to make accommodations on their utility poles or support structures for communications service providers, pursuant to reasonable terms and conditions. Establishes timelines for local

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[15] See each CPUC audit report at https://www.cpuc.ca.gov/regulatory-services/safety/electric-safety-and-reliability-branch/electric-and-cip-audits-introduction/electric-and-communication-facilities-audit-reports.
[16] CPUC; "Electric and CIP Audits"; https://www.cpuc.ca.gov/regulatory-services/safety/electric-safety-and-reliability-branch/electric-and-cip-audits-introduction.

publicly owned electric utilities to respond to such requests. Status: Chapter 580, Statutes of 2011.

6) *Double referral.* This bill is double-referred; upon passage in this Committee, this bill will be referred to the Assembly Committee on Communications and Conveyance.

REGISTERED SUPPORT / OPPOSITION:

Support

CalBroadband
California Apartment Association
California Communications Association
California Retailers Association
California Wireless Association
Crown Castle
CTIA
Los Angeles County Business Federation (BIZFED)
Pasadena Chamber of Commerce
Rural County Representatives of California
San Francisco Chamber of Commerce
San Mateo County Economic Development Association
Silicon Valley Leadership Group
United States Telecom Association Dba Ustelecom – the Broadband Association
Wireless Infrastructure Association

Opposition

California Municipal Utilities Association (CMUA)
California Special Districts Association
City of Rancho Cucamonga
City of Shasta Lake
Coalition of California Utility Employees
Environmental Defense Action Fund
Pacific Gas and Electric Company
San Diego Gas & Electric
Southern California Edison
Southern California Public Power Authority (SCPPA)

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