Application: 17-04-010
(U 39 E)
Exhibit No.:
Date: September 22, 2017
Witness(es): Various

PACIFIC GAS AND ELECTRIC COMPANY

APPLICATION FOR A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY TO OPERATE AS A COMPETITIVE LOCAL EXCHANGE CARRIER

PREPARED TESTIMONY

PACIFIC GAS AND ELECTRIC COMPANY
APPLICATION FOR A CERTIFICATE OF PUBLIC CONVENIENCE
AND NECESSITY TO OPERATE AS A
COMPETITIVE LOCAL EXCHANGE CARRIER
PREPARED TESTIMONY

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A. Introduction

1. In Application No. 17-04-010 (Application), Pacific Gas and Electric Company (PG&E) requests a Certificate of Public Convenience and Necessity (CPCN) from the California Public Utilities Commission (CPUC or Commission) to operate as a Competitive Local Exchange Carrier (CLEC) in the territories served by incumbent Local Exchange Carriers—AT&T California (AT&T); Frontier California, Inc. (Frontier); Consolidated Communications of California Company (Consolidated); and Citizens Telecommunications Company of California (Citizens)—and as a non-dominant interexchange carrier in the entire state of California.
2. PG&E seeks to expand communication services beyond the limited authorized services PG&E offers as Non-Tariffed Products and Services (NTP&S). Currently PG&E offers "dark fiber" services to customers, where PG&E only provides the fiber. The customer is responsible for providing and maintaining the equipment that "lights" the fiber, thereby allowing information to travel on the fiber. In contrast, lit fiber providers provide and maintain both the fiber and the equipment to light the fiber.
3. PG&E would like to offer a more complete menu of services to accommodate the needs of wholesale customers. To offer these services to these customers, PG&E seeks authority to operate as a CLEC. PG&E plans to provide these services to other telecommunications carriers and large enterprises such as business, governmental, and educational enterprises. PG&E does not currently intend to provide residential local exchange services.
4. PG&E proposes that PG&E gas and electric customers and shareholders each receive a 50 percent share of the after-tax net revenues from the CLEC operations. Under this proposal, PG&E shareholders would bear all risk of any revenue shortfall in the event that gross revenues fail to meet or exceed incremental expenses.

5. In the Application, which I verified, PG&E sets forth its qualifications to operate as a CLEC and explains why the Commission should grant PG&E a CPCN.

B. PG&E Operating as a CLEC Would Increase Competition in the Telecom Industry and Benefit PG&E Ratepayers

1. Allowing PG&E to enter the CLEC market would benefit both the communications industry and PG&E's gas and electric ratepayers. The demand for communications service continues to rapidly expand, and the Federal Exchange Commission and the Commission have strongly encouraged additional entrants into the communications industry. With existing expertise in the communications field and a significant fiber network in California, PG&E would increase competition in this market, benefitting users of communication services. Furthermore, as PG&E's new communications services would use available fiber capacity and PG&E's shareholders would bear the costs for the CLEC operations and new investment, PG&E's gas and electric ratepayers would share in the net revenues, risk free.
2. As covered in detail in Chapters 2 and 5 of testimony, PG&E will ensure that the CLEC operations do not detrimentally impact the safety and reliability needs of its gas and electric systems. Any CLEC services using available capacity of fiber installed for gas and electric utility operations will be provided as revocable services under licenses issued under General Order 69C. Under such licenses, encumbered facilities can be reclaimed if needed for gas and electric operations. The stringent processes and procedures of PG&E's Information Technology (IT) Department will ensure that the core gas and electric utility communications needs take precedence. Moreover, the CLEC unit's use of fiber strands separate from those used for the core gas and electric operations will ensure that the safety and security of customer data—both core utility and communications—is protected.
3. As explained in Chapters 2 and 4, PG&E will also ensure that access to PG&E's facilities by the CLEC operation follows the principles of non-discriminatory access required by Commission Decision 98-10-058, known as the Right-of-Way decision (ROW Decision) that apply to all other CLEC entities.

C. Overview of the Testimony

1. This chapter provides an overview of the testimony supporting PG&E's Application for a CPCN to operate as a CLEC.
2. In Chapter 2 of PG&E's Testimony submitted in support of PG&E's Application, PG&E describes its current limited telecommunications services offered as NTP&S, including its current dark fiber offerings. Chapter 2 also provides background information related to existing infrastructure, along with a description of PG&E's gated-implementation approach to the CLEC business. Included in Chapter 2 are discussions of the lit fiber opportunities PG&E believes are available, increased competition in the communications industry due to a PG&E CLEC, and the approaches PG&E will take to ensure nondiscriminatory access.
3. In Chapter 3 of PG&E's Testimony, PG&E describes the revenue sharing mechanism between PG&E ratepayers and shareholders that PG&E proposes and explains why this mechanism will benefit ratepayers. This mechanism provides that all risks of PG&E's CLEC business failing to earn gross revenues greater than or equal to its incremental expenses are carried by PG&E shareholders. In Chapter 3 PG&E also proposes to establish a new communications services balancing account to appropriately track all revenues and costs of the CLEC business.
4. In Chapter 4, PG&E describes the policies and procedures followed by PG&E's Joint Utilities group to process requests for access to PG&E's poles and conduits in compliance with the Commission's Right-of-Way rules. Chapter 4 also describes current terms and conditions for leases and other agreements administered by the Joint Utilities group, as well as proposed enhancements to the procedures.
5. In Chapter 5, PG&E describes its existing IT Department's Telecom Infrastructure and Operations group (with a dedicated and experienced staff of about 300 people) and provides a summary of its historic experiences with installation, operation, and maintenance of fiber infrastructure and its plans for future installations.

D. Changes in Biographical Information for PG&E CLEC Team

In Exhibit D to its Application, PG&E provided the biographies for four key members of its CLEC team with management and technical expertise. The

information was originally provided for Aaron August, David Wright, Tara Agid, and Jay Dore. Jay Dore has since retired from PG&E, and Tara Agid has transitioned to a new role within PG&E. Instead, Margaret Murphy will work on CLEC operations for PG&E. In addition, I will be the primary Officer responsible for PG&E's CLEC operations. For convenience, my biography, along with biographies for Aaron August, David Wright, and Margaret Murphy are included as Attachment A to this testimony.

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CHAPTER 1

ATTACHMENT A

MANAGEMENT AND TECHNICAL PERSONNEL

Deborah T. (Deb) Affonsa, Vice President, Customer Service, PG&E

Deborah T. (Deb) Affonsa is vice president, Customer Service for Pacific Gas and Electric Company. She is responsible for contact center operations, customer service offices, and customer relations. In addition, she oversees customer experience, business customer account management and demand side management sales as well as non-tariffed products and services.

Her previous role at Pacific Gas and Electric Company was Vice President, Corporate Strategy, reporting to the president. In this role, Affonsa was responsible for driving development and implementation of a detailed, integrated, cross-functional five-year forward -looking plan for achieving and maintaining the company's vision of becoming the leading utility in the United States. She also identified emerging trends in the utility industry, recognizing interdependencies, potential synergies and conflicts to assist senior management in prioritizing and making decisions. She also managed the company's benchmarking and continuous improvement efforts.

Prior to joining Pacific Gas and Electric Company, Affonsa held the position of Senior Director, Corporate Strategy and Development, for its holding company, PG&E Corporation. There she was responsible for evaluating potential new business opportunities, managing the corporate-wide strategic planning process and leading teams in the evaluation and development of Utility strategies around key issues (Smart Grid, PV, etc.).

Affonsa has additional experience in the utility industry, serving as Vice President, Sales and Marketing, for Community Energy, Inc., a privately held, start-up, wind energy company. In that role, she established the strategic sales plan, including revenue, earnings and market share goals both regionally and nationally, as well as developing the internal processes and procedures for running a start-up. Affonsa was also Vice President, Sales and Marketing, for Marlin Leasing Corporation, where she developed strategic sales initiatives and oversaw the realignment and restructuring of the National Account's sales team.

Affonsa holds a Bachelor of Science in Business Administration from Villanova University and a Masters in Organizational Dynamics from the University of Pennsylvania. She also successfully participated in the Harvard Business School's Advanced Management Program in 2000.

Aaron August, Director, Business Energy Solutions and New Revenue Development, PG&E

Aaron August is the Director of Business Energy Solutions (BES) and New Revenue Development (NRD) and is responsible for leading field based sales and service teams that include: Small Business/Mid-Markets (SMB), Large Enterprise Accounts (LEA) and Business Customer Success organizations. He is chartered with strategically leading scalable service processes and selling advance integrated demand side management and energy efficiency solutions for PG&E's non-residential customer base.

In 2016 August led PG&E's strategic realignment of the sales and service functions; centered on the creation of business channels, differentiated by customer centered segments. His leadership spans from the delivery of value-added programs and services to all non-residential customers to the identification and implementation of service processes designed to enhance the overall experience.

August has successfully designed and implemented enterprise wide strategies that have reduced operating costs, improved productivity, increased customer satisfaction and delivered on energy efficiency sales objectives.

He is a results-proven leadership professional with emphasis in running sales and operational functions, teams, and departments in B2C and B2B environments. Prior to working at PG&E, August was the Sales Director of Advanced Products and Director of Business Operations at Comcast Cable Communications. There he led field based sales teams focusing on internet, voice and IP equipment solutions to Mid-Market and Enterprise level customers, in addition to the deployment of emerging products. His tenure at Comcast included leadership roles within Sales Operations, Contact Center Operations, Finance, Service Delivery and overall Sales Management.

August is a graduate of California State University East Bay, and attended executive education programs at Stanford University and the University of Idaho, with over 15 years of related experience.

Margaret Murphy, Director, New Revenue Development Business Operations and Strategy PG&E

Margaret Murphy is the Director of Business Operations and Strategy within New Revenue Development (NRD) and is responsible for financial forecasting and reporting, analytics, compliance and risk, regulatory support, operations, and strategy for the New Revenue Development group. She and her team are charged with providing the analytics and financial discipline to effectively manage the non-tariffed products and services that leverage PG&E's excess capacity for the benefit of PG&E's customers and shareholders, and to operationalize potential future opportunities.

During her nine years at PG&E Murphy has held a variety of roles in Finance, Operations, and Strategy. In her previous position leading PG&E Corporate Strategy Integration, Murphy worked closely with senior leadership and groups across the company, her team was responsible for ensuring that strategic issues were effectively integrated into the company's financial and operational planning process to drive improvements for PG&E's customers and other stakeholders. Murphy's prior corporate experience includes several years overseeing PG&E's relationships with its institutional shareholders as Director of Investor Relations during a period of significant change for the company.

Prior to working at PG&E Murphy worked in the public policy arena, as a policy analyst for the Sunset Advisory Commission of the Texas Legislature, and as a legislative analyst for a government relations firm in the Washington, DC area.

Murphy holds a Bachelor of Arts in Political Science from Vanderbilt University and a Master's of Business Administration from the Tuck School of Business at Dartmouth.

David Wright, Senior Director, IT Solutions Delivery, PG&E

David Wright is the Senior Director of IT Solutions Delivery and is responsible for delivering technical solutions programs within IT and business units. His broad executive management portfolio includes span and control for projects ranging from outside plant (fiber, microwave backbone) construction, cloud platform enablement to business and operational system.

He leads both engineering and program delivery teams that are complemented by process quality management and assurance teams, with a major focus on change leadership and employee and customer experience transformation. Wright has successfully created enterprise-wide strategies that have significantly improved utility asset reliability, business critical systems availability and improved utility operations affordability.

He is an effective business professional focused on solutions strategy and business integration, change leadership, customer experience transformation and delivery principles focused on continuous improvement, quality at source, and other Lean processes.

Wright has 16 years of IT and operations leadership experience. Prior to working at PG&E, Wright was the Senior Director, Infrastructure Services and Director of Network Engineering at Comcast Cable Communications and was responsible for architecture, engineering and operations for the Central US enterprise network and service provider support systems.

Wright attended Royal School of Military Engineering, United Kingdom and studied Civil and Military Construction, as well as the Stanford Management Program.

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CHAPTER 2

BUSINESS PLAN

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A. PG&E's Fiber Business

1. Pacific Gas and Electric Company (PG&E, the Company, or the Utility) owns and operates an extensive network of telecommunications facilities in the course of performing its core gas and electric utility operations. This network provides PG&E with a foundation for communications and information sharing: between employees and internal organizations; between the Company and customers; and with regulators, suppliers, and other utilities. Telecommunications infrastructure is a foundational need and accelerator of efficiencies when paired with other key technologies to enable the functions of the smart grid. These business-as-usual functional needs require different bandwidth, traffic, availability, performance, security, and communications protocols to operate a safe and reliable energy network. The PG&E service territory is broad and vast, encompassing both urban and rural markets with different geographical terrains. Telecommunication transport networks support both fixed and mobile voice and data communications for operational needs that include (but are not limited to) grid and gas system monitoring, System Control and Data Acquisition (SCADA), and remote management of substations across the gas and electric transmission and distribution systems.
2. PG&E's telecommunications network includes a Company-operated network of approximately 4,683 miles of fiber optic cables. Of the 4,683 miles of fiber optic cable, PG&E owns and includes in rates approximately 838 miles. This includes new construction by PG&E of fiber facilities in or on PG&E infrastructure, and the installation of the electronic equipment required to light the fiber and make it useful for operations. Approximately 1,803 of the 4,683 miles of fiber cable were installed in PG&E infrastructure by third parties with PG&E taking bare legal title to the fiber cable while giving the third party an irrevocable right to use some of the optical fibers within the cable (the terms on these cable routes vary according to negotiated agreements). These facilities were installed under agreements filed with the

California Public Utilities Commission (CPUC or Commission) under Public Utilities Code (Pub. Util. Code) Section 851. A final category of fiber in PG&E service comes from leasing or executing "fiber swaps" between PG&E and other fiber owners. This type of arrangement is made when two fiber owners agree to exchange access to excess fiber along routes where one party needs access and the other party has available fiber. In this last category, which represents approximately 2,042 of the 4,683 miles of cable, third parties own the cables. These cables are not installed in or on PG&E infrastructure, and PG&E has access to use of certain fibers through contractual arrangements. The cost to fund the work required to connect fiber appropriately for PG&E use for the last two categories is included in rates. This work consisted of installing the additional fiber necessary to connect PG&E's network to the other fiber and purchasing and installing the electronic equipment required to light the fiber and make it useful for operations.

3. Only a portion of the approximately 4,683 miles of fiber optic cable is available for unrestricted use by PG&E. A brief summary of cable miles and fiber miles (cable miles multiplied by number of strands in each section of cable) available for PG&E's unrestricted use is shown in Table 2-1 below. A summary of rate case (Federal Energy Regulatory Commission's Transmission Owner rate case and CPUC-jurisdictional General Rate Case) references to fiber facilities for the past five years is included as Attachment A to this testimony. Note that some existing portions of PG&E fiber are installed in the electric supply space (power zone) on distribution poles and above conductor (with or as a static line) on transmission structures. Because of difficulties in access for maintenance and repair, PG&E's telecommunications unit does not intend to install fiber in the power zone in the future.
4. PG&E presently offers limited telecommunications related products and services to third parties in the following categories (these services are separate from the Right-of-Way (ROW) access permitted under Decision (D.) 98-10-058, as described in Chapter 4):
    a. Under Non-Tariffed Products and Services (NTP&S) Category N.E.1, PG&E offers facility joint use arrangements. These primarily consist of

joint owner and tenant uses of distribution facilities to support communication equipment, conductors, and cables in addition to electric supply facilities.

b. Under licenses pursuant to CPUC General Order (GO) 69C, PG&E offers licensed attachments of antennas and communications equipment to distribution and street light poles.

c. When granted authority by the CPUC under Pub. Util. Code Section 851, PG&E provides use of underground conduit (distribution facilities) and overhead facilities to third parties for placement of fiber optic cable.

d. Under licenses pursuant to CPUC GO 69C, PG&E offers licensed use of PG&E-owned fiber optic cable ("dark fiber") not otherwise required for PG&E utility operations to third-party communication services providers. Dark fiber is fiber optic cable that is not equipped with the electronic equipment required to enable the cable to transmit data.

e. Under licenses pursuant to CPUC GO 69C, PG&E offers licensed access to PG&E-owned buildings, structures, transmission towers, substation facilities, and fee properties to third-party communication services providers for the installation of communication equipment and antennas.

TABLE 2-1
SUMMARY OF FIBER OPTIC CABLE AVAILABLE FOR UNRESTRICTED USE BY PG&E

Line No.	Total Cable Miles	Available Unrestricted Cable Miles	Available Unrestricted Fiber Miles[(a)]
1	4,683	1,020	4,839

(a) Fiber Miles is Cable Miles multiplied by the number of fiber strands.

B. Competitive Local Exchange Carrier Business Plan

1. PG&E currently works closely with, and provides limited services and access to facilities to, telecommunication companies while providing NTP&S. As a result, PG&E has observed developing needs in the communications market and has perceived the potential to expand PG&E's

service offerings beyond the NTP&S catalog. PG&E began the process of evaluating a possible entry into the market as a Competitive Local Exchange Carrier (CLEC) by looking at the significant assets available, including the potential of excess capacity, which creates an opportunity to provide benefits to PG&E's ratepayers and shareholders.

2. In the course of evaluating the opportunity to enter the CLEC market, PG&E has not investigated specific offerings or evaluated its ability to meet the needs of specific communication companies. Until individual opportunities can be fully evaluated, there is a risk that the market may not be interested in PG&E's CLEC offerings. PG&E deliberately adopted this approach to minimize its exposure from evaluating the potential new business. Communication technology and communication companies' needs change so rapidly that desired services or products available today may not be useful or desired in the future. As PG&E needs approvals from multiple regulatory agencies, and the approval process can be time consuming and is not guaranteed, economic and business analyses performed prior to approval may be outdated by the time the business is authorized to commence. Further, PG&E recognizes that even with possible initial success, changes in the communication industry may cause a situation where future objective evaluation shows that continuing to offer CLEC services no longer makes business sense. With these market realities in mind, PG&E has elected to approach the business opportunity in a phased approach, as outlined below.

3. PG&E decided to take a measured approach in implementation of the proposed CLEC by breaking the process into "stage gates." This gated implementation allows PG&E to suspend the process at various points in the approval and implementation process in order to reassess the risks and benefits of the proposed business. Since PG&E has not engaged in direct discussions or negotiations related to providing CLEC services with any communication companies, this approach provides off-ramps in the event of insufficient interest in engaging PG&E's CLEC services. This approach allows PG&E to make a fully informed, rational decision before investing significant resources in launching a new business unit. Specifically, the stage gate points being used by PG&E are as follows:

a. Seek and obtain approval of a Certificate of Public Convenience and Necessity (CPCN) to operate as a CLEC from the CPUC;
b. Seek and obtain authority from the Federal Communications Commission to offer telecommunications services under Section 214 of the Federal Communications Act, 42 U.S.C. § 214;
c. Ensure any necessary local permits are in place;
d. Develop formal sales plan and begin assessment of business needs for staffing, increasing as necessary for initial service launch;
e. Launch commercial service offerings and begin contacts with potential customers; and
f. Assess CLEC business performance periodically to evaluate whether operations should continue.

4. As explained in Chapter 5 of PG&E's testimony, PG&E's Information Technology (IT) Department has extensive experience with telecom infrastructure and operations. PG&E resources include appropriate specialists who can quickly respond to and resolve operational issues with fiber systems, especially when restoring telecommunication equipment installed in/on electric distribution and transmission infrastructure. With this existing infrastructure and available dedicated staffing, PG&E is uniquely positioned to enter into the competitive telecommunications services market in California.
5. If granted CLEC authority, PG&E proposes to offer "lit fiber" and other services (as market demand and availability of PG&E facilities allows) to third-party communication services providers, communication companies, and large institutional (wholesale) customers that need point-to-point services along routes where PG&E can make lit fiber available. Lit fiber is fiber optic cable that has electronic equipment (such as transmitters and regenerators) connected to it to "light" the fiber, enabling the transmission of data. In providing lit fiber, PG&E would be the service provider, owning and maintaining the equipment to light the fiber. The customers would be free of the maintenance and operation of the equipment. This contrasts to the dark fiber services that PG&E currently provides where the customers are responsible for providing and maintaining the equipment that lights the fiber.

At this stage of development, PG&E's proposed lit fiber offerings would have the following characteristics:

a. PG&E proposes to offer new lit fiber communication services at the wholesale level to communication services providers and other large business customers, not at a retail level to residential consumers.

b. PG&E has not yet entered into any negotiation or discussions with third parties regarding provision of lit fiber or other communication services. PG&E intends to evaluate its capacity of resources and facilities, potentially with a regional focus, and discuss opportunities to match available resources to third-party needs.

c. One opportunity that PG&E will evaluate is providing lit fiber "backhaul" services to third-party communication services providers to connect their core (backbone) networks to individual customer end-users or smaller access networks at the periphery of their larger networks. Increased use of consumer mobile communication and data devices is driving the proliferation of new small cell technology as communication services providers deploy increasing numbers of small antennas and related equipment in access networks. These access networks need to communicate with the core network of the service provider. The communication link between the service provider's core network and the access networks is the "backhaul" function.

5. PG&E plans to initiate contact with individual communication services providers or other large business customers to determine if there is sufficient intersection between their needs and available PG&E resources to justify entering into bilateral contracts with them.

6. PG&E plans to offer the new services on a non-tariffed basis to be flexible and responsive to customer needs. When services are provided under a tariff, both PG&E and customers benefit from clearly defined rules and exact specifications of what service will be provided and clearly defined governance of cost, construction, and ongoing maintenance responsibilities for each party. However, under a tariffed approach, these rules and specifications are defined in advance, and modifications can be slow and unwieldy. In contrast, by offering services on a non-tariffed basis, PG&E and its customers will retain the benefit of clearly defined terms through

individually negotiated agreements, but have the added advantage of being able to execute agreements to meet individual customer's individual needs. This allows for a more targeted approval process for each modification, allowing PG&E to begin the work necessary to provide services more quickly. To ensure that PG&E is able to participate fully in the competitive telecommunications services market in California, with agreements negotiated to meet individual customers' needs with specific pricing based on particular contract terms as well as PG&E asset characteristics, PG&E's CLEC should be permitted to keep the contracts or terms of sale, lease or other agreements related to the telecommunications products or services provided under the CPCN confidential. Otherwise PG&E's CLEC unit would be at an unfair competitive disadvantage compared to other CLECs that are not obligated to disclose the terms of their contracts.

7. It is appropriate for PG&E to offer CLEC services (as described above) on a non-tariffed basis for the following reasons:
   a. Communication industry needs are changing rapidly, and it is beneficial to be able to meet newly identified needs of communication services providers as they develop. Flexibility to negotiate agreements and provide services will ensure the best terms for PG&E and other parties.
   b. PG&E has not engaged in specific discussions of needs or negotiations to provide new services with any third-party communication services provider, so no specific service or pricing options are available. Since the needs of the communication services providers that offer retail services are changing rapidly, service offerings will also likely evolve over the coming years.
   c. PG&E already has a staff and support structure in place to administer other communications services that can support the launch of non-tariffed CLEC services. Requiring a completely new tariffed service structure independent of the existing gas and electric organizations that provide tariffed services would require developing a new organization to develop, administer, and implement the new tariff, resulting in higher costs, a longer lead time, and lower revenues for customers.
   d. PG&E fully understands and will comply with the requirement to comply with the consumer protection rules identified in D.98-08-031.

C. Effects on Competition in the Communications Industry

1. Commission approval of PG&E's Application will enhance competition by allowing a new facilities-based entity to enter the market and thereby advance the pro-competition goals of both the Commission and the 1996 Telecommunications Act. Allowing a new competitor with a large existing network already deployed in northern California to enter the market will result in the timely and efficient deployment of new service offerings at competitive prices. With more telecommunications suppliers serving wholesale customers, industry players must improve their services to be the selected provider. As noted in a 2017 external Telecommunications Industry Outlook, "Telecoms will not be able to achieve rapid growth without upgrading their network infrastructures….In addition, carriers will want to think about ways to rationalize networks and offer improved and expanded services to customers—through the use of small cells, network densification (adding more cells to serve more customers), installing more fiber infrastructure, and improving spectrum efficiency." A 2017 Telecommunication Trends report notes "Investments in telecom network improvements—fiber and 5G upgrades or other networking technologies—are critical to preparing for more dynamic, competitive environments." Offering lit fiber services will provide access to a broader array of entities, supporting and enabling the growth of dynamic, competitive environments. The recent wave of mergers and acquisitions within the telecommunications industry—reducing competition—further increases the importance of PG&E entering the market to increase the number of options available to customers.

D. Non-Discriminatory Access

1. PG&E supports the Commission's mandate of non-discriminatory access. PG&E's CLEC unit will ensure non-discriminatory access by following the same guiding principles that apply to all market participants seeking access to utility facilities. In Chapter 4 of the supporting testimony, PG&E's Joint Utilities team describes the processes it applies in evaluating applications for access to attach communications facilities to PG&E's infrastructure under the ROW Decisions, beginning with D.98-10-058. After PG&E receives authorization to operate as a CLEC, PG&E's Joint Utilities team will continue

to act as the clearinghouse for all complete requests for access from all CLECs, including PG&E's CLEC unit, and will apply consistent treatment to all CLECs in awarding access to requested facilities. Consistent with all other CLECs, PG&E's CLEC unit will submit attachment requests and route applications to PG&E's Joint Utilities team to ensure there is available capacity and to reserve that capacity for a specific project. PG&E's CLEC unit would also request access to assets such as those jointly owned under the Northern California Joint Pole Association Agreement consistent with the process required of other CLECs. PG&E's CLEC unit will seek access to utility facilities only when that access would serve a specific purpose, such as the needs of a customer or the development of a specific product route with defined characteristics.

E. Impacts on Core Gas and Electric Business

1. As PG&E already offers telecommunication services, granting this Application will not divert PG&E management resources or attention from the core gas and electric business. PG&E proposes to operate the CLEC unit as part of the New Revenue Development (NRD) Department, in the Customer Care and Corporate Real Estate (CRE) organization, which is responsible for administration of other telecommunications services offered by PG&E.
2. PG&E, through its NRD Department within its Customer Care and CRE organization, administers an existing catalog of NTP&S along with services provided under permissions granted under approvals sought by PG&E in Pub. Util. Code 851 filings for provision of dark fiber services to third-party communication services providers. The existing NRD Department will administer and manage the business relationships and contracts with communication companies that request services, with technical support and assistance as required from PG&E's IT organization. As explained in Chapter 5, PG&E's IT organization has extensive experience in installing, monitoring, and maintaining an extensive telecommunications network throughout PG&E's territory, and this group stands ready to support the NRD organization as required for successful launch and operation as a CLEC, as they have successfully supported PG&E's NRD organization in offering NTP&S for more than three decades.

F. Franchise Agreements

1. I am not a lawyer and do not offer a legal opinion, but I am informed and believe that PG&E would not rely upon its existing gas and electric franchise agreements in order to install new fiber as a CLEC. Upon issuance of a CPCN to operate as a CLEC, PG&E would have the right under California Pub. Util. Code Section 7901 to occupy public ROW as a provider of telecommunications services. Section 7901 confers on telephone companies the right to operate and maintain communication lines and equipment within public ROW without the necessity of obtaining individual franchises from local governments for that purpose. Just as any other CLEC accessing the excess capacity on PG&E's poles or conduits to string fiber under the Commission's ROW Decisions, Section 7901 gives PG&E authority to string additional fiber as a CLEC.
2. The City and County of San Francisco (CCSF) adopted a Resolution in 1997 that acknowledges that PG&E's communication circuits are "used and useful" to facilitate telecommunications in connection with its franchised activities of transmission, distribution, and supply of gas and electricity within the City, and PG&E may also allow third parties to use excess capacity on such communications circuits:

> …That PG&E may, consistent with the Franchises, lease or license unused capacity in properly constructed, laid and used communications circuits, including fiber optic facilities, to third parties . . . . (so long as such third parties . . . have obtained a valid franchise, encroachment or other legal authority to occupy the public streets and rights-of-way of the City for such purpose as the communications circuits, including fiber optic facilities, are to be used). . . . (CCSF Resolution No. 693-97 at p. 3 (June 2, 1997)).

3. There is no conflict between PG&E's use of public ROW under its electric and gas franchises and PG&E's proposed CLEC operations. To the extent PG&E's proposed CLEC unit seeks to use fiber originally installed for gas and electric utility operations, it will seek access only to excess capacity on that fiber, and will have independent franchise rights under Section 7901.

G. Affiliate Transactions Rules

1. I am not a lawyer and do not offer a legal opinion, but I am informed and believe that the CPUC's Affiliate Transaction Rules will not apply separately to PG&E's CLEC operations. PG&E will operate the CLEC unit as a line of

business (LOB) within the Utility, not as a separate subsidiary or affiliate of the Utility, the parent corporation, or any other affiliate. The Affiliate Transaction Rules apply to PG&E as a whole, and they will apply to PG&E's CLEC business as they would to any LOB within PG&E. PG&E has existing internal procedures to ensure that it follows applicable Affiliate Transaction Rules, which the new CLEC business will follow.

H. Conclusion

1. In the application (Application 17-04-010, filed April 6, 2017), as attested to by Deborah Affonsa, an officer of Pacific Gas and Electric Company, PG&E has satisfied the statutory and other requirements for being granted a Certificate of Public Convenience and Necessity ("CPCN"). The Application is incorporated by reference in this testimony for all matters not addressed by Chapters 3, 4, or 5 of the testimony in support of the Application.
2. PG&E requests that the Commission grant PG&E authority to operate as a competitive local exchange carrier ("CLEC" or "CLC") in the territories served by incumbent LECs, AT&T California ("AT&T"), Frontier California, Inc. ("Frontier"), Consolidated Communications of California Company ("Consolidated"), and Citizens Telecommunications Company of California ("Citizens") and grant PG&E authority to operate as a non-dominant interexchange carrier in the entire state of California.

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CHAPTER 2

ATTACHMENT A

SUMMARY OF PG&E RATE CASE TESTIMONY

Summary of PG&E Rate Case Testimony

CASE	KEY TERM	EXHIBIT	CHAPTER	PAGE	LINES	Extracted Text
2014 GRC	FIBER	4	5	29	Lines 2 - 7	PG&E operates and maintains an extensive technology footprint supporting more than 9.4 million customers, tens of thousands of devices such as computers, telephones and cellular devices, more than 1,400 business applications and an extensive network infrastructure incorporating more than 3,000 miles of fiber.
2014 GRC	FIBER	7	8	13	Lines 16-20	PG&E operates and maintains an extensive technology footprint supporting more than 9.4 million customers, tens of thousands of devices such as computers, telephones and cellular devices, more than 1,400 business applications and an extensive network infrastructure incorporating more than 3,000 miles of fiber.
2014 GRC	FIBER	7	8	33	Lines 1 - 9	Telecommunications and Network – The Telecommunications and Network group maintains the data transmission network, including both microwave and fiber transmission systems, information security firewalls, PG&E's radio systems, private voice networks, the voicemail system, customer contact centers, call logging systems,PG&E's common facilities (i.e., communication rooms, mountain tops, communication buildings, antenna towers, generators, cable plants, high-voltage protection and battery plants), and VoIP systems.
2014 GRC	FIBER	7	8	33	Lines 18 - 22	This includes desktop and laptop computers, mobile and handheld computing devices, radios, pagers, all network telecommunications equipment, 3,000 miles of fiber, 448 Microwave Terminals, and SCADA and SmartMeter™ communications equipment.
2014 GRC	FIBER	7	8	65	Lines 21-25	To develop the JE, the team estimates costs for internal services, materials, contracts, burdens, capital administrative and general (A&G) overheads, escalation, and other cost components for each type of work (i.e., fiber, cabling, microwave radio, etc.) based on the approved project scope.
2017 GRC	FIBER	4	6	41	FTN 40	Other activities performed in MWCs KC and 2C include: Network Related EC Notifications (KC); Network Transformer Oil Replacement (KC); Network Vault Cleanup (KC); Network Transformer Oil Sampling (KC); Network Protector Maintenance (KC); Fiber Optic Repair – SF (KC); Fiber Optics/SCADA – Existing System Capital (2C); Condition Based Maintenance (CBM) Project (2C). These activities are discussed in the workpapers for MWCs KC and 2C. See WP 6-14 and WP 6-32, Exhibit (PG&E-4).
2017 GRC	FIBER	7	9	14	TABLE 9-3	Data Transport Systems: Fiber optic connections, cables, and associated electronics (including software), multiplexor equipment used to aggregate traffic, and point-to-point microwave communication systems and associated licensed RF spectrum
2017 GRC	FIBER	7	9	36	FTN 16	Control components of the WAN are complemented by PG&E's Transport Network, whose function is to connect sites together through the use of fiber optic cables, microwave transmitters, and copper cables. Due to the scale of PG&E's network, additional enhancements to PG&E's Transport Network comprise a second initiative, discussed below.
2017 GRC	FIBER	7	9	37	Lines 21-23	This initiative also includes network transport capacity increases at the needed locations through the use of Fiber Optics and leased capacity from Comcast and AT&T.

2017 GRC	FIBER	7	9	37-38	p. 37 Line 34 - p 38 Line 3	The initiative will upgrade WAN switches and routers and expand microwave, fiber optics, and lease line connections meet business automation and IT management requirements.
2017 GRC	FIBER	7	9	38	Lines 16 - 18	Examples of alternatives include second fiber optic or microwave feeds or backup connections to satellite or alternate carrier services.
2017 GRC	FIBER	7	9	39	Lines 3 - 6	It is comprised of fiber optic cables, microwave transmitters, leased lines from third party carriers, and radio frequency technology that provide connectivity between sites across the WAN.
2017 GRC	FIBER	7	9	40	Lines 6 - 12	Continue to build out fiber optic connectivity and carrier services to additional PG&E substations, offices, and other locations that are currently underserved by the existing telecommunications network. By expanding fiber optic connectivity as part of Electric Operations' electric cable re-conductoring efforts, PG&E can gain economies of scale and minimize the cost to deploy.
2017 GRC	FIBER	7	9	40	Lines 15 - 19	Examples include the creation of fiber "rings" that increase network resiliency at LOB sites and provide assurance that field devices are functioning properly, in turn assuring optimal system operations and public safety.
2017 GRC	FIBER	7	9	41	Lines 11 - 14	Field Area Network technology is, as the name implies, a field technology that is built closest to the devices and has the interfaces to offload the data to the WAN and Transport Networks at fiber optic and microwave hubs.
TO-16	FIBER			164	Lines 19 - 22	On July 1, 1992, PG&E entered into an agreement with MCI allowing MCI to attach fiber optic cables to PG&E electric transmission facilities in exchange for PG&E's utilization of telecommunications capacity on MCI's network.
TO-16	FIBER			226	Lines 7 - 16	Funds will be used to implement security mitigation measures such as: creating buffer zones; restricting sight into substations; installing protective barriers for critical substation components, installing vehicle barriers, installing new detection technology (including thermal imaging cameras/motion alarm sensors, additional fixed cameras focusing outward, and gunshot detection systems), restricting access to communication vaults and fiber, improving lighting positioning, and enhancing the security monitoring center. These mitigation measures were recommended by FERC to the electric industry.
TO-17	FIBER			158	Lines 4 - 7	On July 1, 1992, PG&E entered into an agreement with MCI allowing MCI to attach fiber optic cables to PG&E ET facilities in exchange for PG&E's utilization of telecommunications capacity on MCI's network.
TO-18	FIBER			145	Lines 19 - 22	On July 1, 1992, PG&E entered into an agreement with MCI allowing MCI to attach fiber optic cables to PG&E ET facilities in exchange for PG&E's utilization of telecommunications capacity on MCI's network.

PACIFIC GAS AND ELECTRIC COMPANY

CHAPTER 3

REVENUE SHARING

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REVENUE SHARING

A. Introduction

Pacific Gas and Electric Company (PG&E) proposes that ratepayers and shareholders each receive a 50 percent share of the annual after-tax net revenues from the PG&E Competitive Local Exchange Carrier (CLEC) ("CLEC Business"), if the after-tax net revenues are greater than zero. If the CLEC Business fails to earn gross revenues greater than or equal to its incremental expenses, PG&E proposes that shareholders bear 100 percent of the shortfall. Thus, ratepayers will not be exposed to any "downside" risk from the CLEC Business.

B. Definition of Sharing Mechanism

PG&E defines after-tax net revenues as the annual gross revenues generated by its CLEC Business, minus the annual incremental expenses associated with the CLEC Business (including capital related expenses such as depreciation expense and interest expense), minus income taxes on the CLEC Business net revenues. The relationship can be expressed in the following formulae:[1]

After Tax Net Revenue =	Gross Revenues minus Incremental CLEC Expenses minus Income Taxes
Gross Revenues =	Revenues generated by the CLEC Business
Incremental Expenses =	Expenses directly attributable to the CLEC Business
Income Taxes =	Income taxes on net shareholder income from the CLEC Business

C. PG&E's Proposed Revenue Sharing Mechanism Maximizes Ratepayer Benefits

PG&E's proposed revenue sharing mechanism is reasonable and provides a number of benefits to ratepayers. First, using net revenue as a sharing basis

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[1] The CLEC after-tax net revenue is calculated prior to any net revenue sharing with ratepayers. Income taxes are calculated under as they normally would be for financial reporting and under generally accepted accounting principles (GAAP). The income tax benefit created by the payment to ratepayers of their share is also shared according to the same sharing percentage, 50 percent.

maximizes the opportunities to achieve positive net benefits, thus maximizing the potential for ratepayer benefits. This occurs because all CLEC investment opportunities that have an expected after-tax net present value of cash flows that is greater than or equal to zero after accounting for revenue sharing may be viable investments. Other sharing mechanisms, such as those based on gross revenue as discussed below, may offer fewer viable investment opportunities.

Second, ratepayers bear no risk, because positive benefits are shared with ratepayers, but only shareholders bear the risk of net benefits less than zero.

Third, the sharing formula is simple and easy to understand and administer. A similar sharing mechanism has been used successfully for PG&E's Mover Services Program since the program's inception in 2008.

And last, it is consistent with previous Commission decisions, as detailed below.

D. Sharing Based on After-Tax Net Revenues Will Provide Greater Ratepayer Benefits Relative to Sharing Based on Gross Revenues

An alternative revenue sharing mechanism is to assign a share, e.g., 10 percent, of the gross CLEC revenue, to ratepayers, before subtracting any costs incurred to generate the gross revenue. PG&E believes such a mechanism is inferior to PG&E's net revenue sharing proposal due to the low margin nature of the CLEC Business, and would result in fewer ratepayer benefits.

The low margin nature of the CLEC Business means that PG&E is at greater risk to earn a return on its incremental CLEC capital relative to a high margin business. By definition, in a high margin business revenues or expenses can vary materially while leaving an adequate net margin. But, in a low margin business, a small increase in expenses or a small decrease in revenue can result in earning a return on equity less than that needed to fully compensate for risk, and can result in losses rather than earnings. An after-tax net revenue-sharing mechanism gives the PG&E an incentive to offer CLEC products and services that over time are expected to earn a return adequate for the risk (such products and services would have a positive net present value, meaning the discounted future cash flows from the business are equal to or greater than zero). This is the economically efficient result, since a positive Net Present Value (NPV) of future net revenues implies that the value of the CLEC

products and services to the consumer exceeds the costs of providing them. In contrast, in some instances, a gross revenue-sharing mechanism would either be too risky, or would have an expected return less than the cost of capital, giving PG&E no incentive to provide a particular CLEC product or service, even when doing so could, under a net revenue sharing mechanism, result in a benefit to ratepayers.

Previous Commission decisions have allowed net as well as gross revenue sharing, such as D.99-04-021 in which the commission approved a net revenue sharing mechanism for new non-tariffed products and services; the Edison Non-Generation PBR decision, D.96-09-092 at 41-44 and Conclusions of Law 8 and 9; the ratemaking treatment for Edison's "flexible options," D.96 08-025 at 58 and Conclusion of Law 11; and the "New Regulatory Framework" for telecommunications carriers adopted in D.89-10-031.

The following example demonstrates why a gross revenue-sharing mechanism may not give PG&E an incentive to provide a product or service, even when doing so would result in a positive NPV of future net revenues. Assume that PG&E is considering offering a CLEC service that it anticipates will produce gross revenue of $100 and incur incremental expense of $90, with resulting positive net revenue of $10. The resulting 10 percent net revenue margin is consistent with the high range of net margins experienced by typical telecom companies, as shown in Table 1 of Attachment A. The decision whether or not to invest in this service offering will depend on the revenue-sharing mechanism that would apply.

Case 1: Gross revenue Sharing – 10 Percent Ratepayers/90 Percent Shareholders

Under this sharing mechanism, shareholders would anticipate zero gain, and therefore would not invest in this service offering.

Shareholder Gain/(Loss) Calculation	
Gross Revenue	100.00
Less: Ratepayer Share	(10.00)
Shareholder Share	90.00
Less: Shareholder-funded Expense	(90.00)
Shareholder Gain/(Loss)	**0.00**

Result: PG&E will not make an investment, hence ratepayers receive no benefit.

Case 2: After-tax Net Revenue Sharing – 50 Percent Ratepayers/50 Percent Shareholders

In contrast, under this sharing mechanism, ratepayers and shareholders would each expect to gain $3.72 (assuming a 40.75 percent income tax rate), and therefore shareholders would invest in this service offering.

Shareholder Gain/(Loss) Calculation

Gross Revenue	100.00
Shareholder-funded Expense	(90.00)
Pre-tax Net Revenue	10.00
Less: Ratepayer Share	(3.72)
Shareholder Pre-tax Share	6.28
Income Tax	(2.56)
Shareholder Gain/(Loss)	**3.72**

Result: PG&E will make an investment, and ratepayers get $3.72.

In both cases, the gross revenue and incremental expense are the same—only the revenue-sharing mechanism differs. The gross-revenue sharing mechanism may fail to provide sufficient incentive to bring a valuable product or service to market, even though net revenue could be positive. In contrast, a net revenue sharing mechanism always gives shareholders the appropriate incentive to provide a service whenever expected net revenues are positive, benefitting ratepayers.

E. Illustrative CLEC Gross and Net Revenues

The following table shows possible gross and net revenues for the first five years of PG&E's CLEC Business.

($ Millions)	Year 1	Year 2	Year 3	Year 4	Year 5
Gross Revenue	–	1	4	12	23
Net Revenue	(2)	(3)	(3)	1	7

The Gross Revenue is based on the assumption that PG&E's market share could grow from 0 percent to 2 percent of the total, projected market revenue over four years, assuming the first year is a "startup" year in which no revenues are generated. The Net Revenue was estimated by assuming amounts of capital and expense that would be needed to start up and grow the business as market share increases. These numbers are illustrative and are not based on a

business plan, and will very likely change materially in the event PG&E's CLEC application is approved and a business plan is developed.

F. Incremental Costs Will Be Paid by the CLEC Business

PG&E proposes that all incremental costs of developing, marketing, and offering the telecommunications services to be provided under its CLEC business be paid by the CLEC business. Incremental costs include both recurring and non-recurring costs attributable to the products and services of the CLEC business, such as systems development and maintenance costs. To the extent the CLEC business causes increases in other costs, then they will be tracked and included as incremental costs.

G. Non-Incremental Costs Will Not Be Allocated to the CLEC Business

Non-incremental costs (such as existing utility asset costs and Administrative and General costs) will not be allocated to the CLEC Business, because these non-incremental costs will not increase as a result of the CLEC business. Ratepayers will bear the same amount of non-incremental costs—neither more nor less—as they would without the CLEC business.

H. Tracking of Costs and Revenues

To ensure that rates paid by its core gas and electric customers do not fund additional operations associated with the offering of the CLEC business, PG&E will maintain a separate budget with separate accounts for its CLEC business. PG&E will track and account for existing assets and new assets as set forth below, and its books and records will be kept in compliance with GAAP and the FERC Uniform System of Accounts.

In order to appropriately track the revenues and costs (both expenses and capital expenditures) of the CLEC business, PG&E proposes to establish a new CLEC business balancing account. All expenses, capital expenditures, and revenues will be charged to unique order numbers created for and associated exclusively with the separately established CLEC business balancing account. The established CLEC balancing account will be identified by a unique Receiver Cost Center (RCC). The Energy Accounting team will extract monthly reports by the RCC, which are used in tracking the 50 percent after-tax net revenue computation (discussed below).

Orders will be created with categorizations of revenue, expense, or capital and will contain specified order settlements. All such orders will be monitored and reviewed on a regular basis to ensure actual costs are captured in the appropriate intended orders and settlements for accurate and separate reporting of the CLEC business. Internal controls will be established by the Business Finance Department to ensure costs for the CLEC business are accounted for separately. The controls for the CLEC business will align with the internal review and reporting already in place for other lines of business within PG&E. Such internal controls will ensure that budget owners, together with Business Finance, thoroughly review all costs on a monthly basis for both accuracy and appropriateness before any reporting is produced. This monthly review will ensure that all costs reported out will be solely related to the CLEC business.

The CLEC business balancing account will track the ratepayer share of after-tax net revenues from the CLEC business for annual disbursement to ratepayers of any positive balances calculated using the 50/50 after-tax net revenue sharing formula described above.

The CLEC business after-tax net revenues will be accounted for as follows: Actual gross revenues, net of actual incremental expenses and calculated income taxes, and prior to any sharing with ratepayers, will be split 50/50 between ratepayers and shareholders. The costs associated with the CLEC business will include expenses such as, but not limited to, Information Technology (IT) operations and maintenance expense, sales expense, general and administrative expense, depreciation expense, and interest expense. Costs will also include any capital expenditures such as, but not limited to, any necessary customer premises IT equipment and any construction necessary to serve a given customer. For instance, if PG&E is required to install new fiber optic cables to serve its new CLEC customers, the capital and operation and maintenance costs, such as engineering, construction, installation, operations, and maintenance of these cables will be allocated to PG&E's shareholders.

Likewise, with respect to new telecommunications equipment PG&E will purchase for providing telecommunications services, all of the capital costs and operation and maintenance costs will be allocated to PG&E's shareholders. Shareholder funded capital costs will be identified as separate projects and tracked accordingly. All revenues, expenses, and capital expenditures will be

charged to unique order numbers created for the CLEC business. The CLEC orders will be exclusively associated with the separately established CLEC business balancing account.

The 50 percent of after-tax net revenues shared with ratepayers will be transferred to the Distribution Recovery Adjustment Mechanism and the Core Fixed Cost Account for a rate reduction through the Annual Electric True-Up and Annual Gas True-Up advice letters.

PG&E will update its existing accounting, budgeting, and internal controls policies, standards, and procedures to incorporate the cost and revenue allocations discussed herein. To implement the allocation and accounting described herein, PG&E will implement and administer the updated policies, standards, and procedures.

PG&E may utilize existing, available capacity to provide telecommunications services under the requested CPCN. As discussed above, PG&E does not propose to allocate these embedded asset costs to the CLEC business, because these non-incremental costs will not be affected by the new business.

With respect to existing telecommunications equipment used to serve core gas and electric customers, PG&E will continue to use such equipment exclusively for its gas and electric utility operations. PG&E does not intend to modify how this equipment is utilized, and thus there will be no change to the corresponding accounting. New telecommunications equipment that will be purchased and used for the CLEC business will be tracked in the capital orders set up exclusively under the separately established CLEC business balancing account. Capital asset settlements will be established with the guidance from PG&E's Capital Accounting/Advice team, following GAAP.

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CHAPTER 3

ATTACHMENT A

NET REVENUE MARGIN

NET REVENUE MARGIN

Line No.	Company	Average	2016	2015	2014
1	Earthlink	(3.1%)	0.9%	(3.7%)	(6.6%)
2	Windstream	(3.4%)	(9.7%)	0.8%	(1.1%)
3	CenturyLink	6.4%	5.8%	7.4%	6.2%
4	MagicJack	16.9%	14.1%	25.1%	11.6%
5	Sprint	(6.5%)	(2.3%)	(5.8%)	(11.3%)
6	AT&T	11.3%	12.1%	14.1%	7.8%
7	Comcast	18.0%	17.9%	17.9%	18.1%
8	Verizon	16.7%	16.7%	21.5%	12.0%
9	Average	7.1%	6.9%	9.7%	4.6%

Net revenue margin is pre-tax income divided by revenue. The numbers above were derived using publically available information (annual reports, 10Ks, etc.)

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CHAPTER 4

PG&E'S ROW PROCEDURES

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A. PG&E Compliance With Right-of-Way Rules, Including Rule 6.A.

1. Internal Policies and Procedures for Reservation of Space

PG&E's internal policies for reservation of space uphold the first-come, first-served principle of Rule 6A of Decision (D.) 98-10-058, the Right-of-Way (ROW) Decision. Applications submitted for poles are evaluated according to the date on which the applications are received; in the event that poles do not contain enough space to accommodate more than one of multiple applications, the application received first is given priority. This same principle applies to conduit access. Details of the application processes specific to non-discriminatory access will be discussed in a later section.

PG&E's Joint Utilities Group is responsible for the management of programs that facilitate ROW access. The group is the business-to-business liaison for ROW access to PG&E infrastructure, and strives to create and uphold policies and programs to comply with regulations and add value to the pole attachment and underground facility installation communities.

2. Average Response Times to Requests for Access

PG&E uses a 45-day response time guideline for responding to applications submitted to its Tenant Program, the Joint Utilities-managed program that is used for ROW access requests. Although the ROW Decision does not mandate this timeframe for electric utilities, PG&E recognizes that stakeholders of the pole attachment community are accustomed to this timeframe and seeks to meet that timeframe as far as safety concerns will allow. Data queried for pole attachment applications submitted within the past two calendar years revealed the following statistics on response times:

- Response time mean: 37 days
- Response time median: 25 days

- These mean and median response times do not include time needed for applicant actions, such as correcting pole loading calculations or other revisions necessary to obtain approval of the application.

Data for conduit and antenna/Commercial Mobile Radio Service (CMRS) requests for access are not included in the above statistics because PG&E has had very few applications. Both of these processes require significant customer input (e.g., construction drawings), which can take 45-60 days to receive.

B. Current Terms and Conditions for Leases and Other Agreements

PG&E establishes Master License Agreements (MLA) with third parties to establish the terms for ROW access applications, construction, and leasing. Subsequent applications for access are made pursuant to the terms of the applicant's MLA. These agreements are drafted in accordance with the ROW Decision.[1] PG&E strives for uniformity in the terms of the agreements as a means of ensuring non-discriminatory access and facilitating administration. To that end, PG&E has obtained Commission approval of *pro forma* MLA agreements and relies on those MLAs to ensure consistency of terms, with exceptions only in rare circumstances. Attachments A, B, and C, respectively, to this testimony are the *pro forma* MLAs for access to PG&E's overhead (wireline) facilities, to duct/conduit facilities, and to overhead by CMRS applicants. PG&E seeks Commission approval of executed MLAs that vary from the *pro forma* through advice letters. PG&E has executed MLAs with each of its lessees. Due to the sensitive and confidential nature of MLAs that vary from the *pro forma* agreement, PG&E has not provided them with this testimony.

C. ROW Pole Access – Wireline Attachments

The procedures within PG&E's tenant program ensure that PG&E processes pole access requests according to the ROW Decision and does not give preferential treatment to any entity. The process for standard overhead wireline applications includes a central electronic location for application submission, a date-stamped clerical intake process, and representatives assigned to review

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[1] See Attachment A, PG&E *pro forma* Overhead MLA, Section 1.5.

and approve applications. Specifically, the process entails the following high-level steps:

- Qualifying CLEC or CATV provider submits pole access applications with pole loading calculations, make-ready forms,[2] current intrusive inspection data (for poles more than 15 years old), maps, and PG&E's official request form to a designated PG&E e-mail address.
- PG&E records the receipt of the applications and verifies that applications are complete and that poles requested are consistent between the forms named above. Incomplete or erroneous applications are returned to Requester for correction. Complete applications are forwarded to PG&E's Joint Utilities Group representatives (according to PG&E service region) for review.
- The applications are then reviewed for accuracy and to determine if the request satisfies safety factors, including a review of the information used in the pole loading calculations. For any identified errors or discrepancies, the Requester may be asked to revise the calculations before approval, or, in the case of multiple errors, the application may be denied.
- For application denials, specific reasons for denial are provided in writing. A 45-day period is the internal target for the review timeframe.
- Approvals are provided on a pole-specific basis and include a PG&E contact permit number. The Requester may then attach their facilities. The Requester is billed for the time required by PG&E to review the application and the approved attachments are submitted to PG&E's Mapping Department.
- Approved applications are selected randomly for a post-audit, to ensure that the Requester has constructed the pole attachments as designed in the approved application job package.

A process overview is publicly available to requesters at the following PG&E website: https://www.pge.com/en_US/for-our-business-partners/purchasing-program/suppliers/standard-overhead-access/standard-overhead-access.page.

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2 Make-ready forms identify the heights of each pole attachment and denote any raising or lowering of existing attachments necessary for a proposed attachment.

In accordance with the ROW Decision, costs associated with this process generally fall into two categories: (1) annual lease rate; and (2) unit costs. Annual lease rates are calculated according to PG&E's Cost of Ownership (COO), as reported by its Capital Accounting Department (PG&E *pro forma* Overhead MLA, Section 8.1). Each attachment is billed at a rate of 7.4 percent of the cost of a pole's COO. Unit costs for processing requests for access include: costs related to clerical services; project management; estimating; and construction. The unit cost rates are derived from PG&E's labor rates.

This foregoing process is intended for wireline access to PG&E's solely-owned poles. For poles jointly owned under the Northern California Joint Pole Association (NCJPA)[3] Agreement, prospective tenants pursuing ROW access apply to the owner of the communication zone.

D. Modified ROW Decision Access, CMRS Attachments

As with the procedures for the wireline request for access process above, the procedures for CMRS applications also ensure non-discriminatory access, per the ROW Decision. The process for antenna requests for access includes a central electronic location for application submission, a date-stamped clerical intake process, and representatives assigned by area to review and approve applications. Additionally, this process includes a pre-engineering option that enables applicants and PG&E representatives to select poles suitable for CMRS equipment. This process entails the following high-level steps:

- Qualifying CMRS provider submits pole access applications with maps to PG&E Customer Connect Online.
- PG&E reviews request to determine if pole top antenna applications are in conflict. If the pole has already been applied for, and both applications are for a pole top antenna, the second application is denied and the Requester is notified.
- PG&E records the receipt of the applications and verifies that applications are complete. Incomplete or erroneous applications are returned to Requester for correction. Complete applications are forwarded to PG&E's Service Planning and Design business representatives.

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3 The NCJPA is a trade organization serving members since 1913. Its purpose is to facilitate pole ownership transactions among members under the terms of the NCJPA Routine Handbook.

- Business representative issues an invoice for engineering advance to requester if pre-engineering has been requested.
- Upon payment, the business representative schedules pre-engineering that entails a field survey of the pole applied for, including PG&E and Requester representatives.
- Estimating performs pre-engineering, and pole is pre-approved for design if deemed structurally suitable.
- Upon approval, the Requester submits construction drawings.
- Job estimate and final design are then completed by PG&E Estimating.
- Upon approval of the construction drawings, the contract, approved drawings, and final approval are forwarded to the Requester, who executes the contract and submits payment for costs related to request for access processing, described below.
- Business representative coordinates construction with the Requester.

A process overview is publicly available to requesters at the following PG&E website: https://www.pge.com/en_US/for-our-business-partners/purchasing-program/suppliers/pole-top-antenna-access/pole-top-antenna-access.page.

Although PG&E uses the 45-day response time guideline, this process can have significant mid-process delays that depend upon Requester actions. In the wireline process, the Requester generally performs all make-ready and engineering paperwork prior to submission of the application and all that remains is to review the application for accuracy and pole loading. In the CMRS process, waiting for the Requester to prepare construction drawings may cause significant delays, and the wait time to receive these from Requesters can be an additional 45-60 days.

In accordance with the ROW Decision, costs associated with this process generally fall into two categories: (1) annual lease rate; and (2) unit costs. Annual lease rates are calculated according to PG&E's COO (PG&E *pro forma* CMRS MLA, Exhibit B). Pole leasing is billed in accordance with the terms of the modified ROW decision of February, 2016 (D.16-01-046). Unit costs for processing requests for access include costs related to clerical services, project and program management, estimating, inspection, and construction. The unit cost rates are derived from PG&E's labor rates. In addition, requesters pay the actual cost of contractors employed by PG&E in the course of this process.

E. ROW Conduit Access

The procedures for conduit access within PG&E's Tenant Program ensure that no preferential conduit access is granted to eligible entities, per the ROW Decision. The process for conduit access requests includes a central electronic location for application submission, a date-stamped clerical intake process, and representatives assigned to review and approve applications. Specifically, the process entails the following high-level steps:

- Requester submits applications with route map and PG&E's official access request form to a designated PG&E e-mail address.
- The designated Joint Utilities Group representative issues an invoice for engineering advance to the Requester.
- Upon receipt of payment, the representative reviews the proposed route and obtains information from the following PG&E departments: Electric Engineering, New Revenue Development, and Information Technology, to determine whether existing plans for PG&E electric business or other existing third-party requests conflict with the proposed route and will be constructed within the following 12 months.
- If no conflicts exist, the proposed route is reserved for the Requester.
- An approved contractor is engaged to perform a feasibility study (i.e., rod and rope test[4] and conduit/duct capacity fill reading) to test the available capacity within the structures contained in the route, accompanied by an inspector. If sufficient capacity exists, the Requester may submit construction drawings for approval.
- If construction drawings meet PG&E standards, PG&E will coordinate with the Requester for a construction start date to include an inspector on-site.
- After construction, the Requester submits as-built drawings, which, upon approval, are submitted to PG&E's Mapping Department.
- Requester's construction is subject to PG&E inspection during and after construction.

A process overview is publicly available to requesters at the following PG&E website: https://www.pge.com/en_US/for-our-business-partners/purchasing-

[4] "Rod and rope" refers to an industry-recognized test method to determine whether a cable can be successfully run through a given duct path.

program/suppliers/underground-conduit-access/underground-conduit-access.page.

As with the CMRS process, the conduit access request process may have significant mid-application delays pending Requester actions. PG&E provides information concerning existing internal plans for the proposed routes within 15 business days. Thereafter, process advancement depends on the feasibility study/"rod and rope" field test performed by an approved contractor, and then on approving construction drawings submitted by the applicant. The feasibility study is a crucial step to ensure the availability and suitability—whether cable can be successfully routed through conduits along a proposed route—of excess capacity.

In accordance with the ROW Decision, costs associated with this process generally fall into two categories: (1) annual lease rate; and (2) unit costs. Annual lease rates are calculated according to PG&E's COO (PG&E *pro forma* Duct/Conduit MLA, Section 8.1). Each foot of conduit accessed is billed according to the percentage of conduit occupied times the COO per foot (example: if cost is $1.00 per foot, and the proposed fiber occupies 25 percent of the conduit area, the billing rate is $0.25/foot). Unit costs for processing requests for access include costs related to clerical services, project and program management, estimating, and construction. The unit cost rates are derived from PG&E's labor rates. In addition, requesters pay the actual cost of contractors employed by PG&E in the course of this process.

F. Changes to Procedures Upon CPUC Grant of PG&E CPCN Application

Although PG&E's existing processes facilitate compliance with Rule 6A, PG&E is exploring certain enhancements to management of the request for access queue. The Order Instituting Investigation/Order Instituting Rulemaking for a pole and conduit database has served as the primary vehicle for the exploration of these enhancements.

1. PG&E is investigating how the unique pole identifiers—such as SAP Identification (ID) numbers—can be collected upon receipt of each application concerning pole access and compared against SAP ID numbers already in the application queue. A mechanism to collect this data immediately would serve to mitigate any potential human error in processing applications on a first-come, first-served basis.

2. For conduit request management, PG&E is investigating the potential of its internal fiber Geographic Information Systems application, and whether proposed routes may be more efficiently managed through use of this tool. The adoption of these enhancements will depend on the value they bring toward request for access process efficiencies.

PACIFIC GAS AND ELECTRIC COMPANY

CHAPTER 4

ATTACHMENT A

PRO FORMA OVERHEAD MASTER LICENSE AGREEMENT

Overhead Facilities License Agreement

between

Pacific Gas and Electric Company

and

ABCDEFGHIJ KLMNOPQRSTUVXYZ ABCDEFGHIJK Cable Company

Agreement No. 2016-xx-xxx

TABLE OF CONTENTS

TABLE OF EXHIBITS

These Exhibits are all single page documents that are part of this Agreement and are attached separately. The exhibits referenced within this Agreement may be revised or converted to an electronic on-line application in the future, which will be deemed an equivalent means of requesting access, providing notification and coordination of the attachments. The Permittee shall use the latest issued exhibits identified by the Company when requesting access, providing notification and coordination of their activities.

OVERHEAD FACILITIES LICENSE AGREEMENT

This Overhead Facilities License Agreement ("**Agreement**") is entered into by and between **Pacific Gas and Electric Company** (**"Company"**), a California corporation and **ABCDEFGHIJ KLMNOPQRSTUVXYZ ABCDEFGHIJK Cable Company** a California corporation ("**Permittee**") (together, the Company and Permittee shall be referred to as the "**Parties**"), and in consideration of the mutual promises and agreements set forth herein, the Parties hereby agree as follows:

ARTICLE I
SCOPE OF AGREEMENT

1.1 SCOPE OF LICENSE

The Company gives Permittee permission, on the terms and conditions stated herein, to install and maintain communications cables and related equipment (hereinafter sometimes collectively referred to as "**Pole Attachment(s)**" or "**Attachment(s)**") in the space below that space assigned for use by electric supply circuits as set forth in General Order (G.O.) 95 of the California Public Utilities Commission (CPUC) on **(i)** distribution and transmission poles and anchors solely owned or jointly owned by the Company (collectively referred to as "the **Company Pole(s)**, **Overhead Facilities**, or the **Company Facilities**") The Company Overhead Facilities are located on rights-of-way ("the **Company Right-Of-Way**") solely owned or jointly owned or otherwise held and maintained by the Company.

The Company Facilities to be accessed shall be identified by Permittee and submitted to the Company for authorization in the form set forth in Exhibit A.

The term **"Attachment"** shall mean, with respect to the Company Pole(s), a contact on a pole to accommodate or to support a single messenger /strand with single or multiple cables (with the associated guy wire) or piece of equipment (amplifier, power supply, switch and related communication equipment) utilizing one foot (1'-0") or less of vertical pole space. Every additional foot of vertical pole space utilized by cable(s) or a piece of equipment will be considered an additional Attachment. The installation of a single guy wire attached to anchors associated with the Company Poles shall be considered an additional Attachment and is within this Agreement. The installation of risers (irrespective of length) shall be treated as one Attachment and subject to all provisions of this Agreement, except that risers shall not be subject to any attachment fees under Section 8.1.

The electric connection for power supplies shall be governed by the Company's electric tariff and not by this Agreement. If any Attachments include metered or unmetered electrical equipment, Permittee shall notify the Company in writing to arrange for electric service and appropriate billing prior to using the Attachment.

1.2 EXHIBITS

The Exhibits referenced within this Agreement, including the Company's estimated unit cost, may be updated or revised as to format and content, or converted to an electronic on-line application in the future by the Company upon a sixty (60) day notice to the Permittee, in a manner not inconsistent with the CPUC Decision 98-10-058, dated October 22, 1998. The Permittee shall use the latest version of the Exhibits provided by the Company to meet the requirements of this Agreement.

1.3 THE COMPANY DISCLAIMER.

Permittee expressly acknowledges that the Company does not represent and warrant that the Company Right-of-Way, whether by easement, franchise, or other form of permission, is broad enough to permit Permittee's Attachments on the Company Facilities or for the exercise by Permittee of any other rights set forth in this Agreement. It shall be the sole responsibility and obligation of Permittee to secure any such further rights or permission for the placement and use of the Permittee's Attachments on the Company Facilities and the Company Right-of-Way as may be necessary, including obtaining any permits required by an authorized permitting agency under the California Environmental Quality Act. Permittee shall obtain any such necessary rights from Granting Authorities. "Granting Authority(ies)" means those persons or entities from whom the Company has received the Company Right-of-Way and includes both governmental and non-governmental entities and persons. This Agreement does not include a conveyance of any interest in real property or the Company Facilities, and Permittee agrees to never claim such interest.

1.4 ASSIGNMENT AND SUBLEASE.

This Agreement and the rights, interests and obligations hereunder are being granted in reliance on the financial standing and technical experience of Permittee and are thus granted personally to Permittee and shall not be assigned or delegated, in whole or in part without the prior written consent of the Company, consent of which shall not be unreasonably withheld. Any attempt to assign or delegate without such consent shall be void. Notwithstanding the foregoing, this Agreement may be assigned or delegated in whole or in part by the Company or Permittee without the Other Party's consent for (i) assignments in connection with interests that arise by reason of any deed of trust, mortgage, indenture or security agreement granted or executed by such Party, (ii) assignments to Affiliates, where, in the absence of the other Party's consent thereto the assigning Party retains responsibility for the payment and performance of all of its obligations and liabilities hereunder, (iii) assignments by operation of law in connection with any merger or consolidation of a Party with or into any Person, whether or not the Party is the surviving or resulting Person, or (iv) assignments to a purchaser of all of the outstanding equity securities of, or substantially all of the assets of, either Party. Any assignment that does not comply with the provisions of this Section 1.4 shall be null and void, and the putative assignee shall have no right to attach to the Company Facilities.

Permittee shall not sublease any of the Company Facilities.

1.5 CERTIFICATION OF PERMITEE.

Permittee warrants it is either (a) a Cable TV company that provides cable service as defined in the Public Utility Code; and/or (b) a telecommunications carrier that has been granted certificates of public convenience and necessity (CPCN) from the CPUC. Permittee warrants that its certificate(s) authorizes it to use governmental Rights-of-Way for the purposes of this Agreement.

The Permittee also represents that it is an entity which is governed by CPUC Decision 98-10-058 and subsequent rulings applying to this decision, and as such has the right-of-way for nondiscriminatory access to the Company Facilities.

1.6 COMMERCIAL MOBILE RADIO SERVICE (CMRS)

Permittee further warrants that it is not entering into this Agreement for the purpose of providing a commercial mobile radio service (CMRS) as defined in the Federal Telecommunications Act of 1996. Permittee further warrants that it shall not install or maintain any Attachments (e.g., antennas or similar equipment) to Company Facilities used in connection as a CMRS provider. For purposes of this Agreement, the term CMRS includes the term "wireless" and service provided by any wireless real time two-way voice communication device, including radio-telephone communications used in cellular telephone service, personal communication service, or the functional or competitive equivalent of a radio-telephone communications line used in cellular telephone service, a personal communication service, specialized mobile radio service, or a network radio access line.

ARTICLE II
EFFECTIVE DATES OF AGREEMENT AS LICENSE

2.1 LICENSE

a) This Agreement as a license is given pursuant to the authority of, and upon, and subject to, the conditions prescribed by G.O. 69-C of the CPUC, dated and effective July 10, 1985, which by this reference is incorporated herein. This license is effective the date it is signed and delivered by the Company, and will terminate based on any of the terms and conditions set forth in this Agreement. The Company Attachment rates will be calculated on a year-to-year basis, under the terms of Section 8.1. No Permittee use of any Company Facilities shall create or vest in Permittee any ownership or property rights herein; Permittee's rights hereunder shall be and remain a mere license, but subject to CPUC Decision 98-10-058 dated October 22, 1998, as amended as of the effective date of this Agreement.

b) Pursuant to G.O. 69-C this license is conditioned upon the right of the Company, either upon order of the CPUC, or upon the Company's own decision to commence or resume the use of the property in question whenever, in the interest of the Company's core utility service to its patrons or customers, it shall appear necessary or

desirable to do so. The Company will use commercially reasonable efforts to accommodate relocations, rearrangements and replacements under Sections 7.2 and 7.4.

c) Notwithstanding anything in this Agreement to the contrary, including Article IX ("Dispute Resolution"), interpretation of the meaning and effect of G.O. 69-C in this Agreement shall be in the exclusive jurisdiction of the CPUC.

2.2 CHALLENGE TO AGREEMENT

If a Granting Authority, in any forum, in any way challenges, disputes, or makes a claim against the Company's authority to grant this license, the Company shall give Permittee reasonable notice of same. The Company reserves the right in its sole discretion to require Permittee to remove its Attachments from the Company Facilities which are the subject of the challenge, dispute or claim, within thirty (30) days or less (as required by the Granting Authority or statute) of written notice from the Company. Permittee shall, upon such notice, relinquish use of the Company Facilities, and remove any Attachments promptly prior to the last date specified in the notice. Notwithstanding the above, if within the period described above, Permittee obtains an order from a court or regulatory agency with jurisdiction over the challenge, dispute or claim against the Company's authority to grant this license, which order allows Permittee to remain attached to the Company Facilities, Permittee shall be allowed to remain on the Company Facilities under the terms of that order, until a final decision or judgment is made at the highest level desired by Permittee. In the event of such contest, Permittee shall indemnify and hold the Company harmless from any expense, legal action, or cost, including reasonable attorneys' fees, resulting from the exercise of Permittee's right to contest under this section at Permittee's sole expense.

2.3 TERM OF AGREEMENT

This Agreement is for a term of **five (5) years** from the date it is signed by the Company. The Company Attachment rates will be calculated on a year-to-year basis, under the terms of Section 8.1.

ARTICLE III
PLACING ATTACHMENTS

3.1 PROCESS FOR ATTACHING TO THE COMPANY FACILITIES.

a) Request For Information

Permittee may, from time to time, submit a written request for information about the availability of space on the Company Facilities. The request for information must include the proposed route. Permittee agrees to pay in advance all of the Company's estimated unit costs currently in effect to respond to the request for information. The total cost for providing the information is reconciled based on actual cost at the end of the project. The Company's estimated unit costs are set forth in Exhibit C.

b) Request For Access

If Permittee desires to add new facilities, rebuild existing facilities or overlash to existing cables on the Company Facilities, it must submit a request for access using Exhibit A and include the following information for the identified facilities:

- **For Company Pole Attachments** - grade and size of attachment(s), size of cable bundle, average span length, wind loading of their equipment, vertical loading, and bending moments.

- **For Underground Facilities** – [Intentionally omitted.]

Using this data the Company will do engineering evaluations to determine rearrangement, (including replacement, if necessary) or modifications of the Company Facilities to accommodate the attachment. Permittee shall not install any Attachments on or in the Company Facilities without first securing the Company's written authorization.

Permittee agrees to pay in advance all of the Company's estimated unit costs to respond to the request for access. The cost is reconciled based on actual cost at the end of the project. The Company's estimated unit costs are set forth in Exhibit C.

Alternatively, if the Permittee meets the qualifications established by the Company guidelines, it may at its expense do the engineering evaluations to determine and identify the required make ready work. The Company reserves the right to check the accuracy of the Permittee's engineering evaluations and if relevant errors are found, the Permittee shall be notified and advised to resubmit its request with accurate information. If relevant errors result in a request for access that results in an infraction of the applicable codes and standards, Permittee agrees to reimburse the Company for the actual cost of checking the Permittee's initial and resubmitted engineering evaluation.

c) Make Ready Work

Make Ready work is the process of completing rearrangements on or in Company Facilities to create space for the Permittee's attachments, or replacing the existing facilities.

Permittee agrees to pay in advance all of the Company's estimated unit costs to respond to and perform the make ready work at Permittee's expense. The Company cost is reconciled based on actual cost at the end of the project. The Company's estimated unit costs are set forth in Exhibit C. Alternatively, the Company will at its discretion allow Permittee to perform the make ready work at Permittee's expense.

3.2 ADDITIONAL ATTACHMENTS

Permittee shall not install any additional Attachments on or in the Company Facilities without first securing the Company's written authorization. The Application for Pole and

Conduit Attachment Contact Permit attached as Exhibit A shall be used for all requests for attachments to the Company Facilities.

Notwithstanding this, for service drop attachments, the Permittee may attach a single cable to provide service to a customer on the closest available service/clearance pole without prior written authorization by the Company. Within ten (10) days of any such installation, the Permittee shall submit an application to the Company using the Pole and Conduit Attachment Contact Permit attached as Exhibit A with Parts 1 & 3 completed and the installation date noted. Each application for service/clearance pole(s) shall include supporting documentation certifying that the Permittee has evaluated each attachment(s) prior to installation and concluded that the attachment conforms with all applicable codes and standards. Upon review, in the event that the Company determines the attachment(s) is noncompliant, the Permittee shall take any actions necessary to correct the condition and that Permittee agrees to be bound by the terms of the License Agreement.

3.3 NO THIRD-PARTY ATTACHMENT

Permittee shall not, without the prior consent in writing of the Company, assign, transfer, sublet or permit any other person or entity to over lash or to make any physical contact or attachment to any of Permittee's facilities which are supported by or placed in or on the Company Facilities. Any attempted assignment in contravention of this section shall be null and void and shall be grounds for the Company to terminate this Agreement. Subject to the foregoing, and Section 1.4, Assignment, this Agreement shall inure to the benefit of and be binding upon the respective heirs, administrators, executors, successors and assigns of the parties hereto.

3.4 INCREMENTAL PROPERTY RIGHTS, AND COSTS:

a) If any time during this Agreement a Granting Authority of the Company makes a demand for additional compensation or indicates its intent to reopen, renegotiate or terminate the Company's franchise, easement, license or other agreement establishing the Company's rights in the Company Right-of-Way as a direct result of the existence of this Agreement, the Company shall promptly notify Permittee. After conferring with the Company and allowing the Company an opportunity to resolve the issue, Permittee may attempt at Permittee's expense to resolve the issue with the Granting Authority through negotiation or settlement. Any decision to commence litigation on behalf of or in the name of the Company shall be in the sole discretion of the Company, and any subsequent litigation, whether brought by the Company at Permittee's request or by such third party Granting Authority, shall be conducted at Permittee's expense, but under the Company's direction and control with respect to any issues materially affecting the Company's rights in the Company Right-of-Way. If the dispute is resolved through negotiation or settlement approved by Permittee (which approval will not be unreasonably withheld), and such resolution requires the payment of additional consideration by the Company, Permittee shall reimburse the Company for the amount of such additional consideration, to the extent such amount is due to Permittee's presence on or in the Company Facilities. If the dispute is resolved through litigation in accordance with the foregoing and the judgment resulting there from requires the payment of additional consideration by the Company, Permittee shall reimburse the

Company for the amount of such additional consideration to the extent such amount is due to Permittee's presence on or in the Company Facilities. If Permittee possesses the power of eminent domain within the relevant jurisdiction, Permittee shall have the right, in its sole discretion, independently of the Company to seek resolution of such a dispute by exercising such power of eminent domain, provided that Permittee shall pay all costs of such exercise. Permittee's obligation to reimburse the Company for the amounts of additional compensation due to Granting Authorities shall survive this Agreement.

b) Notwithstanding the foregoing, the Company after conferring with Permittee at any time and in the Company's sole discretion, may require that Permittee discontinue such attempts to resolve issues with a particular governmental Granting Authority by litigation or otherwise; provided that, such requirement of the Company notwithstanding, Permittee may still continue to attempt to resolve such issues independently of the Company, by litigation or otherwise, so long as the Company is not named, joined or otherwise included as a party or principal in any such litigation or other attempt; and provided further that the foregoing shall not be deemed to prohibit Permittee from exercising any eminent domain rights that Permittee is authorized to pursue within the relevant jurisdiction.

3.5 INNER DUCT INSTALLATION

[Intentionally omitted.]

ARTICLE IV
COMPLIANCE WITH LAW AND SAFETY REQUIREMENTS

4.1 APPLICABLE LAW AND REQUIREMENTS.

(a) The Permittee shall install and maintain the Attachments in conformity with all applicable laws, rules, and regulations of state and federal governments, agencies, and other governmental authorities, including, but not limited to, the rules, regulations, and orders of the CPUC, and in conformity with any safety standards or requirements as may be required or specified by the Company in its sole, good faith discretion, and including obtaining any permits required by an authorized permitting agency under the California Environmental Quality Act. All Company Pole Attachments must adhere to the clearance, separation, wind loading and dead-end tensions and other requirements of G.O. 95 of the CPUC or any successor and standards or requirements as may be specified by the Company.

(b) [Intentionally omitted.]

(c) The Permittee shall be solely responsible for the Attachments and shall take all necessary precautions during installation, and maintenance on or near the Company Facilities and the Company Right-of-Way so as to protect all persons and the property of the Company and others from injury and damage. Without limiting the foregoing and without assuming any obligation to maintain or monitor the Attachments, if the Company believes

that Permittee's Attachments are in any way endangering any person or property, or are in noncompliance with any requirement referenced in Sections 4.1(a) or (b) above (a "**Hazardous Condition**"), the Company may, in its sole discretion, take any steps it deems necessary to remedy the Hazardous Condition; in which case Permittee shall be required to reimburse the Company for its actual costs. Notwithstanding the above, the Company shall take reasonable action to notify Permittee of any Hazardous Condition that does not require immediate attention, and where feasible, allow Permittee to correct the Hazardous Condition prior to any corrective action taken by the Company. In addition, if the Company notifies Permittee of any Hazardous Condition, Permittee shall remedy such condition promptly and in no case later than ten (10) days after receipt of such notice.

4.2 WORK ON COMPANY POLES

Permittee and its duly authorized contractors, agents and employees (**"Permittee's Workers")** shall avoid directly climbing the Company Poles and, if possible, use a ladder or bucket truck to perform work on the Company Pole Attachments. If the use of a ladder or bucket truck is not feasible, Permittee's workers shall exercise best efforts to make certain that the poles or structures are strong enough to safely sustain the workers' weight or the change in applied stress before climbing any poles or structures. **HOWEVER, IN NO EVENT SHALL PERMITTEE'S WORKERS CLIMB OR MAKE CONTACT WITH ANY PORTION OF THE ELECTRIC SUPPLY SPACE ON THE COMPANY POLES, INCLUDING WITHOUT LIMITATION THE WIRES, CABLES, RISERS, CONDUIT, CROSS ARMS AND OTHER APPLIANCES OR OTHER ELEMENTS OF THE COMPANY'S ELECTRICAL SUPPLY SYSTEM.** All work on the Company Poles, or under this Agreement to be performed in the proximity of energized electrical conductors shall only be performed by qualified electrical workers in accordance with Title 8 -- State of California High Voltage Safety Orders as amended. Permittee shall provide the Company forty-eight (48) hours advance notice by calling the Company's designated representative before any work is performed on the Company Overhead Facilities when an electric service shutdown is not required. If an electric service shutdown is required, the Permittee shall arrange a specific schedule with the Company prior to performing any work on the Company Overhead Facilities. The Company reserves the right to an authorized employee or agent of the Company being present when the Permittee's employee's, agents, or contractors will be permitted to work in secured areas where safety or system reliability of the Company Overhead Facilities are an issue. Permittee agrees to pay the Company for such Company's employee based upon the Company's then current fully loaded labor rate.

4.3 ACCESS TO THE COMPANY UNDERGROUND FACILITIES

[Intentionally omitted.]

4.4 WORK PRIORITY

Permittee's workers shall conduct its work so as not to interfere or delay any other work performed or scheduled to be performed by the Company or its authorized agents on or near the Company Facilities or the Company Right-of-Way. The Company and its authorized agents shall have priority to access the Company Facilities and the Company Rights-of-Way

at any time and Permittee's workers must adhere to any requests made by the Company to modify or interrupt the work of Permittee's workers.

4.5 MAINTENANCE OF ATTACHMENTS.

Permittee shall, at its sole expense, keep in good repair and maintain its Attachments. Permittee shall also operate and maintain its Attachments in conformity to CPUC General Orders, the National Electrical Safety Code, the National Electrical Code and all other applicable ordinances, statutes, regulations and laws. If the Company determines that Permittee is not in compliance with any of these applicable requirements, the Company shall inform Permittee in writing and such Hazardous Conditions shall be remedied per Sections 4.1(a) or (b). Permittee shall notify the Company forty-eight (48) hours in advance by calling the Company's designated representative before any routine repair or maintenance of its facilities is performed on the Company Facilities when an electric service shutdown is not required. If an electric service shutdown is required, the Permittee shall arrange a specific schedule with the Company prior to performing any work on the Company Facilities. Emergency restoration of service and maintenance shall be performed per Section 7.7.

4.6 SERVICE CONNECTION/DISCONNECTION

Any electrical service connection or disconnection to the Permittee's Attachments from the Company's overhead or underground electric supply system shall only be performed by the Company in accordance with the Company's rates, applicable tariffs, and CPUC Rules and Regulations.

4.7 IDENTIFICATION TAGS

Permittee shall identify its Attachments to the Company Facilities using weather and corrosive resistant tags (capable of lasting the life of the attachment). The tags shall include Permittee's corporate name legible from the ground, a 24-hour emergency contact number and identify the Company as the licensor. The tag shall be attached in the zone on the pole where Permittee's cable and equipment are located. If adequate identification of all Attachments are not added by the Permittee pursuant to this Agreement, the Company may identify Permittee's facilities and all incurred cost shall be reimbursed by the Permittee.

4.8 POLE PROTECTION

For new construction, replacements, rebuilds and upgrades of the Permittee's facilities, the Permittee shall use, in areas where there is potential for trees to damage poles and to the extent where reasonably available, at the time of attachment to a pole, break-away fasteners or cross arms designed such that in the event a falling tree or other foreign object comes in contact with Permittee's cable in mid-span, the cross arm, bolt or lashing attaching the cable to the pole will fail before the pole fails. Permittee may, with the Company's written consent, use alternative designs capable of accomplishing equivalent results to preserve the pole. Regardless of the presence of breakaway fasteners or the Company-approved alternative design, Permittee shall be responsible for all costs associated with replacing a pole that failed due to Permittee's Attachments. Permittee will comply with any CPUC orders and revisions regarding design and construction standards.

4.9 POLE TREATMENT

Permittee shall treat with a chemical solution of copper napthenate or the Company approved equivalent all cuts created on new and existing poles by Permittee to accommodate an Attachment, including but not limited to, gains and through holes.

ARTICLE V
INDEMNIFICATION AND LIABILITY

5.1 INDEMNIFICATION.

(a) The Parties agree to bear any and all "Losses" (defined below) which arise out of or are in any way connected with the performance of this Agreement as set forth in this section. All losses, fines, penalties, claims, demands, legal liability, damages, attorneys' fees, costs of investigation and litigation, expenses, settlements, verdicts, awards or judgments (collectively, "Losses") connected with or resulting from injury to or death of any person (including employees of the Parties), damage to or destruction of any property (including property of the Parties), damage to the environment or any natural resources, or violation of any local, state or federal law, rule or regulation, including but not limited to environmental laws and regulations, however caused on either Party shall be borne as follows:

(1) Any Losses arising from injury to or death of an employee, contractor, subcontractor, or agent of a Party or arising from damage to or destruction of any property of a Party shall be borne by such Party, and such Party shall defend, indemnify and hold harmless the other Party and each of its officers, directors, partners, employees, and agents ("**Indemnitees**") against such Losses, excepting only Losses as may be caused by the sole negligence or willful misconduct of the Indemnitees.

(2) Excepting Losses arising from injury to or death of an employee, contractor, subcontractor, an agent of a Party or arising from damage to or destruction of any property of a Party, any Losses caused by the joint or concurrent negligence of the Parties or their respective contractors or agents, or by the failure of the Parties to observe or perform any obligation hereunder, shall be borne by the Parties according to their degree of fault.

(3) Any Loss caused by the climbing or entering the Company Facilities by the employee, agent, contractor or subcontractor of a Party shall be borne solely by such Party.

4) Any Loss caused by the sole act or omission of a Party shall be the responsibility of that Party.

If either Party, as the result of any claim for Losses, should be compelled to pay damages to a greater extent than specified in this section, such Party shall have, to the extent of the excess so paid by it, the right of contribution from the other Party.

(b) Notwithstanding the foregoing, Permittee shall indemnify, defend and hold harmless the Company, its officers, directors, partners, agents, and employees (collectively, "the **Company Indemnitees**") from and against all claims, demands, losses, damages, expenses, and legal liability connected with or resulting from (i) interruption, discontinuance or interference with Permittee's service to any of its customers or economic and any economic or commercial loss of Permittee's customers, resulting there from (but only to the extent of Permittee's customers' claims, not those of the Company), with the exception of claims, demands, losses, damages, expenses, and legal liability arising solely from the gross negligence or willful misconduct of the Company or the Company's agents, employees or independent contractors who are directly responsible to the Company; (ii) Permittee's failure to comply with applicable rules, regulations or safety standards; and (iii) any and all claims or assessments of any kind or nature, including increased franchise fees, right-of-way or easement fees, made or asserted against the Company Indemnitees by any third party, including any Granting Authority, franchise authority, governmental authority or other property owner as a result of Permittee's use of, or failure to relinquish use of the Company Facilities or remove any Attachments as may be required by the Company pursuant to Article X Termination. Regardless of fault on behalf of Permittee, the Company shall exercise reasonable commercial effort toward restoring the Company's service to its customers in accordance with the Company's customary procedures and priorities, to enable Permittee to restore Permittee's Attachments on the Company Facilities and to resume service to Permittee's customers so as to minimize any and all losses once an interruption, discontinuance or interference with a Party's service to its customers occurs. Nothing in this Article V or Section 5.1 shall affect the application of the provisions of Section 12.14 "No Third Party Beneficiaries". Under no circumstance shall either Party have the authority to admit any liability on behalf of the other.

(c) Any Party seeking indemnification hereunder ("**Indemnitee**") shall notify the other party ("Indemnitor") of the nature and amount of such claim and the method and means proposed by the Indemnitee for defending or satisfying such claim within a reasonable time after the Indemnitees receives written notification of the claim. The Indemnitees shall consult with the Indemnitor respecting the defense and satisfaction of such claim, and the Indemnitee shall not pay or settle any such claim without the prior written consent of the Indemnitor, which consent shall not be unreasonably withheld or delayed; provided, however, that the Indemnitee's failure to give such notice shall not impair or otherwise affect the Indemnitor's obligation to indemnify against such Claim except to the extent that the Indemnitor demonstrates actual damage caused by such failure.

5.2 AD VALOREM INDEMNITY

If the ad valorem property taxes, special assessments, local improvement district levies, or other levies or taxes (collectively, "**Ad Valorem Taxes**") or bases for ad valorem taxation payable by the Company with respect to the Company Facilities increase as a result of the

Permittee's Attachments, or the Ad Valorem Taxes increase or change due to any construction, installation or improvements provided pursuant to this Agreement, the Company shall deliver to Permittee copies of the relevant tax bills and supporting materials along with a detailed calculation of such taxes to be paid by Permittee only to the extent such Ad Valorem Tax exceeds the amount which the Company would otherwise pay. Within thirty (30) days Permittee shall pay or reimburse the Company for such amounts. Permittee may make such reimbursements or payments under protest, in which event Permittee and the Company shall attempt to agree upon a calculation of the amount payable by Permittee. If agreement cannot be reached, either party may refer the dispute to mediation in accordance with the provisions of Article IX. Permittee also shall be responsible for timely payment of any Ad Valorem Taxes or other taxes and fees levied against the Permittee's Attachments or other of Permittee's property or equipment located on the Company Facilities or the Company Right-of-Way that are billed directly to Permittee by the taxing authority. However, in the event the same property or interests are assessed an Ad Valorem Tax or sales or use tax in the same year to both the Company and Permittee, each party agrees to promptly notify the other upon becoming aware thereof to cooperate with the other in seeking appropriate redress from the authority or authorities assessing the property or imposing the tax; and, provided the Company has notice of such potential double taxation, the Company agrees at Permittee's request, not to pay such tax and seek reimbursement from Permittee without having first protested, at Permittee's expense, the assessment at the appropriate administrative level.

5.3 DEFENSE OF CLAIMS

Both parties shall, on request, defend any suit asserting one or more claims covered by the indemnities set forth in Sections 5.1(a). Permittee shall, on the Company's request, defend any suit asserting one or more claims covered by the indemnities set forth in Sections 5.1(b) and 5.2. The indemnifying party shall pay any costs that may be incurred by the Indemnitees in enforcing such indemnity provisions, including reasonable attorney's fees.

5.4 LIMITATION OF LIABILITY

In no event shall the total cumulative liability of the Company, arising out of or in connection with the use of the Company Facilities or relating to this Agreement, exceed the sum of the attachment fees received, and forecasted to be received, by the Company under the current Agreement with Permittee, whether based on contract, tort, including negligence, or otherwise. The above limitations of liability shall not apply to any willful misconduct on the part of the Company.

5.5 NO WARRANTIES

Except as specifically and expressly provided herein, the Company makes no warranty, express or implied with respect to the Company Facilities or the use of the Company Facilities by Permittee. The Company Facilities are "as is." The Company disclaims all warranties express or implied including the warranties of merchantability and fitness for particular purposes.

5.6 CONSEQUENTIAL DAMAGES

Notwithstanding anything in this Agreement to the contrary, neither Party nor its contractors or subcontractors shall be liable to the other Party for the other Party's own special, consequential or indirect damages, including without limitation, loss of use, loss of profits or revenue, loss of capital or increased operating costs, arising out of this transaction or from breach of this Agreement, even if either Party is negligent, grossly negligent or willful.

ARTICLE VI
INSURANCE

With the written consent of the Company, and until Permittee has demonstrated to the Company's satisfaction adequate financial strength to support self-insurance, Permittee shall maintain the following insurance coverage or self-insurance and be responsible for its contractors and subcontractors maintaining sufficient limits of the same insurance coverage.

6.1 WORKERS' COMPENSATION AND EMPLOYERS' LIABILITY

(a) Workers' Compensation insurance indicating compliance with any applicable labor codes, acts, laws or statutes, state or federal, where Permittee performs any work on the Company Facilities.

(b) Employers' Liability insurance shall not be less than $1,000,000 for injury or death each accident.

6.2 COMMERCIAL GENERAL LIABILITY

(a) Coverage shall be at least as broad as the Insurance Services Office (ISO) Commercial General Liability Coverage "occurrence" form, with no coverage deletions.

(b) The limit shall not be less than $10,000,000 each occurrence for bodily injury, property damage, personal injury, completed operations and endorsed to include mobile equipment.

(c) Coverage shall: (1) by "Additional Insured" endorsement add as additional insured the Company, its directors, officers, agents and employees with respect to liability arising out of the work performed by or for the Permittee for ongoing operations as well as completed operations. If the Permittee has been approved to self-insure, Permittee shall, at all times, extend coverage to the Company in the same position as if the Company were an "Additional Insured" under a policy; (2) be endorsed to specify the Permittee's insurance is primary and that any insurance or self-insurance maintained by the Company shall not contribute with it.

6.3 BUSINESS AUTO

(a) Coverage shall be at least as broad as the Insurance Services Office (ISO) Business Auto Coverage form covering Automobile Liability, code 1 "any auto."

(b) The limit shall not be less $1,000,000 each accident for bodily injury and property damage

6.4 POLLUTION LIABILITY

(a) Coverage for bodily injury, property damage, including clean up costs and defense costs resulting from sudden and gradual pollution conditions including the discharge, dispersal, release or escape of smoke, vapors, soot, fumes, acids, alkalis, toxic chemicals, hydrocarbons, liquids or gases, waste materials or other irritants, contaminants or pollutants into or upon land, the atmosphere or any watercourse or body of water.

(b) The limit shall not be less than $1,000,000 each occurrence for bodily injury and property damage.

(c) The Company shall be named as additional insured.

6.5 ADDITIONAL INSURANCE PROVISIONS

(a) Before commencing any work on the Company Facilities, Permittee shall furnish the Company with certificates of insurance and Additional Insured endorsement of all required insurance for Permittee.

(b) The certificate shall state that coverage shall not be canceled except after thirty (30) days prior written notice has been given to the Company.

(c) The certificate must be signed by a person authorized by that insurer to bind coverage on its behalf and shall be submitted to:

PG&E
Insurance Department, Suite 2400
One Market, Spear Tower
San Francisco, CA 94105

A copy of all such insurance certificates and the Additional Insured endorsement shall be sent to the Company's Contract Negotiator and/or Contract Administrator.

(d) The Company may require Permittee to furnish to the Company certificates of insurance or other evidence thereof attesting that the insurance required by Article VI is in effect.

(e) Upon request, Permittee shall furnish the Company the same evidence of insurance for its contractors and subcontractors, as the Company requires of Permittee.

(f) If Permittee claims to self-insure then this section applies. Notwithstanding any provisions in this Article to the contrary, Permittee represents that its customary practice, as of the date of this Agreement, is to self-insure for all or a portion of the insurance required of it under this Agreement. Accordingly the parties agree that such self-insurance shall constitute compliance with all or some of the requirements of this Article for as long as Permittee generally continues such practice of corporate self-insurance with respect to its regular conduct of business. Permittee covenants to advise the Company when it ceases generally to self-insure with respect to its regular conduct of business.

ARTICLE VII
REMOVALS AND EMERGENCY CONDITIONS

7.1 DISCONTINUATION

Notwithstanding any provision to the contrary, the Company shall be entitled at any time to discontinue the Company's use of the Company Facilities located on the Company Right-of-Way, and Permittee shall immediately remove its Attachments. In the event of any such discontinuation, the Company shall give Permittee advance written notice (Exhibit F or equivalent) as soon as reasonably practicable, and the Company may propose alternative facilities to meet the needs of the Permittee in which case Permittee shall be entitled to a credit of the remaining rental fees paid in advance for future use, towards the use of the alternate facilities. If no alternate facilities are available or acceptable, Permittee shall be entitled to a refund, if a refund is requested by Permittee and if the value exceeds $1,000.00. The Company may allow Permittee to buy the Company's interest in the discontinued facilities at the Company's replacement cost new minus depreciation. Permittee's costs of relocating to other poles or facilities shall be governed by the provisions of Section 7.2 below.

7.2 RELOCATION

Notwithstanding poles rearranged or replaced pursuant to Section 7.4, the Company at any time may relocate all or any portion of its poles to other locations. In the event of any such relocation, the Company may in its discretion allow Pole Attachments at such alternate location(s) in accordance with this Agreement, and the Company shall give Permittee sixty (60) days advance written notice (Exhibit F or equivalent) or less if circumstances require, of its intended relocation and of the particulars of the alternate location(s). In the case of a relocation of the Pole Attachments, the Company may either: (a) require Permittee at its cost to move its Pole Attachments to the alternate location, or (b) with mutual consent move the Permittee's Pole Attachments with reimbursement from Permittee for the actual costs of moving the Pole Attachments. In the event that Permittee is unable to transfer its facilities on the day the pole is scheduled to be removed, the Permittee shall pay all costs incurred by the Company to make an additional field trip to remove the pole. To the extent the Company can reasonably obtain reimbursement from a third party for any work performed by the Company, Permittee's share of the Company cost will be included in the reimbursement. If the Company cannot reasonably obtain such reimbursement, then Permittee and other

permittees shall be responsible for a proportional share of those costs. When a pole relocation is necessitated by the installation of a Pole Attachment by a new permittee, the relocation of the Company's and its Permittee's Pole Attachments shall be at the expense of the new permittee to the extent allowed by law.

7.3 REMOVALS

(a) If the existing equipment on the pole or anchor (including Permittee's equipment) cannot be relocated in accordance with Section 7.4 or rearranged in accordance with Section 7.4 to create the required space or capacity for the Company's use and

(1) the Company needs the space or capacity occupied by the Permittee's equipment for its use to serve core utility customers, or

(2) should any pole to which Permittee has attached an Attachment be taken by the power of eminent domain,

then on being given at least sixty (60) days written notice (Exhibit F or equivalent) by the Company to do so, or in cases of emergency on such notice less than sixty (60) days as the circumstances reasonably permit (some emergency circumstances may include no notice), the Permittee shall remove its Attachments from the Company Poles as the Company shall designate and at the expiration of the time specified in the notice all rights and privileges of the Permittee in and to the Company Poles designated shall terminate.

(b) Permittee shall not be entitled to any compensation paid as a result of a taking by the power of eminent domain, except for compensation paid expressly for the taking or relocating of Permittee's Attachment. In no event shall Permittee be entitled to any compensation for the taking of the Company Right-of-Way itself.

(c) The Permittee may on its own remove its equipment from the Company Facilities and provide the Company within sixty (60) days a written notice (Exhibit E or equivalent).

(d) In the event of a removal as provided in this section, Permittee shall be entitled to a rental refund if a refund is requested by Permittee and if the rental value exceeds $1,000.00.

7.4 REARRANGEMENT/REPLACEMENT POLES OR ANCHORS

The Company shall give Permittee sixty (60) days advance written notice (Exhibit F or equivalent) or less if circumstances required for Sections 7.4 (a) through (c) below.

(a) Capacity for the Company:

When the Company needs space or capacity for its core utility service, and without the Permittee's Attachment there would be adequate space or capacity, then the Permittee shall

either pay for expansion of the pole to provide adequate space or capacity for the Company, or remove its Attachments.

If more than one Company Permittee is on the pole and all Permittees cumulatively occupy the space or capacity needed by the Company, and the removal of the last authorized Permittee will provide adequate space or capacity, then the last authorized Permittee will pay the cost of providing additional space or capacity for the Company, or remove its Attachments.

If more than one Company Permittee is on the pole and all Permittees cumulatively occupied the space or capacity needed by the Company, then all Permittees will share equally the cost of providing additional space or capacity on the pole, or remove their Attachments.

If the Company is unable to determine which Permittee is the last authorized Permittee on the pole then the Permittees will share equally the cost of providing additional space or capacity on the pole, or removes their Attachments.

(b) New Permittees:

When rearrangement and/or larger or additional pole(s) or anchors are necessitated by the installation of an Attachment by a new Company permittee, the larger pole and relocation of the Company's and its permittee's attachments shall be installed and/or transferred at the expense of the new permittee to the extent allowed by law.

(c) Other Causes of Rearrangement/Replacement:

When a pole replacement is required due to any other reason outside of the control of the Company, including but not limited to, accidents, storms, bird, pest, or fungal infestation, excessive checking and splits, earthquake, tornadoes, street widening or Granting Authority action, Permittee shall not be responsible for cost of the replacement pole, unless the failure was due to fasteners which did not comply with the requirements of Section 4.8 or if the Permittee did not meet the requirements of Section 4.1. Permittee shall be responsible for relocation of its Attachment under the terms of Section 7.2.

7.5 ADDITIONAL POLE SPACE

Whenever any discontinuation, rearrangement, relocation, removal or substitution of a larger pole would be necessary under this Article and there is additional space available on the pole under the control of another party, the Company shall at Permittee's discretion request such additional space.

7.6 INCOME TAXES

As set forth in the Company's Electric Rules, Preliminary Statement, Paragraph J, and as amended, the costs to be paid by Permittee to the Company as set forth in Section 7.4 above shall include a gross-up amount for potential income tax liability of the Company for contributions in aid of construction (as used in Internal Revenue Code § 118(b) and similar

state legislation) arising from the acquisition and installation of new or replacement poles and/or anchors, which gross-up amount shall be equal to the gross-up percentage for such contributions set forth in the Company's current filed electric tariffs.

7.7 RESTORATION OF SERVICE

In the case of any incident whereby both the Company's electrical service capacity and Permittee's telecommunications capacity are adversely affected, restoration of Permittee's Attachments and /or Permittee's capacity shall at all times be subordinate to restoration of the Company's electrical service capacity, unless otherwise agreed in advance by both Parties. Nonetheless, the Company shall permit Permittee to make repairs to restore its Attachments and/or its capacity, as long as such restoration efforts do not interfere with the Company's restoration activities.

7.8 RECLAMATION OF THE COMPANY UNDERGROUND FACILITIES

[Intentionally omitted.]

ARTICLE VIII
ATTACHMENT FEES

8.1 ANNUAL ATTACHMENT FEES

Prior to attaching to the Company Overhead Facilities, Permittee shall pay to the Company an Attachment fee(s) at the applicable rate set forth in Exhibit B to this Agreement for each Attachment authorized under Exhibit A. Subject to the Company's reservations stated in this section, Attachment fees will be calculated annually using the formula set forth in **Exhibit B**. Permittee shall pay that fee for each Attachment initially installed, regardless of size, attachment type or duration. The parties agree in good faith to meet and confer to modify these Attachment fees if any rules, regulations or orders of the CPUC, or a court of law, modify the fee structure imposed by Rule VI and the definition of "*annual cost of ownership*" in Rule II, Section I. of CPUC Decision 98-10-058, dated October 22, 1998 ("**fee restraints**"). Modification of these Attachment fees pursuant to this section shall be effective beginning with the most recent annual period preceding the date when the Company is allowed to charge Attachment fees greater than the fee restraints.

8.2 UNAUTHORIZED ATTACHMENTS

Upon request of the Company, Permittee shall provide written evidence of Attachment authorization for any Company Facilities on or in which the Permittee has installed an Attachment. If Permittee cannot provide such evidence of Attachment authorization, Permittee shall pay to the Company a penalty of Five Hundred Dollars ($500.00) or as may be allowed under any applicable regulations in effect at that time, for each unauthorized Attachment made after October 22, 1998, unless the Company determines in its sole and absolute discretion that any such unauthorized Attachments were made accidentally by Permittee in good faith. The amount of the penalty authorized in this Agreement shall be subject to such additional penalties as may be authorized under any applicable regulations in effect at the time of the installation. Any unauthorized attachments made prior to October

22, 1998 shall be subject to such penalties authorized under any applicable regulations and/or agreements in effect at the time of the installation. However, in no event will Permittee be relieved from the obligation of paying Attachment fees to the Company from the date of Permittee's original attachment. The unauthorized Attachment(s) shall then be subject to all the terms of this Agreement. If payment is not received within thirty (30) days of invoice date, the Company may invoke rights under Article X, Termination, and remove Permittee's Attachments from the Company Facilities.

All attachments on service/clearance poles that the Permittee has not obtained written authorization in accordance with Section 3.2 of this Agreement shall be treated as an unauthorized attachment. All new facilities, rebuild of existing facilities or overlash to existing cables on the Company Facilities that the Permittee has not obtained written authorization in accordance with Section 3.1.b of this Agreement shall be treated as an unauthorized attachment.

ARTICLE IX
DISPUTE RESOLUTION

9.1 MEDIATION

The Parties shall attempt in good faith to resolve any dispute arising out of or relating to this Agreement promptly by negotiations between a representative designated by the Company Vice President empowered to resolve the dispute and an executive of similar authority of the Permittee. Either Party may give the other Party written notice of any dispute. Within twenty (20) days after delivery of the notice, the executives shall meet at a mutually acceptable time and place, and thereafter as often as they reasonably deem necessary to exchange information and to attempt to resolve the dispute. If the matter has not been resolved within thirty (30) of the first meeting, either Party may initiate a mediation of the controversy in accordance with the Commercial Mediation Rules of the American Arbitration Association.

All negotiations and any mediation conducted pursuant to this clause are confidential and shall be treated as compromise and settlement negotiations, to which Section 1119 of the California Evidence Code shall apply, and which is incorporated herein by reference.

Each Party is required to continue to perform its obligations under this Agreement pending final resolution of any dispute arising out of or relating to this Agreement.

9.2 INJUNCTION

Notwithstanding the foregoing provisions, a Party may seek a preliminary injunction or other provisional judicial remedy if in its judgment such action is necessary to avoid irreparable damage.

ARTICLE X
TERMINATION

10.1 TERMINATING

(a) Subject to the time frames set forth in Section 12.1, if Permittee **(i)** fails to make any payment due within the time frame specified or otherwise comply with any material term or condition of this Agreement; or **(ii)** fails to obtain or maintain the appropriate CPCN from the CPUC; or **(iii)** installs or maintains any Attachments to Company Facilities used in connection as a CMRS provider **(iv)** fails to take reasonable steps to resolve any issue arising under Section 3.3 of this Agreement; **(v)** fails to maintain the insurance and bond requirements in compliance with Articles VI and XI of this Agreement; or **(vi)** fails to comply with the material requirements of this Agreement, the Company, at its sole discretion, upon thirty (30) days written notice to Permittee (or such shorter period of time as may be determined by the Company in order to comply with a notice from a Granting Authority or under law, if applicable), may terminate this Agreement without further liability any permission granted to Permittee as to all or any portion of those facilities which are the subjects of (i) through (vi) above, and Permittee shall immediately relinquish use of the Company Facilities and remove its Attachments from the Company Facilities in accordance with this Agreement prior to the effective date of termination. Notwithstanding the above, if within the period described above, Permittee obtains an order from a court or regulatory agency with jurisdiction over the challenge, dispute or claim against the Company's authority to grant this license, which order allows Permittee to remain attached to the Company Facilities, Permittee shall be allowed to remain on or in the Company Facilities under the term of that order, until a final decision or judgment is made at the highest level desired by Permittee. In the event of such contest, Permittee shall indemnify and hold the Company harmless from any expense, legal action, or cost, including reasonable attorneys' fees, resulting from the exercise of Permittee's right to contest the actions of a Granting Authority under this Section 10.1.

(b) This Agreement shall also terminate in whole or in part, upon the happening of any of the following events:

(1) at the option of either Party, upon the termination or abandonment by Permittee of the use of all of the Permittee's Attachments. If less than all of Permittee's attachments are abandoned or terminated, the Company shall have the option of terminating its permission under this Agreement for only the Attachments abandoned or terminated;

(2) at the option of the non-defaulting Party and without limiting the rights or remedies of the non-defaulting party, upon a breach or default by the other party of any material obligation hereunder and the continuance thereof following the expiration of the applicable remedy period;

(3) upon the written mutual agreement of the Parties; or

(4) in accordance with the provisions of Section 2.1, if the Company or the CPUC invoke the provisions of G.O. 69-C.

(c) Upon termination of this Agreement for all or any portion of the Company Facilities, which are used by Permittee, Permittee shall immediately relinquish use of those Company Facilities and promptly remove its facilities or the Company may remove Permittee's Attachments from the Company Facilities at Permittee's expenses.

ARTICLE XI
FAITHFUL PERFORMANCE BOND

11.1 SURETY PERFORMANCE BOND; LETTER OF CREDIT

To cover the faithful performance by Permittee of its obligations under this Agreement, Permittee shall be required to furnish (i) a valid performance bond or (ii) an unconditional irrevocable letter of credit issued by a financial institution acceptable to the Company. Said bond or letter of credit shall be in such form approved in writing by the Company and in such amount as the Company shall specify from time to time based on the financial exposure caused by the Permittee's Attachment to the Company to be maintained in full force and effect throughout the term of this Agreement. The amount of said bond or letter of credit shall be initially set at Fifty Thousand Dollars ($50,000). Permittee shall furnish such performance bond or letter of credit on or before the effective date of this Agreement, and remain in full force thereafter for a period of one year. Said bond or letter of credit shall provide ninety (90) days advance written notice to the Company of expiration, cancellation or material change thereof. Said bond or letter of credit will automatically extend for additional one-year periods from the expiration date, or any future expiration date, unless the surety or financial institution provides to the Company, not less that ninety (90) days' advance written notice, of its intent not to renew such bond or letter of credit. The liability of the surety under said bond or the financial institution under said letter of credit shall not be cumulative and shall in no event exceed the amount as set forth in this bond or letter of credit, in any additions, riders, or endorsements properly issued by the surety or the financial institution as supplements thereto. Failure of Permittee to obtain a bond or letter of credit as specified will be cause to terminate this Agreement.

If the surety on the bond or financial institution issuing the letter of credit should give notice of the termination of said bond or letter of credit and if Permittee does not reinstate the bond or letter of credit or obtain a bond or letter of credit from another surety of financial institution that meets the requirements of this Section 11.1 within fifteen (15) days after written notice from the Company, the Company may by written notice to Permittee, terminate this Agreement and/or revoke permission to use the Company Facilities covered by any or all applications submitted by Permittee hereunder, and Permittee shall remove its

Attachments from the Company Facilities to which said termination applies within thirty (30) days from such notification.

ARTICLE XII
MISCELLANEOUS

12.1 BREACH

Permittee and the Company agree that neither shall proceed against the other for breach or default under this Agreement by mediation or otherwise before the offending Party has had notice of and a reasonable time and opportunity to respond to and/or cure any breach or default. For purposes of this Agreement, a reasonable time to cure any breach or default shall be deemed to be thirty (30) days after notice, unless for safety, or legal reasons or Permittee's use interferes with the Company's ability to serve core utility customers, and fewer than thirty days are required. This section does not supersede the rights and obligations of the Parties under Section 4.1 (c) for "Hazardous Conditions." If a Party claims that more than thirty (30) days are reasonable to cure a breach, that Party shall have the burden of proving the reasonableness of the claim for more than thirty days. If such breach or default cannot be cured within such thirty day period, and the defaulting party has promptly proceeded to cure the same and to prosecute such cure with due diligence, the time for curing the breach shall be extended for such period of time as may be reasonably necessary to complete such cure.

12.2 BANKRUPTCY OF PERMITTEE

(a) The occurrence of any of the following shall constitute a default which may be a basis for termination of this Agreement:

(1) Permittee files for protection under the Bankruptcy Code of the United States or any similar provision under the laws of the State of California; or

(2) Permittee has a receiver, trustee, custodian or other similar official appointed for all or substantially all of its business or assets; or

(3) Permittee makes an assignment for the benefit of its creditors.

(b) Assignment of Agreement

Any person or entity to which this Agreement is assigned pursuant to the provisions of the Bankruptcy Code shall be deemed without further act or deed to have assumed all of the obligations arising under this Agreement on and after the date of such assignment. Any such assignee shall upon demand execute and deliver to the Company an instrument confirming such assumption.

12.3 NOTICES

Any notice given pursuant to this Agreement given by a Party to the other, shall be in writing and given (with proof of delivery or proof of refusal of receipt) by letter mailed, hand or personal delivery, or overnight courier to the following:

If delivered to the Company by U.S. mail and express mail:

Manager, Electric Distribution Maintenance
Pacific Gas and Electric Company
77 Beale Street
San Francisco, CA 94105-1814

If delivered to Permittee by U.S. mail and express mail:

ABCDEFGHIJ KLMNOPQRSTUVXYZ ABCDEFGHIJK Cable Company
123. Main Street,
Anycity, CA 90000

or to such other addresses as either Party may, from time to time, designate in writing for that purpose.

Notices shall be deemed given **(i)** when received in the case of hand or personal delivery, **(ii)** three days after mailing by United States mail as provided above, or **(iii)** the next business day in the case of reliable overnight courier. For routine notice changes, proof of delivery is not required. By mutual agreement facsimile notices may be used for routine notice changes.

12.4 APPLICABLE LAW

This Agreement shall be governed by, construed and enforced in accordance with the laws of the State of California, exclusive of conflicts of laws provisions.

12.5 CONFIDENTIAL INFORMATION

If either Party provides confidential information to the other, it shall be in writing and clearly marked as confidential. The receiving Party shall protect the confidential information from disclosure to third parties with the same degree of care afforded its own confidential and proprietary information, except that neither Party shall be required to hold confidential any information which becomes publicly available other than through the recipient, which is required to be disclosed by a governmental or judicial order, which is independently developed by the receiving Party, or which becomes available to the receiving Party without restriction from a third party. These obligations shall survive expiration or termination of this Agreement for a period of two (2) years.

12.6 FORCE MAJEURE

Neither Party shall be liable for any failure to perform this Agreement when such failure is due to "force majeure." The term "force majeure" means acts of God, strikes, lockouts, civil

disturbances, interruptions by government or court orders, present and future valid orders of any regulatory body having proper jurisdiction, acts of the public enemy, wars, riots, inability to secure or delay in securing labor or materials (including delay in securing or inability to secure materials by reason of allocations promulgated by authorized governmental agencies), landslides, lightning, earthquakes, fire, storm, floods, washouts, or any other cause, whether of the kind herein enumerated or otherwise, not reasonably within the control of the Party claiming "force majeure." The "force majeure" shall, so far as possible, be remedied with all reasonable dispatch. The settlement of strikes or lockouts or industrial disputes or disturbances shall be entirely within the discretion of the Party having the difficulty. The Party claiming any failure to perform due to "force majeure" shall provide verbal notification thereof to the other Party as soon as practicable after the occurrence of the "force majeure" event. Force Majeure shall not excuse Permittee's obligation to make payment for its Attachments except that if the event of force majeure remains uncured for a period of thirty (30) days and renders the Attachments unusable, then Permittee shall be excused from its rental payment obligation as to the affected Attachments throughout the duration of the event of force majeure. If the Company is the party claiming force majeure and the event of force majeure prevents restoration of Permittee's previously authorized attachments within six (6) months of the force majeure event, then the facilities shall be deemed to be discontinued and the provisions of Section 7.1 of this Agreement shall apply.

12.7 SEVERABILITY

The invalidity of one or more clauses, sentences, sections or articles of this Agreement shall not affect the validity of the remaining portions of the Agreement so long as the material purposes of this Agreement can be determined and effected.

12.8 REMOVAL OF ATTACHMENTS

Upon any expiration or termination, Permittee shall relinquish use of the Company Facilities and remove its Attachments from the Company Facilities in accordance with this Agreement prior to the effective date of expiration or termination at Permittee's sole expense. If Permittee fails to remove the Attachments by the expiration of this Agreement or as may be required by the Company within the time period designated by notice pursuant to Article VII or otherwise required by this Agreement, the Company shall be entitled to consider Permittee's Attachments abandoned as set forth in Section 12.9 below.

12.9 ABANDONMENT

If Permittee fails to use its Attachments for any period of one hundred and eighty (180) days, the Company shall provide Permittee written notice of its intent to treat such Attachments as abandoned and remove the Attachments at Permittee's sole risk and expense. If Permittee identifies such Attachments as abandoned or fails to respond to such notice within thirty (30) days, Permittee shall be deemed to have abandoned such Attachments which abandonment shall terminate all rights of Permittee as to the abandoned Attachment. Upon abandonment by Permittee, the Company shall have the right to retain such Attachments as the Company's own, and Permittee agrees to reimburse the Company for its expense. This provision excludes service drops that comply with the requirements of Section 4.1. Abandonment shall not relieve Permittee of any obligation, whether of indemnity or otherwise, accruing prior to

completion of such removal by the Company or which arises out of an occurrence happening prior thereto.

12.10 ADDITION OF NEW POLES

Except for any poles added under the conditions of Article VII, the Company will not add new poles to existing distribution facilities or build new distribution facilities for the sole purpose of accommodating an Attachment unless the Permittee agrees to reimburse the Company for the full cost of the new Company Facilities.

12.11 LIENS

Permittee and its contractors shall keep the Company Facilities free from any statutory or common law lien arising out of any work performed, materials furnished or obligations incurred by Permittee, its agents or contractors. Permittee agrees to defend, indemnify and hold the Company harmless from and against any such liens, claims or actions, together with costs of suit, and reasonable attorneys' fees incurred by the Company in connection with any such claim or action. In the event that there shall be recorded against said Company Facilities any claim of lien arising out of any such work performed, materials furnished or obligations incurred by Permittee or its contractors and such claim of liens not removed within ten (10) days after notice is given by the Company to Permittee to do so, the Company shall have the right to pay and discharge said lien without regard to whether such lien shall be lawful, valid or correct.

12.12 JOINT USE AGREEMENT

This Agreement shall be subject to rights which may be exercised by other companies under joint use or joint ownership agreements which the Company executed prior to this Agreement.

12.13 SURVIVABILITY

Any expiration or termination of Permittee's rights and privileges shall not relieve the Permittee of any obligation, whether indemnity or otherwise, which has accrued prior to such termination or completion of removal of Permittee's Attachments.

12.14 NO THIRD PARTY BENEFICIARIES

All of the terms, conditions, rights and duties provided for in this Agreement are and shall always be, solely for the benefit of the Parties. It is the intent of the Parties that no third party (including customers of either Party) shall ever be the intended beneficiary of any performance, duty or right created or required pursuant to the terms and conditions of this Agreement.

12.15 HAZARDOUS MATERIALS

The California Health and Safety Code requires businesses to provide warnings prior to exposing individuals to material listed by the Governor as chemicals “known to the State of California to cause cancer, birth defects or reproductive harm.” The Company uses chemicals on the Governor’s list at many of its facilities and locations. Accordingly, in

performing the work or services contemplated in this Agreement, Permittee, its employees, agents and subcontractors may be exposed to chemicals on the Governor's list. Permittee is responsible for notifying its employees, agents and subcontractors that work performed hereunder may result in exposures to chemicals on the Governor's list. The Company will provide Permittee upon request with a copy of a Materials Safety Data Sheet for every Hazardous Chemical on the Company Right-of-Way.

12.16 WAIVER

The failure of either Party to enforce or insist upon compliance with any of the terms or conditions of this Agreement shall not constitute a general waiver or relinquishment of any such terms or conditions, but the same shall be and remain in full force and effect.

12.17 MARK AND LOCATE RESPONSIBILITY

Permittee using the Company Underground Facilities, shall be responsible for marking and locating their equipment in accordance with State of California Government Code Section 4216 and shall become a member U.S.A (Underground Service Alert) and shall maintain membership for the duration of this Agreement.

12.18 PAYMENTS

Unless otherwise specified in this Agreement, Permittee shall make all payments to the Company within thirty (30) days of receipt of the invoice to;

For U.S. mail and express mail:

Pacific Gas & Electric Company
P.O. Box 997300
Sacramento, CA 95899-7300

12.19 DEFINITIONS

Capitalized terms used are defined in this Agreement shall have the meanings set forth herein.

12.20 TITLES AND HEADINGS

The table of contents, titles and headings of Articles and Sections of this Agreement are inserted for the convenience of reference only and are not intended to be part of or to affect the meaning or interpretation of this Agreement.

12.21 NO STRICT CONSTRUCTION

The Parties have participated jointly in the negotiation and execution of this Agreement. In the event an ambiguity or question of intent or interpretation arises with respect to this Agreement or any of the documents delivered pursuant hereto, this Agreement and such documents shall be construed as if jointly agreed upon by the Parties, and no presumption or burden of proof shall arise favoring or disfavoring any Party by virtue of the authorship of any of the provisions of this Agreement or such documents.

12.22 ENTIRE AGREEMENT

This Agreement constitute the entire agreement between the Parties with respect to the subject matter hereof and supersedes all prior oral or written agreements, commitments or understanding with respect to the subject matter hereof and may be amended only by a writing signed by both Parties.

ABCDEFGHIJ KLMNOPQRSTUVXYZ ABCDEFGHIJK Cable Company	**PACIFIC GAS AND ELECTRIC COMPANY**
By: _____	By: _____
Title: _____	Title: _____
Date: _____	Date: _____

PACIFIC GAS AND ELECTRIC COMPANY

CHAPTER 4

ATTACHMENT B

PRO FORMA UNDERGROUND LICENSE AGREEMENT

Duct, Conduit, and Other Underground Structure Space License Agreement

between

Pacific Gas and Electric Company

and

[Company]

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TABLE OF EXHIBITS

These Exhibits are part of this Agreement and are attached separately. The exhibits referenced within this Agreement may be revised or converted to an electronic on-line application in the future, which will be deemed an equivalent means of requesting access, providing notification and coordination of the activities. The Permittee shall use the latest issued exhibits identified by the Company when requesting access, providing notification and coordination of their activities.

DUCT, CONDUIT, AND OTHER STRUCTURE SPACE LICENSE AGREEMENT

This Duct, Conduit, and Other Structure Space License Agreement ("Agreement") is entered into by and between Pacific Gas and Electric Company ("Company"), a California corporation and _____ ("Permittee"), a _____ Limited Liability Company (together, the Company and Permittee shall be referred to as the "Parties"), and in consideration of the mutual promises and agreements set forth herein, the Parties hereby agree as follows:

ARTICLE 1

GRANT OF LICENSE

1.1 LICENSE

1.1.1 The Company gives Permittee permission, on the terms and conditions stated herein, to install and maintain completely dielectric communications cables (no metallic shield or embedded tracing wire allowed) and related equipment (hereinafter sometimes collectively referred to as "Attachment(s)") in "Excess Capacity" (as defined in Section 2.1.4) within distribution ducts, conduits, manholes, handholes, and other distribution structures, including above-ground distribution conduit, ducts, or other structures used for services entry to buildings (but excluding space on poles or other aerial facilities) owned, leased, or controlled by, or licensed to the Company for use in the provision of electric service, consistent with General Order (G.O.) 128 of the California Public Utilities Commission (CPUC) and Company standards, as discussed herein, collectively referred to as "Company Space," along with a license to use such rights-of-way owned, leased, or controlled by, or licensed to the Company ("Company Rights-of-Way") as are reasonably required to enable Permittee to access Company Space for such purposes. The Company Space to be accessed shall be identified by Permittee and submitted to the Company for authorization in the form set forth in Exhibit A.

1.1.2 This Agreement as a license is given pursuant to the authority of, and upon, and subject to, the conditions prescribed by G.O. 69-C of the CPUC, dated and effective July 10, 1985, which by this reference is incorporated herein. This license is effective the date it is signed and delivered by the Company, and will terminate based on any of the terms and conditions set forth in this Agreement. No Permittee use of any Company Space or Company Rights-of-Way shall create or vest in Permittee any ownership or property rights herein; Permittee's rights hereunder shall be and remain a mere license, but subject to CPUC Decision (D.) 98-10-058 as amended or superseded ("CPUC ROW Decisions").

1.1.3 Pursuant to G.O. 69-C this license is conditioned upon the right of the Company, either upon order of the CPUC, or upon the Company's own decision, consistent with CPUC ROW Decisions, to commence or resume the use of the property in question whenever, in the interest of the Company's utility service to its patrons or customers, it shall appear necessary or

desirable to do so. In such case, the Company will use commercially reasonable efforts consistent with applicable legal requirements to accommodate relocations, rearrangements, and replacements under Section 6.3.

1.1.4 Notwithstanding anything in this Agreement to the contrary, including Article 10 ("Dispute Resolution"), interpretation of the meaning and effect of G.O. 69-C in this Agreement shall be in the exclusive jurisdiction of the CPUC.

1.2 THE COMPANY DISCLAIMER

Permittee expressly acknowledges that the Company does not represent or warrant that Company Rights-of-Way, whether by easement, franchise, or other form of permission, are broad enough to permit Permittee's Attachments in the Company Space or for the exercise by Permittee of any other rights set forth in this Agreement. It shall be the sole responsibility and obligation of Permittee to secure any such further rights or permission for the placement and use of the Permittee's Attachments in Company Space and Company Rights-of-Way as may be necessary, including obtaining any permits or other approvals required by an authorized permitting agency. Permittee shall obtain any such necessary rights, including any required encroachment permits, from Granting Authorities before installing attachments. "Granting Authority(ies)" means those persons or entities from whom the Company has received the Company Rights-of-Way and includes both governmental and non-governmental entities and persons. This Agreement does not include a conveyance of any interest in real property, the Company Space, or facilities in which Company Space is located, and Permittee agrees to never claim such interest.

1.3 CHALLENGE TO AGREEMENT

1.3.1 If a Granting Authority, in any forum, in any way challenges, disputes, or makes a claim against the Company's authority to grant this license, the Company shall give Permittee reasonable written notice of same. The Company reserves the right in its sole discretion to require Permittee to remove from Company Space the Attachments that are the subject of the challenge, dispute, or claim, within thirty (30) days of written notice from the Company or such earlier time required by the Granting Authority. Permittee shall, upon such written notice, relinquish use of the Company Space, and remove any Attachments promptly prior to the last date specified in the notice.

1.3.2 Notwithstanding the above, if within the period described above, Permittee obtains an order from a court or regulatory agency with jurisdiction over the challenge, dispute, or claim against the Company's authority to grant this license, which order allows Permittee's Attachments to remain in the Company Space, Permittee shall be allowed to maintain the Attachments in the Company Space under the terms of that order, until a final decision or judgment is made at the highest level desired by Permittee. In the event of such contest, Permittee shall indemnify and hold the Company harmless from any expense, legal action, or cost, including reasonable attorneys' fees, resulting from the exercise of Permittee's right to contest under this section at Permittee's sole expense.

1.4 INCREMENTAL PROPERTY RIGHTS AND COSTS

1.4.1 If any time during this Agreement a Granting Authority of the Company makes a demand for additional compensation or indicates its intent to reopen, renegotiate, or terminate the Company's franchise, easement, license, or other agreement establishing the Company's rights in any of the Company Rights-of-Way as a direct result of the existence of this Agreement, the Company shall promptly notify Permittee. After conferring with the Company and allowing the Company an opportunity to resolve the issue, Permittee may attempt at Permittee's expense to resolve the issue with the Granting Authority through negotiation or settlement. Any decision to commence litigation on behalf of or in the name of the Company shall be in the sole discretion of the Company, and any subsequent litigation, whether brought by the Company at Permittee's request or by such third party Granting Authority, shall be conducted at Permittee's expense, but under the Company's direction and control with respect to any issues materially affecting the Company's rights in the Company Right-of-Way. If the dispute is resolved through negotiation or settlement approved by Permittee (which approval will not be unreasonably withheld), and such resolution requires the payment of additional consideration by the Company, Permittee shall reimburse the Company for the amount of such additional consideration, to the extent such amount is due to Permittee's presence in the Company Space. If the dispute is resolved through litigation in accordance with the foregoing and the judgment resulting there from requires the payment of additional consideration by the Company, Permittee shall reimburse the Company for the amount of such additional consideration to the extent such amount is due to Permittee's presence on or in the Company Space. If Permittee possesses the power of eminent domain within the relevant jurisdiction, Permittee shall have the right, in its sole discretion, independently of the Company to seek resolution of such a dispute by exercising such power of eminent domain, provided that Permittee shall pay all costs of such exercise. Permittee's obligation to reimburse the Company for the amounts of additional compensation due to Granting Authorities shall survive this Agreement.

1.4.2 Notwithstanding the foregoing, the Company after conferring with Permittee at any time and in the Company's sole discretion, may require that Permittee discontinue such attempts to resolve issues with a particular governmental Granting Authority by litigation or otherwise; provided that, such requirement of the Company notwithstanding, Permittee may still continue to attempt to resolve such issues independently of the Company, by litigation or otherwise, so long as the Company is not named, joined, or otherwise included as a party or principal in any such litigation or other attempt; and provided further that the foregoing shall not be deemed to prohibit Permittee from exercising any eminent domain rights that Permittee is authorized to pursue within the relevant jurisdiction.

1.5 TERM OF LICENSE

This Agreement is for a term of five (5) years from the date it is signed by the Company and will thereafter continue in effect for recurring five (5) year periods until terminated, as of the end of the then-current term, by either Party upon one (1) year's written notice to the other.

1.6 COMMISSION JURISDICTION

Unless otherwise expressly ordered by the CPUC, this Agreement at all times shall be subject to such modifications as the CPUC may direct from time to time in the exercise of its jurisdiction.

ARTICLE 2

PLACING ATTACHMENTS

2.1 PROCESS FOR ATTACHING IN THE COMPANY SPACE

2.1.1 Request For Information

Permittee may, from time to time, submit a written request for information about the availability of Company Space. The request for information must include the proposed route or location of Attachments. Company shall respond in writing to such request for information as quickly as possible using commercially reasonable methods and consistent with applicable legal, safety, and reliability requirements. Availability of Company Space shall be determined in a manner consistent with Sections 2.1.4 and 2.1.5. Subject to the Confidentiality provisions in Section 13.4, the Company shall, within such period, provide Permittee with access to maps, and currently available records such as drawings, plans, and other information that it uses in its daily transaction of business necessary for evaluating the availability of Excess Capacity for the proposed route or location of Attachments specified by the Permittee in the request. Permittee agrees to pay in advance all of the Company's estimated unit costs currently in effect to respond to the request for information. The total cost for providing the information will be reconciled based on the Company's actual costs at the end of the task. The Company's estimated unit costs for such work are set forth in Exhibit C. The Company may revise such estimated unit costs, from time to time, upon sixty (60) days' written notice to Permittee.

2.1.2 Request For Access

If Permittee desires to install new Attachments or replace existing Attachments in Company Space, it must submit a request for access using the form attached as Exhibit A, or such other form as the Company may specify from time to time in its reasonable discretion, and identify the facilities and equipment, including their physical characteristics (e.g., material and dimensions), to be placed in the Company Space and a copy of Permittee's property lease or right-of-way document, if any are required.

Permittee agrees to pay in advance all of the Company's estimated unit costs to respond to the request for access. The total cost for responding to the request is reconciled based on the Company's actual costs at the end of the task. The Company's estimated unit costs for such work are set forth in Exhibit C. The Company may revise such estimated unit costs, from time to time, upon sixty (60) days' written notice to Permittee.

2.1.3 Response to Request for Access

The Company shall provide a written response to the Permittee's request for access as quickly as possible using commercially reasonable methods and consistent with applicable legal, safety, and reliability requirements. The response shall state whether the request is being granted or denied, and if the request is denied, provide all of the reasons why the request is being denied. In granting a request, the Company will select or approve Permittee's selection of the specific duct, conduit, or innerduct, or other location in the Company Space that Permittee may occupy. If denial of access is proposed, upon request of Permittee the Company will promptly meet with Permittee and explore in good faith reasonable alternatives to accommodate the proposed access. Permittee must request such meeting within ten (10) business days of receipt of a notice of denial.

2.1.4 Space Availability

(a) "Excess Capacity" means volume or capacity in a distribution duct, conduit, manhole, handhole, or other distribution structure, including an above-ground distribution conduit, duct, or other structure used for service entry to a building (but excluding space on poles or other aerial facilities) which can be used for dielectric communications cables and equipment, consistent with General Order 128 and the Company's nondiscriminatory design, engineering and construction standards and safety rules.

(b) Excess Capacity that is not assigned, reserved for Company use or occupied shall be deemed available for use by Permittee.

(c) Excess Capacity shall be deemed assigned if, on a nondiscriminatory basis, another customer, telecommunications carrier or cable TV company has an agreement with Company or other legal right to occupy said Excess Capacity and has requested or reserved access to a particular route or specific distribution conduit or duct or other space containing said Excess Capacity prior to Permittee requesting the use of such particular route or specific distribution conduit or duct or other space containing said Excess Capacity.

(d) Permittee's Attachments shall be permitted to co-occupy, with the Company's electrical cables and other equipment, available Excess Capacity consistent with G.O. 128 and Company's nondiscriminatory standards and safety rules.

(e) A duct, conduit, innerduct, or other location for which there is insufficient Excess Capacity to accommodate Permittee's request for access, or which is already occupied or assigned for use by the Company or another telecommunications carrier, cable TV company or customer shall be deemed unavailable for assignment to Permittee.

(f) No Company Space shall be deemed assigned to, or otherwise reserved for use by, the Company unless (i) prior to Permittee's request for access the Company had a bona fide development plan in place and the specific reservation of the attachment capacity is reasonably and specifically needed for the provision of utility service within such twelve (12) month period; (ii) there is no other feasible solution to the Company's meeting its immediately foreseeable needs; (iii) there is no commercially reasonable available technological means for

increasing the capacity of the support structure for additional attachments; and (iv) the Company has attempted to negotiate with Permittee for a cooperative solution to the capacity problem.

2.1.5 Denial Based on Safety, Reliability, Engineering Considerations

In the event the Company denies a request based on reasons of safety or reliability, the Company shall, in the event of dispute, bear the burden of establishing that the proposed Attachment cannot be accommodated without threat to safety or utility service reliability, and that the Company's relevant practices and standards are being applied in a nondiscriminatory manner.

2.1.6 Make Ready Work

(a) Determination of Need

If a request for access is granted, the Company, using the information included in the request and other information as the Company may reasonably require, will conduct engineering evaluations to determine any rearrangement (including replacement, if necessary), modifications, or expansions, or other work to or in the Company Space or any Company or third-party-owned facilities or equipment in the Company Space ("Make Ready Work") that is needed to accommodate the Attachments, and shall provide an estimate of the Company's unit costs for such Make Ready Work. The Company's estimated unit costs for such work are set forth in Exhibit C. The Company may revise such estimated unit costs, from time to time, upon sixty (60) days' written notice to Permittee.

Alternatively, if Permittee meets the qualifications established by the Company's guidelines, Permittee may at its expense conduct the engineering evaluations to determine and identify the required Make Ready Work. The Company reserves the right to check, at Permittee's expense, the accuracy of the Permittee's engineering evaluations and if relevant errors are found, Permittee shall be notified and advised to resubmit its request with accurate information. If relevant efforts result in a request for access that results in an infraction of applicable codes and standards, Permittee agrees to reimburse the Company for the actual cost of checking the Permittee's initial and resubmitted engineering evaluation.

(b) Performance of Make Ready Work

If it is determined that Make Ready Work will be necessary to accommodate Permittee's Attachments, Permittee will have forty-five (45) days (the "Acceptance Period") to either (i) submit payment for the estimated unit costs authorizing the Company to complete the Make Ready Work, in which case, the Company shall schedule and complete the Make Ready Work on a nondiscriminatory, commercially-reasonable basis without unreasonable delay, following its receipt of such payment; or (ii) advise the Company of its willingness to perform the proposed make-ready work itself if permissible in the application area.

Permittee agrees to pay in advance all of the Company's estimated unit costs to perform Make Ready Work at Permittee's expense. The total cost for such work is reconciled based on the Company's actual costs at the end of the project. The Company's estimated unit costs for such

work are set forth in Exhibit C. The Company may revise such estimated unit costs, from time to time, upon sixty (60) days' written notice to Permittee.

Alternatively, the Company will at its discretion allow Permittee to perform Make Ready Work at Permittee's expense. Make Ready Work performed by Permittee, or by a contractor approved by Company ("Authorized Contractor") and selected by Permittee, shall be performed in accordance with the Company's specifications and in accordance with the same standards and practices that would be followed if such work were being performed by the Company or the Company's contractors. Neither Permittee nor Authorized Contractors selected by Permitted shall conduct such work in any manner that degrades the integrity of Company Space or any equipment or facilities in such Space or in which such Space is located or that interferes with any existing use of any such equipment, facilities, or Space.

Permittee shall make arrangements with third parties who have facilities occupying Company Space regarding reimbursement for any expenses incurred by such third parties in transferring or rearranging their facilities and equipment to accommodate the placement of Permittee's Attachments in the Company Space.

2.1.7 Occupancy of Company Space After Make Ready Work Completed and Relinquishment of Assignment of Company Space If Not Timely Occupied

(a) Permittee must exercise its access rights and occupy a specific duct, conduit, or innerduct, or other location in the Company Space approved for Permittee's occupation (i) within ninety (90) days after a determination that Make Ready Work is not necessary in accordance with Section 2.1.6(a) above; (ii) within ninety (90) days after the completion of Make Ready Work if the Company is performing the Make Ready Work pursuant to Section 2.1.6(b) above; or (iii) within twelve (12) months after Permittee's request for access is granted by the Company if the Permittee advises the Company that the Permittee will perform the Make Ready Work pursuant to Section 2.1.6(b) above.

(b) If Permittee does not exercise its access rights and occupy a specific duct, conduit, or innerduct, or other location in the Company Space approved for Permittee's occupation within the time set forth in subsection (a) above, or if Permittee has elected to make the determination of the necessity for any Make Ready Work itself in accordance with the second paragraph of Section 2.1.6(a) but has failed to complete that determination within ninety (90) days, then the assignment will lapse and the assigned location will be deemed available for use by the Company or another telecommunications carrier.

2.1.8 Installation of Attachments

Under no circumstances shall Permittee enter Company's Rights-of-Way, enter or access Company Space or install any Attachments in Company Space without (a) obtaining any necessary encroachment or street occupation permits from local authorities, (b) receiving all required approvals from Company and (c) being accompanied by Company personnel, as set forth in Section 3.2.

Permittee shall be responsible for the placement of Attachments in the Company Space and shall be solely responsible for all costs and expenses incurred by it or on its behalf in connection with such activities.

Permittee shall provide the Company with a construction schedule and thereafter keep the Company informed of anticipated changes in the construction schedule.

Permittee's Attachments shall be placed, constructed, maintained, repaired, and removed in full compliance with the requirements, specifications, and standards specified in this Agreement, and the current (as of the date when such work is performed) versions of the following:

(a) the National Electrical Safety Code ("NESC"), published by the Institute of Electrical and Electronic Engineers, Inc. ("IEEE");

(b) the National Electrical Code ("NEC"), published by the National Fire Protection Association ("NFPA");

(c) General Order 128;

(d) The Company's nondiscriminatory design, engineering and construction standards and safety rules.

Without limitation, Permittee will mechanically and electrically protect Permittee's cables within any Company splice box, vault or enclosure. Permittee shall be permitted to locate communications splices, coils of communications cable, or other communications equipment within a Company vault or other subsurface enclosure to the extent consistent with the Company's nondiscriminatory standards and practices as applied to other communications splices, coils of communications cable, or other communications equipment, excluding those used by the Company solely for its own internal communications purposes. To the extent practicable, Permittee shall place its own enclosure, if required, adjacent to the Company enclosure for splices, coils of cable or other equipment.

Permittee is solely responsible to maintain safe and efficient working and operating conditions. Notwithstanding the foregoing, any Company representative has the authority to temporarily revoke any Permittee access or stop Permittee activities if the Company representative believes that there is or has been a violation of any safety rule or procedure or that the situation is unsafe.

2.1.9 Inspection

Permittee must notify the Company when Permittee has completed work in the Company Space and Company Rights-of-Way. If the Company has not had the opportunity to complete the review, the Company will attempt to meet with Permittee's contractors to finalize the review. If the Company is not available when Permittee provides the Company with notice of completion then the Company may perform a post-construction inspection as described in this section. Permittee shall reimburse the Company for costs associated with the presence of the Company's authorized employee or representative.

The Company may, at Permittee' expense, conduct a post-construction inspection of the Permittee' installation of Attachments in Company Space for the purpose of determining the conformance of the installation to the access authorization. The Company will provide the Permittee advance notice of the proposed date and time of the post-construction inspection. Permittee may accompany the Company on the post-construction inspection.

The Company shall have the right, but not the obligation, to make periodic inspections of all Attachments installed in Company Space.

2.1.10 Noncompliance

If an inspection reflects that Permittee's Attachments are not in compliance with the terms of this Agreement, Permittee shall bring the Attachments into compliance within thirty (30) days after being notified of such noncompliance. If any modification work to the Company's facilities or Company Space is required to bring Permittee's Attachments into compliance, Permittee shall provide written notice to the Company and such modification work will be treated in the same fashion as Make Ready Work in connection with a new request for access. If the violation creates a hazardous condition, Permittee must bring its Attachments into compliance upon notification.

2.1.11 "As-Built" Drawings

Within ninety (90) days following Permittee's installation of any Attachment(s) in Company Space, Permittee shall provide Company with "as-built" drawings (CAD and PDF versions) of the communications cables or other related equipment including fiber cable numbers, fiber cable type and count, tracer wire details, butterfly drawings, splice locations, building POI locations, GPS or latitude & longitude coordinates.

2.2 ADDITIONAL ATTACHMENTS

Permittee shall not install any additional Attachments in Company Space without first securing the Company's written authorization in accordance with Section 2.1 and following the process for a new attachment.

ARTICLE 3

COMPLIANCE WITH LAW AND SAFETY REQUIREMENTS

3.1 APPLICABLE LAW AND REQUIREMENTS

3.1.1 Permittee shall, at its sole expense, install, maintain, operate and keep in good repair the Attachments in conformity with all applicable state and federal laws, including rules, and regulations of state and federal governmental agencies, and other governmental authorities, including, but not limited to, the rules, regulations, and orders of the CPUC, and in conformity with any safety standards or requirements as may be required or specified by the Company in its sole, good faith discretion.

3.1.2 Permittee shall be solely responsible for the Attachments and shall take all necessary precautions during installation, and maintenance on or near the Company's facilities and the Company's Rights-of-Way so as to protect all persons and the property of the Company and others from injury and damage. Without limiting the foregoing and without assuming any obligation to maintain or monitor the Attachments, if the Company believes that Permittee's Attachments are in any way endangering any person or property or are in noncompliance with any requirement referenced in Sections 3.1.1 (a "Hazardous Condition"), the Company may, in its sole discretion, take any steps it deems necessary to remedy the Hazardous Condition; in which case Permittee shall be required to reimburse the Company for its actual costs of doing so. Notwithstanding the above, the Company shall take reasonable action to notify Permittee of any Hazardous Condition that does not require immediate attention, and where feasible, allow Permittee to correct the Hazardous Condition prior to any corrective action taken by the Company. In addition, if the Company notifies Permittee of any Hazardous Condition, Permittee shall remedy such condition promptly and in no case later than ten (10) days after receipt of such notice.

3.2 ACCESS TO COMPANY SPACE OR RIGHTS OF WAY

3.2.1 The following requirements apply to any access to and any work performed in Company Space and Rights-of-Way:

(a) Except for emergencies or service restoration, Permittee shall notify the Company not less than five (5) business days in advance before entering Company Space. The notice shall state the general nature of the work to be performed. All such activities shall be conducted during normal business hours except as otherwise agreed by the Parties or required by a government agency. For emergencies or service restoration, Permittee shall provide Company with as much notice as reasonably possible under the circumstances, and Company shall make commercially reasonable efforts to provide an authorized employee or agent of Company present to enable Permittee to enter Company Space. If an electric service shutdown is required, the Permittee shall arrange a specific schedule with the Company prior to performing any work in the proximity of energized electrical conductors or equipment.

(b) Notwithstanding any other provision of this Agreement, an authorized employee or representative of the Company must be present when Permittee or personnel acting on Permittee's behalf enter or perform work within the Company Space and Company Rights-of-Way. Permittee shall pay Company for Company's employee or representative based upon Company's current fully loaded labor rate.

(c) Access shall be in accordance with CPUC General Order 128.

(d) Any access by Permittee, whether for initial installation, maintenance, repairs or service restoration shall be performed by using "qualified" personnel, as such term is defined in the California Code of Regulations Title 8, division 4, Chapter 4, under the supervision of a qualified electrical worker licensed in the State of California and whose qualifications have been verified in advance by Company. All work under this Agreement to be performed in the proximity of energized electrical conductors or equipment shall only be performed by qualified electrical workers in accordance with Title 8 -- State of California High

Voltage Safety Orders as amended. Permittee (including any Authorized Contractor selected by Permittee) must satisfy the qualifications required by the Company of its own personnel and the Company's contractors who perform such work as set forth on https://www.pge.com/en_US/for-our-business-partners/purchasing-program/suppliers/suppliers.page.

(e) Permittee shall not make any physical contact with Company's cables or other elements of Company's electrical system.

(f) Permittee shall comply with Company's established safety rules, a copy of which is attached to and incorporated by reference in this Agreement as Exhibit D, when working around electric cables or other elements of the Company electric system.

(g) Permittee shall comply with any conditions legally imposed by the owner of the property on which the Right of Way is located.

(h) Permittee shall indemnify Company as further provided in Section 4.1 of this Agreement with respect to such entry as specified in Section 3.2.

3.2.2 Company's authorized employee or agent shall have the authority, without subjecting Company to any liability, to suspend Permittee's work in and around Company Space or Company facilities if, in the sole discretion of that employee or agent, any Hazardous Conditions arise or any unsafe practices (including unsafe practices which may threaten the integrity of Company's facilities) are being followed by Permittee's employees, agents or contractors. The presence of Company's authorized employee or agent shall not relieve Permittee of its responsibility to conduct all of its work and operations in and around Company Space or Company facilities in a safe and workmanlike manner.

3.2.3 Company, from time to time by written notice to Permittee, may specify additional reasonable and necessary entry conditions or requirements in addition to the requirements set forth in this Agreement.

3.3 WORK PRIORITY

Permittee's workers shall conduct their work so as not to interfere or delay any other work performed or scheduled to be performed by the Company or its authorized agents on or near the Company Space or the Company Rights-of-Way, or to interfere with Company's utility services or operations. The Company and its authorized agents shall have priority to access the Company Space and the Company Rights-of-Way at any time and Permittee's Workers must adhere to any requests made by the Company to modify or interrupt the work of Permittee's workers.

3.4 IDENTIFICATION TAGS

Permittee shall identify its Attachments in accordance with Company's Labeling Standard (ISTS 2014).

3.5 MARK AND LOCATE RESPONSIBILITY

Permittee shall be responsible for marking and locating its underground Attachments in accordance with California Government Code § 4216 and shall become a member of U.S.A (Underground Service Alert) and shall maintain membership for the duration of this Agreement.

ARTICLE 4

INDEMNIFICATION AND LIABILITY

4.1 INDEMNIFICATION

4.1.1 The Parties agree to bear any and all Losses (defined below) that arise out of or are in any way connected with the performance of this Agreement as set forth in this section. All losses, fines, penalties, claims, demands, legal liability, damages, attorneys' fees, costs of investigation and litigation, expenses, settlements, verdicts, awards or judgments (collectively, "Losses") connected with or resulting from injury to or death of any person (including employees of the Parties), damage to or destruction of any property (including property of the Parties), damage to the environment or any natural resources, or violation of any local, state or federal law, rule or regulation, including but not limited to environmental laws and regulations, however caused on either Party shall be borne as follows:

(a) Any Losses arising from injury to or death of an employee, contractor, subcontractor, or agent of a Party or arising from damage to or destruction of any property of a Party shall be borne by such Party, and such Party shall defend, indemnify and hold harmless the other Party and each of its officers, directors, partners, employees, and agents ("Indemnitees") against such Losses, excepting only Losses as may be caused by the sole negligence or willful misconduct of the Indemnitees.

(b) Excepting Losses arising from injury to or death of an employee, contractor, subcontractor, an agent of a Party or arising from damage to or destruction of any property of a Party, any Losses caused by the joint or concurrent negligence of the Parties or their respective contractors or agents, or by the failure of the Parties to observe or perform any obligation hereunder, shall be borne by the Parties according to their degree of fault.

(c) Any Loss caused by entering the Company Space or Company Rights-of-Way by the employee, agent, contractor or subcontractor of a Party shall be borne solely by such Party.

(d) Any Loss caused by the sole act or omission of a Party shall be the responsibility of that Party.

If either Party, as the result of any claim for Losses, is compelled to pay damages to a greater extent than specified in this section, such Party shall have, to the extent of the excess so paid by it, the right of contribution from the other Party.

4.1.2 Notwithstanding the foregoing, Permittee shall indemnify, defend and hold harmless the Company, its officers, directors, partners, agents, and employees (collectively, "the

Company Indemnitees") from and against all claims, demands, losses, damages, expenses, and legal liability connected with or resulting from (i) interruption, discontinuance or interference with Permittee's service to any of its customers or any economic or commercial loss of Permittee's customers, resulting therefrom (but only to the extent of Permittees customers' claims, not those of the Company), with the exception of claims, demands, losses, damages, expenses, and legal liability arising solely from the gross negligence or willful misconduct of the Company or the Company's agents, employees or independent contractors who are directly responsible to the Company; (ii) Permittee's failure to comply with applicable rules, regulations or safety standards; and (iii) any and all claims or assessments of any kind or nature, including increased franchise fees, right-of-way or easement fees, made or asserted against the Company Indemnitees by any third party, including any Granting Authority, franchise authority, governmental authority or other property owner as a result of Permittee's use of, or failure to relinquish use of the Company Space or Company Rights-of-Way or remove any Attachments as may be required by the Company pursuant to Section 1.3 or Section 11.2. Regardless of fault on behalf of Permittee, the Company shall exercise reasonable commercial effort toward restoring the Company's service to its customers in accordance with the Company's customary procedures and priorities, to enable Permittee to restore Permittee's Attachments in the Company Space and to resume service to Permittee's customers so as to minimize any and all losses once an interruption, discontinuance, or interference with a Party's service to its customers occurs. Nothing in this Article 4 shall affect the application of the provisions of Section 13.11 "No Third Party Beneficiaries." Under no circumstance shall either Party have the authority to admit any liability on behalf of the other.

4.1.3 Any Party seeking indemnification hereunder ("Indemnitee") shall notify the other party ("Indemnitor") of the nature and amount of such claim and the method and means proposed by the Indemnitee for defending or satisfying such claim within a reasonable time after the Indemnitee receives written notification of the claim. The Indemnitee shall consult with the Indemnitor respecting the defense and satisfaction of such claim, and the Indemnitee shall not pay or settle any such claim without the prior written consent of the Indemnitor, which consent shall not be unreasonably withheld or delayed; provided, however, that the Indemnitee's failure to give such notice shall not impair or otherwise affect the Indemnitor's obligation to indemnify against such claim except to the extent that the Indemnitor demonstrates actual damage caused by such failure.

4.2 AD VALOREM INDEMNITY

If the ad valorem property taxes, special assessments, local improvement district levies, or other levies or taxes (collectively, "Ad Valorem Taxes") or bases for ad valorem taxation payable by the Company with respect to the Company facilities increase as a result of Permittee's Attachments, or the Ad Valorem Taxes increase or change due to any construction, installation, or improvements provided pursuant to this Agreement, the Company shall deliver to Permittee copies of the relevant tax bills and supporting materials along with a detailed calculation of such taxes to be paid by Permittee only to the extent such Ad Valorem Tax exceeds the amount which the Company would otherwise pay. Within thirty (30) days Permittee shall pay or reimburse the Company for such amounts. Permittee may make such reimbursements or payments under protest, in which event Permittee and the Company shall attempt to agree upon a calculation of the amount payable by Permittee. If agreement cannot be reached, either party may refer the

dispute to mediation in accordance with the provisions of Article 10. Permittee also shall be responsible for timely payment of any Ad Valorem Taxes or other taxes and fees levied against the Permittee's Attachments or other of Permittee's property or equipment located in the Company Space or the Company Rights-of-Way that are billed directly to Permittee by the taxing authority. However, in the event the same property or interests are assessed an Ad Valorem Tax or sales or use tax in the same year to both the Company and Permittee, each Party agrees to promptly notify the other upon becoming aware thereof to cooperate with the other in seeking appropriate redress from the authority or authorities assessing the property or imposing the tax; and, provided the Company has notice of such potential double taxation, the Company agrees at Permittee's request, not to pay such tax and seek reimbursement from Permittee without having first protested, at Permittee's expense, the assessment at the appropriate administrative level.

4.3 DEFENSE OF CLAIMS

Both parties shall, on request, defend any suit asserting one or more claims covered by the indemnities set forth in Section 4.1.1. Permittee shall, on the Company's request, defend any suit asserting one or more claims covered by the indemnities set forth in Sections 4.1.2 and 4.2. The indemnifying party shall pay any costs that may be incurred by the Indemnitee in enforcing such indemnity provisions, including reasonable attorney's fees.

4.4 LIMITATION OF LIABILITY

In no event shall the total cumulative liability of the Company, arising out of or in connection with the use of the Company Space or Company Rights-of-Way or relating to this Agreement, exceed the sum of the attachment fees received, and forecasted to be received, by the Company under the current Agreement with Permittee whether based on contract, tort, including negligence, or otherwise. The above limitations of liability shall not apply to any willful misconduct on the part of the Company or to the Company's liability for contribution under Section 4.1.1 if Permittee, as the result of any claim for Losses, is compelled to pay damages to a greater extent than specified in that section.

4.5 NO WARRANTIES

Except as specifically and expressly provided herein, the Company makes no warranty, express or implied with respect to the Company Space or Company Rights-of-Way or the use of the Company Space or Company Rights-of-Way by Permittee. The Company Space is "as is." The Company disclaims all warranties express or implied including the warranties of merchantability and fitness for particular purposes.

4.6 CONSEQUENTIAL DAMAGES

Notwithstanding anything in this Agreement to the contrary, neither Party nor its contractors or subcontractors shall be liable to the other Party for the other Party's own special, consequential or indirect damages, including without limitation, loss of use, loss of profits or revenue, loss of capital or increased operating costs, arising out of this transaction or from breach of this Agreement, even if either Party is negligent, grossly negligent, or willful.

ARTICLE 5

INSURANCE

With the written consent of the Company, and until Permittee has demonstrated to the Company' satisfaction adequate financial strength to support self-insurance, Permittee shall maintain the following insurance coverage or self-insurance and be responsible for its contractors and subcontractors maintaining sufficient limits of the same insurance coverage.

5.1 WORKERS' COMPENSATION AND EMPLOYERS' LIABILITY

5.1.1 Workers' Compensation insurance indicating compliance with any applicable labor codes, acts, laws or statutes, state or federal, where Permittee performs any work in the Company Space or the Company Rights-Of-Way.

5.1.2 Employers' Liability insurance shall not be less than $1,000,000 for injury or death each accident.

5.2 COMMERCIAL GENERAL LIABILITY

5.2.1 Coverage shall be at least as broad as the Insurance Services Office (ISO) Commercial General Liability Coverage "occurrence" form, with no coverage deletions.

5.2.2 The limit shall not be less than $10,000,000 each occurrence for bodily injury, property damage, personal injury, and completed operations, with no exclusions for collapse, explosions, and underground hazards. Defense costs shall be provided as an additional benefit and not included within the limits of liability. Coverage limits may be satisfied using an umbrella or excess liability policy.

5.2.3 Coverage shall: (l) by "Additional Insured" endorsement add as additional insured the Company, its directors, officers, agents and employees with respect to liability arising out of the work performed by or for the Permittee for ongoing operations as well as completed operations. If the Permittee has been approved to self-insure, Permittee shall, at all times, extend coverage to the Company in the same position as if the Company were an "Additional Insured" under a policy; (2) be endorsed to specify the Permittee's insurance is primary and that any insurance or self-insurance maintained by the Company shall not contribute with it.

5.3 BUSINESS AUTO

5.3.1 Coverage shall be at least as broad as the Insurance Services Office (ISO) Business Auto Coverage form covering Automobile Liability, code 1 "any auto."

5.3.2 The limit shall not be less $3,000,000 each accident for bodily injury and property damage.

5.4 POLLUTION LIABILITY

5.4.1 Coverage for bodily injury, property damage, including clean up costs and defense costs resulting from sudden and gradual pollution conditions including the discharge, dispersal, release or escape of smoke, vapors, soot, fumes, acids, alkalis, toxic chemicals, hydrocarbons, liquids or gases, waste materials or other irritants, contaminants or pollutants into or upon land, the atmosphere or any watercourse or body of water.

5.4.2 The limit shall not be less than $1,000,000 each occurrence for bodily injury and property damage.

5.4.3 The Company shall be named as additional insured.

5.5 ADDITIONAL INSURANCE PROVISIONS

5.5.1 Before commencing any work in the Company Space or Company Right-Of-Way, Permittee shall furnish the Company with certificates of insurance and Additional Insured endorsement of all required insurance for Permittee.

5.5.2 The policies shall state that insurers shall provide thirty (30) days prior written notice to the Company prior to cancellation.

5.5.3 The certificate must be signed by a person authorized by that insurer to bind coverage on its behalf and shall be submitted to:

Pacific Gas and Electric Company
Joint Utility Department
1850 Gateway Blvd, Room 6032
Concord, CA 94520

A copy of all such insurance certificates and the Additional Insured endorsement shall be sent to the Company's Contract Negotiator and/or Contract Administrator.

5.5.4 The Company may require Permittee to furnish to the Company certificates of insurance or other evidence thereof attesting that the insurance required by Article 5 is in effect.

5.5.5 Upon request, Permittee shall furnish the Company the same evidence of insurance for its contractors and subcontractors, as the Company requires of Permittee.

5.5.6 Permittee shall provide Company with written notice of cancellation within five (5) business days of Permittee's receipt of notice of cancellation from insurer.

5.5.7 If Permittee claims to self-insure then this section applies. Notwithstanding any provisions in this Article to the contrary, Permittee represents that its customary practice, as of the date of this Agreement, is to self-insure for all or a portion of the insurance required of it under this Agreement. Accordingly the parties agree that such self-insurance shall constitute compliance with all or some of the requirements of this Article for as long as Permittee generally continues such practice of corporate self-insurance with respect to its regular conduct of

business. Permittee covenants to advise the Company when it ceases generally to self-insure with respect to its regular conduct of business.

ARTICLE 6

DISCONTINUATION, RELOCATION, AND RECLAMATION OF SPACE

6.1 DISCONTINUATION

Notwithstanding any provision to the contrary, the Company shall be entitled at any time to discontinue the Company's use of the Company Space and Company Rights-of-Way, and, in such case, Permittee shall immediately remove its Attachments. In the event of any such discontinuation, the Company shall give Permittee advance written notice as soon as reasonably practicable, and the Company may propose alternative Company Space to meet the needs of the Permittee in which case Permittee shall be entitled to a pro rata credit for any Attachment fees paid in advance against future use of the alternative Company Space. If no alternate Company Space is available or acceptable, Permittee shall be entitled to a pro-rata refund of any Attachment fees that were paid in advance. The Company shall allow Permittee to buy the Company's interest in the discontinued Space at the Company's replacement cost new minus depreciation. Permittee shall be responsible for transferring its Attachments at its expense.

6.2 RELOCATION

The Company at any time may relocate all or any portion of its support structures to other locations. In the event of any such relocation, the Company may in its discretion allow Permittee to transfer its Attachments to the new support structure location in accordance with this Agreement. The Company shall provide Permittee sixty (60) days advance written notice, although less notice is permitted if required by the circumstances. The Company shall have the right to proceed with the relocation in accordance with such notice, including, but not limited to, the right, in good faith, to reasonably determine the extent and timing of, and methods to be used for, the relocation of the Company's support structure, provided that the Company shall use commercially reasonable efforts to coordinate such relocation with Permittee. Permittee shall be kept informed of determinations made by the Company in connection with the scheduling of such relocation, and Permittee shall be responsible for transferring its Attachments at its expense in accordance with such schedule.

6.3 RECLAMATION OF SPACE

6.3.1 In the event that the Company, either upon order of the CPUC, or upon the Company's own decision, consistent with legal requirements determines that the Company must commence or resume use of all or a portion of Company Space previously assigned to Permittee, for the purpose of providing utility service to its patrons or customers, and the Company shall evaluate if the Company can accommodate continued use of the Company Space by Permittee through expansion of the subject support structures or other modifications.

6.3.2 If the Company is not able to make such accommodation, the Company shall provide Permittee as much advance written notice of the need for the removal or transfer of Permittee's attachments as is practicable but in no event less than thirty (30) days advance

written notice. Each notice shall specify the portion, if less than all, of the Company Space to which such notice relates. Permittee shall remove its Attachments from the Company Space, at its expense, prior to the expiration of the notice period, and all rights and privileges of Permittee in the Company Space that is the subject of the notice shall terminate upon expiration of the notice period.

6.3.3 In the event of reclamation pursuant to Sections 6.3.1 and 6.3.2 above, Company shall make a good faith effort to assist Permittee in finding alternative routes owned or controlled by Company and to the extent there is Company Space available within or through which any affected Permittee Attachments may be relocated. If an alternative route is located, Permittee shall be responsible for transferring its Attachments at its expense. Permittee shall be entitled to a pro rata credit for any Attachment fees paid in advance against future use of the alternative Company Space. If no alternate Company Space is available or acceptable, Permittee shall be entitled to a pro-rata refund of any Attachment fees that were paid in advance.

ARTICLE 7

RESTORATION OF SERVICE

In the case of any incident whereby both the Company's electrical service capacity and Permittee's telecommunications capacity are adversely affected, restoration of Permittee's Attachments and Permittee's capacity shall at all times be subordinate to restoration of the Company's electrical service capacity, unless otherwise agreed in advance by both Parties. Nonetheless, the Company shall permit Permittee to make repairs to restore its Attachments and its capacity, as long as such restoration efforts do not, in the Company's sole discretion, interfere with the Company's restoration activities, and as long as Permittee complies with Section 3.2, Access to Company Space.

ARTICLE 8

ATTACHMENT FEES

8.1 ANNUAL ATTACHMENT FEES

8.1.1 Prior to placing its Attachments in Company Space, Permittee shall pay to the Company an Attachment fee for each Attachment to be installed in Company Space. The Attachment fee shall be equal to the percentage of the annual cost of ownership of the Company's support structure, computed by dividing the volume or capacity rendered unusable by Permittee's Attachment by the total usable volume or capacity, consistent with the methodology in the CPUC's ROW decisions. For this purpose, "total usable volume or capacity" means all volume or capacity in which the Company's lines, plant, or system could legally be located, including the volume or capacity rendered unusable by Permittee's Attachments and equipment of other licensees using the Company Space.

8.1.2 The current rates for Attachments to conduits and other support structures are set forth in Exhibit B to this Agreement. The Company may revise the unit rates from time to time,

but no more often than annually. The revised unit rates shall be effective following sixty (60) days' notice to Permittee.

8.2 UNAUTHORIZED ATTACHMENTS

8.2.1 Upon request of Company, Permittee shall provide written evidence of Attachment authorization from the Company for any Company Space in which Permittee has an Attachment. If Permittee cannot provide such written evidence of Attachment authorization, Permittee shall pay to the Company Five Hundred Dollars ($500.00) per block (or portion of a block) per cable for each unauthorized Attachment as an unauthorized attachment fee. The unauthorized Attachment shall then be subject to all the terms of this Agreement. If payment is not received within thirty (30) days of invoice date, the Company may invoke rights under Article 11 "Breach and Termination," and remove Permittee's Attachments from the Company Space.

8.2.2 Notwithstanding Section 8.2.1 above, any unauthorized attachment or unauthorized entry in Company Space or Company ROW is a material and substantial breach of Permittee's obligations under this Agreement and may justify Company's termination of this Agreement.

ARTICLE 9

REMOVAL; ABANDONMENT

9.1 REMOVAL OF ATTACHMENTS

Upon any expiration or termination, Permittee shall relinquish use of the Company Space and remove its Attachments from the Company Space in accordance with this Agreement prior to the effective date of expiration or termination at Permittee's sole expense. If Permittee fails to remove the Attachments by the expiration of this Agreement or as may be required by the Company within the time period designated by notice pursuant to Article 6 or otherwise required by this Agreement, the Company shall be entitled to consider Permittee's Attachments abandoned as set forth in Section 9.2, below.

9.2 ABANDONMENT

If Permittee fails to use its Attachments for any period of one hundred eighty (180) days, the Company shall provide Permittee written notice of its intent to treat such Attachments as abandoned. If Permittee identifies such Attachments as abandoned or fails to respond to such notice within thirty (30) days, Permittee shall be deemed to have abandoned such Attachments which abandonment shall terminate all rights of Permittee as to the abandoned Attachment. Upon abandonment by Permittee, the Company shall have the right to retain such Attachments as the Company's own, or to remove the Attachments at Permittee's sole risk and expense, and Permittee agrees to reimburse the Company for its expense. Company shall also have the right to leave the abandoned Attachments in place. Abandonment shall not relieve Permittee of any obligation, whether of indemnity or otherwise, accruing prior to completion of any removal by the Company or which arises out of an occurrence happening prior thereto.

ARTICLE 10

DISPUTE RESOLUTION

10.1 MEDIATION

10.1.1 The Parties shall attempt in good faith to resolve any dispute arising out of or relating to this Agreement promptly by negotiations between a representative designated by the Company Vice President empowered to resolve the dispute and an executive of similar authority of the Permittee. Either Party may give the other Party written notice of any dispute. Within twenty (20) days after delivery of the notice, the executives shall meet at a mutually acceptable time and place, and thereafter as often as they reasonably deem necessary to exchange information and to attempt to resolve the dispute.

10.1.2 If the matter has not been resolved within thirty (30) days of the first meeting, either Party may initiate a mediation of the controversy in accordance with the Commercial Mediation Rules of the American Arbitration Association. All negotiations and any mediation conducted pursuant to this clause are confidential and shall be treated as compromise and settlement negotiations, to which Section 1119 of the California Evidence Code shall apply, and which is incorporated herein by reference.

10.2 CPUC RESOLUTION

If a disputed matter has not been resolved within thirty (30) of the first meeting in accordance with Section 10.1.1, then notwithstanding Section 10.1.2, either Party make seek resolution of any dispute under this Agreement pursuant in a proceeding brought before the CPUC in accordance with CPUC rules and decisions.

10.3 INJUNCTION

Notwithstanding the foregoing provisions, a Party may seek a preliminary injunction or other provisional judicial remedy if in its judgment such action is necessary to avoid irreparable damage.

10.4 CONTINUING PERFORMANCE

Each Party is required to continue to perform its obligations under this Agreement pending final resolution of any dispute arising out of or relating to this Agreement.

ARTICLE 11

BREACH AND TERMINATION

11.1 BREACH

Permittee and the Company agree that neither shall proceed against the other for breach or default under this Agreement by mediation or otherwise before the offending Party has had notice of and a reasonable time and opportunity to respond to and cure any breach or default.

For purposes of this Agreement, a reasonable time to cure any breach or default shall be deemed to be thirty (30) days after notice. Notwithstanding the above, in the case of safety concerns, legal reasons, or if Permittee's use interferes with the Company's ability to serve utility customers, fewer than thirty (30) days are required. This section does not supersede the rights and obligations of the Parties under Section 3.1.2 for "Hazardous Conditions." If a Party claims that more than thirty (30) days are reasonable to cure a breach, that Party shall have the burden of proving the reasonableness of the claim for more than thirty days. If such breach or default cannot be cured within such thirty (30) day period, and the defaulting party has promptly proceeded to cure the same and to prosecute such cure with due diligence, the time for curing the breach shall be extended for such period of time as may be reasonably necessary to complete such cure.

11.2 TERMINATION

11.2.1 Subject to Section 11.1, if Permittee (a) fails to make any payment due within the time frame specified, (b) fails to obtain or maintain the appropriate CPCN from the CPUC, (c) fails to take reasonable steps to resolve any safety issue, (d) fails to maintain the insurance and bond requirements in compliance with Articles 5 and 12 of this Agreement or (e) otherwise fails to comply with any material term or condition of this Agreement, the Company, at its sole discretion, upon thirty (30) days written notice to Permittee (or such shorter period of time as may be determined by the Company in order to comply with a notice from a Granting Authority or under law, if applicable), may without further liability terminate this Agreement and any permission granted to Permittee as to all or any portion of those facilities which are the subjects of such breach of agreement, and Permittee shall immediately relinquish use of the Company Space and remove its Attachments from the Company Space in accordance with this Agreement prior to the effective date of termination.

11.2.2 This Agreement shall also terminate in whole or in part, upon the occurrence of any of the following events:

(a) at the option of either Party, upon the termination or abandonment by Permittee of the use of all of the Permittee's Attachments. If less than all of Permittee's attachments are abandoned or terminated, the Company shall have the option of terminating its permission under this Agreement for only the Attachments abandoned or terminated;

(b) at the option of the non-defaulting Party and without limiting the rights or remedies of the non-defaulting party, upon a breach or default by the other party of any material obligation hereunder and the continuance thereof following the expiration of the applicable remedy period;

(c) upon the written mutual agreement of the Parties; or

(d) in accordance with the provisions of Section 1.1.3, if the Company or the CPUC invoke the provisions of G.O. 69-C.

11.2.3 Upon termination of this Agreement for all or any portion of the Company Space used by Permittee, Permittee shall immediately relinquish use of the Company Space and

promptly remove its Attachments or the Company may remove Permittee's Attachments from the Company Space at Permittee's expense.

11.3 BANKRUPTCY OF PERMITTEE

11.3.1 The occurrence of any of the following shall constitute a default which may be a basis for termination of this Agreement:

(a) Permittee files for protection under the Bankruptcy Code of the United States or any similar provision under the laws of the State of California; or

(b) Permittee has a receiver, trustee, custodian or other similar official appointed for all or substantially all of its business or assets; or

(c) Permittee makes an assignment for the benefit of its creditors.

11.3.2 Assignment of Agreement

Any person or entity to which this Agreement is assigned pursuant to the provisions of the Bankruptcy Code shall be deemed without further act or deed to have assumed all of the obligations arising under this Agreement on and after the date of such assignment. Any such assignee shall upon demand execute and deliver to the Company an instrument confirming such assumption.

ARTICLE 12

FAITHFUL PERFORMANCE BOND; LETTER OF CREDIT

To cover the faithful performance by Permittee of its obligations under this Agreement, Permittee shall be required to furnish (i) a valid performance bond or (ii) an unconditional irrevocable letter of credit issued by a financial institution acceptable to the Company. Said bond or letter of credit shall be in such form approved in writing by the Company and in such amount as the Company shall specify from time to time based on the financial exposure caused by the Permittee's Attachment to the Company to be maintained in full force and effect throughout the term of this Agreement. The amount of said bond or letter of credit shall be initially set at Fifty Thousand Dollars ($50,000). Permittee shall furnish such performance bond or letter of credit on or before the effective date of this Agreement, and remain in full force thereafter for a period of one year. Said bond or letter of credit shall provide ninety (90) days advance written notice to the Company of expiration, cancellation or material change thereof. Said bond or letter of credit will automatically extend for additional one-year periods from the expiration date, or any future expiration date, unless the surety or financial institution provides to the Company, not less than ninety (90) days' advance written notice, of its intent not to renew such bond or letter of credit. The liability of the surety under said bond or the financial institution under said letter of credit shall not be cumulative and shall in no event exceed the amount as set forth in this bond or letter of credit, in any additions, riders, or endorsements properly issued by the surety or the financial institution as supplements thereto. Failure of Permittee to obtain a bond or letter of credit as specified will be cause to terminate this Agreement. If the surety on the bond or financial institution issuing the letter of credit should

give notice of the termination of said bond or letter of credit and if Permittee does not reinstate the bond or letter of credit or obtain a bond or letter of credit from another surety or financial institution that meets the requirements of this Article 12 within fifteen (15) days after written notice from the Company, the Company may by written notice to Permittee, terminate this Agreement and revoke permission to use the Company Space and Rights-of-Way covered by any or all applications submitted by Permittee hereunder, and Permittee shall remove its Attachments from the Company Space to which said termination applies within thirty (30) days from such notification.

ARTICLE 13

MISCELLANEOUS

13.1 NOTICES

Any notice given pursuant to this Agreement by a Party to the other, shall be in writing and given (with proof of delivery or proof of refusal of receipt) by letter mailed, hand or personal delivery, or overnight courier to the following:

If delivered to the Company by U.S. mail and express mail:

Program Manager, Joint Utility Department
Pacific Gas and Electric Company
1850 Gateway Blvd., 6th Floor
Concord, CA 94520

If delivered to Permittee by U.S. mail and express mail:

Modus, Inc.
Attn: Legal
240 Stockton St., 3rd Floor
San Francisco, CA 94108

or to such other addresses as either Party may, from time to time, designate in writing for that purpose.

Notices shall be deemed given (i) when received in the case of hand or personal delivery, (ii) three days after mailing by United States mail as provided above, or (iii) the next business day in the case of reliable overnight courier. For routine notice changes, proof of delivery is not required. By mutual agreement facsimile notices may be used for routine notice changes.

13.2 APPLICABLE LAW

This Agreement shall be governed by, construed and enforced in accordance with the laws of the State of California, exclusive of conflicts of laws provisions.

13.3 CHANGE OF LAW

In the event any change in law or government regulation materially modifies either Party's rights or obligations under law or regulations existing as of the effective date of this Agreement with respect to the right to access, or the obligation to provide access to, utility support structures and rights-of-way, either Party may by providing written notice to the other party, require that this Agreement be renegotiated in good faith and amended to reflect such changes in law or regulations. In the event the Parties fail to reach agreement on such amendment, either Party may invoke the dispute resolution provisions of this Agreement.

13.4 CONFIDENTIAL INFORMATION

If either Party provides confidential information to the other, it shall be in writing and clearly marked as confidential. The receiving Party shall protect the confidential information from disclosure to third parties with the same degree of care afforded its own confidential and proprietary information, except that neither Party shall be required to hold confidential any information which becomes publicly available other than through the recipient, which is required to be disclosed by a governmental or judicial order, which is independently developed by the receiving Party, or which becomes available to the receiving Party without restriction from a third party. Either Party may require the Parties to sign a standard Company Non-Disclosure Agreement prior to receipt of confidential information, including in particular maps, plans and drawings. These obligations shall survive expiration or termination of this Agreement for a period of two (2) years, or longer as set forth in a standard Company Non-Disclosure Agreement.

13.5 FORCE MAJEURE

Neither Party shall be liable for any failure to perform this Agreement when such failure is due to "force majeure." The term "force majeure" means acts of God, strikes, lockouts, civil disturbances, interruptions by government or court orders, present and future valid orders of any regulatory body having proper jurisdiction, acts of the public enemy, wars, riots, inability to secure or delay in securing labor or materials (including delay in securing or inability to secure materials by reason of allocations promulgated by authorized governmental agencies), landslides, lightning, earthquakes, fire, storm, floods, washouts, or any other cause, whether of the kind herein enumerated or otherwise, not reasonably within the control of the Party claiming "force majeure." The "force majeure" shall, so far as possible, be remedied with all reasonable dispatch. The settlement of strikes or lockouts or industrial disputes or disturbances shall be entirely within the discretion of the Party having the difficulty. The Party claiming any failure to perform due to "force majeure" shall provide verbal notification thereof to the other Party as soon as practicable after the occurrence of the "force majeure" event . Force Majeure shall not excuse Permittee's obligation to make payment for its Attachments except that if the event of force majeure remains uncured for a period of thirty (30) days and renders the Attachments unusable, then Permittee shall be excused from its rental payment obligation as to the affected Attachments throughout the duration of the event of force majeure. If the Company is the party claiming force majeure and the event of force majeure prevents restoration of Permittee's previously authorized attachments within six (6) months of the force majeure event, then the facilities shall be deemed to be discontinued and the provisions of Section 6.1 of this Agreement shall apply.

13.6 SEVERABILITY

The invalidity of one or more clauses, sentences, sections, or articles of this Agreement shall not affect the validity of the remaining portions of the Agreement so long as the material purposes of this Agreement can be determined and effected.

13.7 LIENS

Permittee and its contractors shall keep the Company Space, Rights-of-Way, and Company facilities free from any statutory or common law lien arising out of any work performed, materials furnished, or obligations incurred by Permittee, its agents or contractors. Permittee agrees to defend, indemnify and hold the Company harmless from and against any such liens, claims or actions, together with costs of suit, and reasonable attorneys' fees incurred by the Company in connection with any such claim or action. In the event that there shall be recorded against said Company Space, Rights-of-Way, or Company facilities any claim of lien arising out of any such work performed, materials furnished, or obligations incurred by Permittee or its contractors and such claim of liens not removed within ten (10) days after notice is given by the Company to Permittee to do so, the Company shall have the right to pay and discharge said lien without regard to whether such lien shall be lawful, valid, or correct.

13.8 SURVIVABILITY

Any expiration or termination of Permittee's rights and privileges shall not relieve Permittee of any obligation, whether indemnity or otherwise, that has accrued prior to such termination or completion of removal of Permittee's Attachments.

13.9 CERTIFICATION OF PERMITEE

Permittee warrants that it is a telecommunications carrier that has been granted a certificate of public convenience and necessity (CPCN) from the CPUC. Permittee warrants that its certificate authorizes it to use governmental rights-of-way for the purposes of this Agreement. The Permittee also represents that it is an entity that is governed by CPUC ROW Decisions and as such has the right to nondiscriminatory access to Company Space.

13.10 ASSIGNMENT AND SUBLEASE

13.10.1 This Agreement and the rights, interests and obligations hereunder are being granted in reliance on the financial standing and technical experience of Permittee and are thus granted personally to Permittee and shall not be assigned or delegated, in whole or in part without the prior written consent of the Company, consent for which shall not be unreasonably withheld. Any attempt to assign or delegate without such consent shall be void. Notwithstanding the foregoing, this Agreement may be assigned or delegated in whole or in part by the Company or Permittee without the other Party's consent for (i) assignments in connection with interests that arise by reason of any deed of trust, mortgage, indenture or security agreement granted or executed by such Party, (ii) assignments to wholly-owned subsidiaries or affiliates under common control with a Party, where, in the absence of the other Party's consent thereto the assigning Party retains responsibility for the payment and performance of all of its obligations and liabilities hereunder, (iii) assignments by operation of law in connection with any

merger or consolidation of a Party with or into any Person, whether or not the Party is the surviving or resulting Person, or (iv) assignments to a purchaser of all of the outstanding equity securities of, or substantially all of the assets of, either Party. Any assignment that does not comply with the provisions of this Section 13.10.1shall be null and void, and the putative assignee shall have no right to maintain or install attachments in the Company Space or to use Company Rights-of-Way.

13.10.2 Permittee shall not sublease any of the Company Space.

13.11 NO THIRD PARTY BENEFICIARIES

All of the terms, conditions, rights and duties provided for in this Agreement are and shall always be, solely for the benefit of the Parties. It is the intent of the Parties that no third party (including customers of either Party) shall ever be the intended beneficiary of any performance, duty, or right created or required pursuant to the terms and conditions of this Agreement.

13.12 HAZARDOUS MATERIALS

The California Health and Safety Code requires businesses to provide warnings prior to exposing individuals to material listed by the Governor as chemicals known to the State of California to cause cancer, birth defects, or reproductive harm. The Company uses chemicals on the Governor's list at many of its facilities and locations. Accordingly, in performing the work or services contemplated in this Agreement, Permittee, its employees, agents and subcontractors may be exposed to chemicals on the Governor's list. Permittee is responsible for notifying its employees, agents, and subcontractors that work performed hereunder may result in exposures to chemicals on the Governor's list. The Company will provide Permittee upon request with a copy of a Materials Safety Data Sheet for every known Hazardous Chemical on or in the Company Rights-of-Way.

13.13 WAIVER

The failure of either Party to enforce or insist upon compliance with any of the terms or conditions of this Agreement shall not constitute a general waiver or relinquishment of any such terms or conditions, but the same shall be and remain in full force and effect.

13.14 PAYMENTS

Unless otherwise specified in this Agreement, Permittee shall make all payments to the Company within thirty (30) days of receipt of the invoice to:

For U.S. mail and express mail:

Pacific Gas & Electric Company
P.O. Box 997300
Sacramento, CA 95899-7300

13.15 DEFINITIONS

Capitalized terms used are defined in this Agreement and shall have the meanings set forth herein.

13.16 TITLES AND HEADINGS

The table of contents, titles and headings of Articles and Sections of this Agreement are inserted for the convenience of reference only and are not intended to be part of or to affect the meaning or interpretation of this Agreement.

13.17 NO STRICT CONSTRUCTION

The Parties have participated jointly in the negotiation and execution of this Agreement. In the event an ambiguity or question of intent or interpretation arises with respect to this Agreement or any of the documents delivered pursuant hereto, this Agreement and such documents shall be construed as if jointly prepared by the Parties, and no presumption or burden of proof shall arise favoring or disfavoring any Party by virtue of the authorship of any of the provisions of this Agreement or such documents.

13.18 POWER SUPPLY

The electrical connection for power supplies shall be governed by Company's electric tariffs and not by this Agreement. If any Attachments include metered or unmetered electrical equipment, Permittee shall notify the Company in writing to arrange for electric service and appropriate billing prior to using the Attachment.

13.19 SERVICE CONNECTION/DISCONNECTION

Any electrical service connection or disconnection to Permittee's attachments from Company's electric supply system shall only be performed by the Company in accordance with the Company's rates, applicable tariffs and CPUC Rules and Regulations.

13.20 COMPANY STANDARDS

Any and all references to Company standards or procedures refer to Company standards or procedures as they may be amended, modified or revised by the Company from time to time in its sole discretion, consistent with the Company's legal obligations consistent with the CPUC's ROW decisions and the Company's safety and other legal obligations.

13.21 ENTIRE AGREEMENT

This Agreement constitutes the entire agreement between the Parties with respect to the subject matter hereof and supersedes all prior oral or written agreements, commitments or understanding with respect to the subject matter hereof and may be amended only by a writing signed by both Parties.

[Company]	**PACIFIC GAS AND ELECTRIC COMPANY**
By: _____	By: _____
Title: _____	Title: _____
Date: _____	Date: _____

EXHIBIT A
APPLICATION FOR CONDUIT ACCESS

Pacific Gas and Electric Company

WM Notification No. _____

PART 1 **REQUEST FOR CONDUIT ACCESS BY APPLICANT (To PG&E)**

Date _____

PG&E – Joint Utilities Department
850 Stillwater Rd
West Sacramento, CA 95605

License Agreement _____
Prior Agreement Number _____
Application Number _____
Applicant Job Number _____

Permittee Company _____

In accordance with the executed agreement between the Permittee and PG&E, we hereby request access to conduits/ducts at the location route _____

_____

_____, *in the City of* _____, *as described in the attached drawings.*

Requestor Company _____

_____ Phone _____

Address _____

_____

Requestor Authorization Signature _____

Requestor Authorization Name _____

_____ Title _____

CONDUIT ACCESS INFORMATION APPLIED FOR UNDER THIS APPLICATION

Cable Size and Type _____ Number of Miles _____ Number of Manholes _____

PART 2 **FINAL AUTHORIZATION BY PG&E (To Permittee)**

You are hereby authorized for installation.

PG&E Authorization Signature _____ Date _____

PG&E Authorization Name _____ Title _____

PG&E Job No(s) _____ Contact Permit No. _____

PART 3 **NOTICE OF COMPLETION BY APPLICANT & PG&E**
(To PG&E Project Manager within 10 days after completion

We hereby notify you that the work authorized above has been completed and is ready for your inspection.

Permittee Authorization Signature _____ Date _____

Permittee Authorization Name _____ Title _____

PG&E Inspector Authorization Signature _____ Date _____

PG&E Inspector Authorization Name _____ Title _____

Notes: _____

_____

_____

1. PART (1) & (3) to be completed by applicant, part (2) and (3) to be completed by PG&E.
2. PG&E's authorization must be secured before the Permittee's facilities are installed.
3. At PG&E request, Permittee shall be able to provide the authorized Contact Permit (this form) for all work performed.
4. The Permittee shall exercise the access rights to conduit(s) within 90 days of the authorization in Part 2.
5. Applicant to provide Contact Permit Number for existing facilities (see Note 4).

04/2016

Pacific Gas and Electric Company

EXHIBIT B
CONDUIT ACCESS RATE

I. CONDUIT ACCESS RATE CALCULATION MODEL

The conduit access rates are calculated based on the depreciation accrual rate schedule submitted to the CPUC, Energy Division annually. The previous year's submittal is used to calculate the conduit access rate for the following year (i.e. 2013 schedule submitted in 2014 determines rental rate for 2015).

A. Historical Net Cost of a Conduit (Account 366 Only, Previous Year):

$$\frac{\text{A\&G Expenses (Electric)}}{\text{Gross Plant - Depr Reserve - Accum Def. Income Taxes (Electric)}}$$

B. Depreciation Expense (Account 366 Only, Previous Year) %:

Deprn. Rate for Gross Conduit Invest. X Gross Conduit Invest / (Net Conduit Invest - Def. Inc. Tax)

C. Administrative Expense % (Total Electric, Previous 5 Year Average):

$$\frac{\text{A\&G Expenses (Electric)}}{\text{Gross Plant - Depr Reserve - Accum Def. Income Taxes (Electric)}}$$

D. Maintenance & Operating Expenses % (Electric, Previous 5 Year Average):

$$\frac{\text{Account 584 + Account 594 (Underground Line)}}{\text{Invest - Depr Reserve - Accum Def Income Taxes (Underground Line)}}$$

E. Normalized Taxes % (Company Total, Previous 5 Year Average):

$$\frac{\text{A/C (408.1+409.1) + (410.1+411.4) - 411.1 (Total Company)}}{\text{Gross Plant - Depr Reserve - A/C 190, Def Income Taxes (Total Company)}}$$

F. Total Operating Cost for Conduits:

F = A * [B + C + D + E]

G. Annual Rental Rate per foot (or one attachment):

G = 100.0% of Total Operating Cost for Conduits (F) = 1.0 * F

CALCULATION DETAIL:

Pacific Gas and Electric Company

EXHIBIT B
CONDUIT ACCESS RATE

1 Historical Net Cost per Conduit Foot = A/C 366 - Deprn Reserve - Accum Def Income Taxes / Feet of Conduit

Basis - Conduit Account 366 - Only
Period - Current Year Only (2015)
Calc.Summary - numerator/denominator:

a.	1,749,743,580		2,565,753,274	-	795,916,460	-	20,093,234	
b.	150,011,136				28,411.2	X	5,280	ft/mile

Proof/ Check:

= $11.66

$ 11.66 Net conduit investment per ft.

2 Depreciation Expense = Deprn. Rate for Gross Conduit Invest. X Gross Conduit Invest / (Net Conduit Invest - Def. Inc. Tax)

Basis - Conduit Account 366 - Only
Period - Current Year Only (2015)
Calculation Summary:

		(2015 rate)		
		2.91%	X	2,565,753,274
Gross/net conduit invest. factor:	1.466	(Gross plant basis)		1,749,743,580 (Gross-to-Net factor)
Times: Depr. Rate	2.91%			
Equals Depreciation Factor	4.27%	**4.27%**	(Net plant basis)	

3 Administrative Expense = A&G Expenses (Electric) / Gross Plant - Depr Reserve - Accum Def. Income Taxes (Electric)

Basis - Electric
Period - 5 Year Average
Calc.Summary - numerator/denominator:

a.	936,900,496				936,900,496			
b.	23,618,158,546		44,117,206,558	-	19,898,943,466	-	600,104,546	

Proof/ Check:

= 3.97% **3.97%** Electric A&G expenses and Electric plant in service.

4 Maintenance & Operating Expenses = Account 584 + Account 594 (Underground Line) / Invest - Depr Reserve - Accum Def Income Taxes (Underground Line)

Basis - Numerator:UG Line; Denominator: UG
Period - 5 Year Average
Calc.Summary - numerator/denominator:

a.	75,319,480				36,961,723	+	38,357,758	
b.	4,126,455,467		7,878,574,668	-	3,671,789,629	-	80,329,571	

Proof/ Check:

= 1.83% **1.83%** Maintenance & Operation Expenses related to conduit.

5 Normalized Taxes = A/C (408.1+409.1) + (410.1+411.4) - 411.1 (Total Company) / Gross Plant - Depr Reserve - A/C 190, Def Income Taxes (Total Company)

Basis - Total Company
Period - 5 Year Average

Pacific Gas and Electric Company

EXHIBIT B
CONDUIT ACCESS RATE

Calc.Summary - numerator/denominator:

a.	909,242,709	448,019,067	+	1,329,905,808	-	868,682,165	
b.	31,949,827,707	60,944,997,578	-	27,484,900,533	-	1,510,269,338	

Proof/ Check:

=	2.85%	**2.85%**	Company-wide percentage of normalized taxes.

6

	SUMMARY AND VARIANCE ANALYSIS:		
	Expense Item	**2015 Pricing Model**	
		Rate	**Amount**
a.	Net Conduit Investment (per foot)		$11.66
b.	Depreciation	*4.27%*	0.50
c.	Admin & Gen	*3.97%*	0.46
d.	O&M	*1.83%*	0.21
e.	Tax	*2.85%*	0.33
f.	Return (Utility Authorized)	*8.06%*	0.94
g.	Total Operating Cost per Conduit Foot	20.97%	**2.45**
h.	**Usable Space Rate Percent & Cost per Conduit Foot**	***100.00%***	**$2.45**
		(NOTE 1)	**(NOTE 2)**

Pacific Gas and Electric Company

EXHIBIT C
UNDERGROUND FACILITIES
ESTIMATED UNIT COST
MAKE READY & REARRANGEMENT WORK

Labor Cost Description	2016 Hourly Rate Per Person
Construction (Inspection)	$ 181.34
Engineering and Planning	$ 186.40
Mapping	$ 163.12
Project Management	$ 170.63
Service Planning	$ 174.22
General and Administration	12% of Labor Costs
Miscellaneous Permit and Fees	Various

EXHIBIT D
COMPANY SAFETY RULES

l. Personnel safety is a primary objective to COMPANY and PERMITTEE. The Parties shall stress SAFETY FIRST to their respective employees and contractors in the performance of their duties. Applicable safety standards and practices of COMPANY and PERMITTEE shall be made available to COMPANY and PERMITTEE personnel and shall be adhered to at all times.

2. All personnel of COMPANY, PERMITTEE, or the contractors of either Party working on or in proximity to any cable route shall be required to comply with COMPANY safety guidelines and shall attend periodic safety training classes provided by their respective companies. The safety classes shall be conducted as needed and shall reflect the latest available concepts and practices. Should COMPANY and PERMITTEE operational personnel agree that any other applicable training is required, this also shall be provided by the appropriate Party. Each Party shall bear its own costs of providing safety training to its employees and/or its contractors' employees, of attending any required safety courses, and of providing any other applicable training that may be required. Any extra-ordinary training costs related to the performance of the Agreement shall be provided at the sole cost of PERMITTEE.

3. Both Parties shall endeavor to assure that all work is performed in a good workmanlike manner in accordance with applicable telecommunications and electric industry standards and in compliance with all applicable laws, ordinances, codes, and regulations of any governmental authority (including Cal-OSHA) having jurisdiction thereof.

4. PERMITTEE'S EMPLOYEES, AGENTS, OR SUBCONTRACTORS SHALL NOT ENTER ANY ENERGIZED VAULT, MAN HOLE OR ENCLOSURE OR PERFORM ANY WORK ON THEM WITHOUT PRIOR CERTIFICATION FROM COMPANY.

5. COMPANY workers shall follow the same safety work rules as PERMITTEE workers when working in the vicinity of any PERMITTEE Attachments provided such rules, at a minimum, comply with the applicable industry standard. PERMITTEE shall inform COMPANY workers of its other internal work practices concerning PERMITTEE Attachments. COMPANY workers shall maintain the safe working distance specified by PERMITTEE.

6. Any COMPANY representative will have the authority to stop any work, including PERMITTEE access and activities, if the COMPANY representative determines that the work cannot be completed safely.

PACIFIC GAS AND ELECTRIC COMPANY

CHAPTER 4

ATTACHMENT C

PRO FORMA COMMERCIAL MOBILE RADIO SERVICE (CMRS) LICENSE AGREEMENT

POLE LICENSE AGREEMENT

FOR WIRELESS ATTACHMENTS

BETWEEN

PACIFIC GAS AND ELECTRIC COMPANY

AND

[COMPANY]

TABLE OF CONTENTS

EXHIBITS

A. REQUEST FOR ACCESS - CMRS

B. SCHEDULE OF FEES

POLE LICENSE AGREEMENT
FOR CMRS ATTACHMENTS BETWEEN
PACIFIC GAS AND ELECTRIC COMPANY
AND
[LICENSEE]

This Pole License Agreement ("Agreement") is made as of _____, 20___ ("Effective Date"), by and between Pacific Gas and Electric Company ("PG&E"), a California corporation and _____, a _____ corporation ("Licensee"), individually "Party" and collectively "Parties."

PG&E herein provides Licensee, a CMRS (as defined below) telecommunication company certified to provide telecommunications services by the California Public Utilities Commission ("CPUC") and the Federal Communications Commission ("FCC"), with a license to attach certain CMRS equipment to specific distribution or transmission poles that are owned in whole or in part by PG&E and used by PG&E to provide electricity distribution or transmission services to customers under CPUC-approved tariffs.

The terms and conditions of this Agreement are as follows:

1. DEFINITIONS

Terms with the initial letter or letters capitalized, whether in the singular or plural, shall have the following meanings:

(a) Applicable Requirement: Any law, code, regulation, ordinance, statute or requirement of a governmental or quasi-governmental authority, regulatory agency or any other similar authority with jurisdiction or control over access to or use of the Pole, an Attachment, Work on a Pole or operation of an Attachment including, without limit, PG&E's tariffs, standards, external manuals, Request For Access - Wireless (RFA - CMRS) Guidelines and Procedures, and any additional written requirements PG&E provides to Licensee, the specifications in the CPUC's Decisions and General Orders, including but not limited to CPUC General Order Nos. 69-C, 95 and 128, and 47 Code of Federal Regulation (C.F.R.).

(b) Attachment: A unit, typically consisting of one or more antennae and the cable(s) connecting them to Equipment, that meet the design specifications, of PG&E and which are owned by Licensee and installed on a Pole within the Licensed Space, pursuant to this Agreement, including any space encumbered by required safety clearances in accord with GO 95, Rule 94.4.

(c) CMRS: Commercial Mobile Radio Service, as defined under Applicable Laws.

(d) Common Space: The first 15 to 18 feet of pole space above ground, as determined by PG&E.

(e) Customer Billing Work Order: PG&E initiated work order to collect the cost of work performed by PG&E or its contractors for the Licensee and from which PG&E derives no direct benefit.

(f) Distribution Pole: A pole owned in whole or in part by PG&E and used to support electric distribution facilities.

(g) Equipment: All ancillary equipment owned by Licensee in connection with an Attachment.

(h) Electrical Zone: On Poles supporting electric conductors designed to operate between 120 Volts to 21,000 Volts (21kV), the Pole space, measured vertically starting at least three feet (3 ft.) below the lowest conductor level up to at least three feet (3 ft.) above the uppermost conductor level.

(i) Licensed Space: The portion of the pole owned in whole or in part by PG&E and approved for the Attachment and Equipment, including space encumbered by the CMRS attachments.

(j) Pole: A Distribution Pole.

(k) Replacement Pole: A Pole installed by PG&E and paid for by Licensee, for the purposes of accommodating Licensee's Attachment and supporting PG&E electric distribution facilities.

(l) Request For Access - CMRS (RFA - CMRS): The PG&E form that Licensee is required to complete and submit to PG&E in order to request use of a specific Pole under this Agreement.

(m) Routine Maintenance: Periodic tasks performed to enable the continued operation of an Attachment or Equipment in normal use.

(n) Work: Any installation, repair, removal, or replacement of an Attachment or Equipment performed by the Licensee as authorized or approved by PG&E.

2. TERM

The term of this Agreement shall begin on the Effective Date and shall continue through December 31 of that calendar year. The term of this Agreement shall automatically renew on January 1 of the successive calendar year and continue for successive calendar-year terms unless a Party notifies the other Party in writing of its election not to renew the term of this Agreement by October 31 of the then- current calendar year.

3. APPLICATION PROCESS

Licensee must submit an RFA - CMRS in accordance with PG&E's RFA - CMRS Guidelines and Procedures (Exhibit A), accompanied with processing and engineering fee(s) (Exhibit B) to request PG&E's authorization to make an Attachment and Equipment to any Pole. Licensee shall have no rights to make an Attachment to a Pole, to take any action that adversely affects a Pole, causes an outage to a Pole, or to repair, replace, or modify an existing Attachment or Equipment, without PG&E's written approval. Subsequent Attachments or Equipment upgrades or replacements are subject to the RFA - CMRS process, however, approval for in-kind replacements will not be unreasonably withheld.

PG&E shall notify Licensee in writing as to whether PG&E approves the RFA - CMRS submitted by Licensee. PG&E makes no representation or warranty whatsoever concerning the time that may be required to process an RFA - CMRS. If PG&E conditionally approves the RFA-CMRS, Licensee shall have ten (10) business days after receipt of PG&E's notice of conditional approval to accept or reject the Attachment and Equipment without exception. Unless Licensee notifies PG&E in writing that it accepts the Attachment and Equipment without exceptions within such ten (10) business-day period, Licensee will be deemed to have rejected the Attachment and Equipment.

4. LICENSE RIGHTS FROM APPROVAL OF AN APPLICATION

Upon PG&E's acceptance and approval of an RFA - CMRS described in Section 3 above, Licensee shall have a license (i) to install an Attachment in the space owned by PG&E, (ii) to connect the Attachment to Licensee's Equipment in the Common Space, (iii) to use exclusively the Attachment and Equipment for wireless communications, and (iv) to maintain, remove, repair or replace the Attachment, as described herein (collectively, the "Attachment Rights").

Licensee shall have no rights to modify an existing Attachment, including installing additional Equipment, or altering the Pole, or rearranging equipment attached to the Pole, without PG&E's prior written approval. Licensee's Attachment Rights (as defined in Section 5) shall be, unless otherwise agreed to by PG&E, limited to the approved Attachment and only for the associated appurtenances approved by PG&E as reasonably necessary for exercise of Licensee's Attachment Rights hereunder. Further, all costs and expenses incurred as a result of Licensee's exercise of any Attachment Right, or Equipment Right (as defined in Section 5), or due to a request by Licensee for an Attachment or Equipment hereunder, shall be the sole responsibility of Licensee, regardless of whether such costs or expenses are incurred by Licensee or by PG&E.

5. CONDITIONS AND RESTRICTIONS ON LICENSE RIGHTS

In addition to the other terms and conditions of this Agreement, Licensee's exercise of its Attachment Rights or Equipment Rights (as defined in this section) shall be subject to the following conditions and restrictions:

(a) Licensee shall operate its Attachment and Equipment exclusively to provide CMRS services.

(b) Licensee shall be solely responsible for separately obtaining any electric utility or other services required for operation of its Attachment, or Equipment, including any electrical service from PG&E.

(c) PG&E shall not be required to modify the Pole to accommodate use by Licensee, however, PG&E may elect to do so. Further, Licensee understands and accepts that if and when the subject Pole is replaced in the normal course of business rather than a special accommodation (see section 7), PG&E will install a Pole of sufficient height to provide the clearance required by GO 95, Rule 94.4 without a Pole extension.

(d) PG&E shall have the right to require that only PG&E, or its contractor, may install any Licensee Equipment in the Common Space on the Pole, but PG&E shall not be required to install any Equipment for the Licensee.

(e) Licensee is NOT permitted to install any Attachment in the Electrical Zone unless PG&E, in its sole discretion, agrees in writing.

(f) Licensee shall maintain the areas around its Attachment and keep them clean and free from vegetation and tree branches.

(g) PG&E shall not be required to allow Licensee to locate any Equipment on PG&E-owned property.

(h) Licensee's rights shall be subordinate to all existing uses or rights to use the Pole by PG&E or a third party, and shall not interfere with PG&E's utility operations or with the operations of others that are attached to a Pole. If an Attachment made under this Agreement interferes with PG&E's ability to use a Pole or with a third party's use of a Pole, then, upon notice, Licensee shall immediately initiate actions to remedy the interference and prosecute those remedies with reasonable diligence. PG&E shall not be liable to Licensee for any interference with an Attachment's operation caused by PG&E or a third party.

(i) Except as otherwise provided in Exhibit H of GO 95, Licensee shall not install or modify an antenna on a Pole that emits Radio Frequency (“RF”) energy in excess of the FCC’s General Population/Uncontrolled maximum permissible exposure limits as set for the in 47 CFR for each particular antenna installation, unless Licensee provides to any other utility or company with facilities attached to the subject Pole a locally verifiable means to de-energize said antenna.

(j) Licensee shall switch off all power to any Attachment and Equipment upon twenty four (24) hours' notice from PG&E (which notice PG&E may provide by telephone, or e-mail) if required for PG&E's utility operations, or immediately upon verbal notice by PG&E for safety reasons. If Licensee fails to comply with such notice, PG&E shall have the right to temporarily disconnect and lock out all power to the Attachment and Equipment at Licensee's cost and risk, without further notice and without liability to PG&E.

(k) Lessee is granted access only to the licensed space, provided it can be accessed without encroachment into the Electrical Zone.

6. ATTACHMENT AND EQUIPMENT FEES

(a) Licensee shall pay a non-refundable, non-prorated annual license fee for each Attachment and Equipment ("Annual License Fee"). The initial amount of the Annual License Fee shall be determined by PG&E in accordance with Applicable Requirements based on the type and extent of Licensee's Pole use for each Attachment and Equipment.

(b) Upon PG&E's approval of an RFA - CMRS for an Attachment and Equipment, Licensee shall pay the Annual License Fee for the first calendar year of such Attachment and Equipment, regardless of which month of the year that PG&E approves the RFA - CMRS. The total Annual License Fee for all Attachments and Equipment during each calendar year of this Agreement shall equal the number of approved Attachments and Equipment as of January **1** of each calendar year.

(c) Beginning on January 1 of the first renewal term of this Agreement, and continuing on January 1 of each successive renewal term, PG&E shall adjust the Annual License Fee in accordance with Applicable Requirements.

(d) If PG&E terminates the Licensee's right to use a Pole, then PG&E will provide Licensee with a pro rata refund of any prepaid License Fee, except where the termination is due to a default by the Licensee under this Agreement.

(e) Licensee shall reimburse PG&E for the actual amount of any costs reasonably incurred by PG&E pursuant to this Agreement, as invoiced by PG&E.

7. INSTALLATION, MAINTENANCE, OR REPAIR OF AN ATTACHMENT; REPLACEMENT OF A POLE

(a) Licensee shall use best efforts to perform any Work in a manner which will not cause any interruption of PG&E's utility or other services. No less than thirty (30) days prior to the date that Licensee desires to perform Work, Licensee shall submit detailed information to PG&E about Licensee's plans for performing such Work as well as written documentation, satisfactory to PG&E, verifying that Licensee has met all Applicable Requirements required to perform the Work. Licensee shall also provide PG&E with a written consent from the affected

PG&E customer in the event Licensee's Work will cause any interruption of PG&E's electric service to that customer. In order to be acceptable to PG&E, the affected customer(s) must agree to relieve PG&E from any obligation to provide service to the customer(s) until Licensee has successfully completed its Work. Licensee shall not begin any such Work until after Licensee receives PG&E's written approval.

(b) All work performed within the Electrical Zone will be performed exclusively by PG&E or its approved contractor.

(c) All Work performed within the Licensed Space will be at Licensee's sole risk and cost by persons qualified and licensed by the State of California. Licensee shall be solely responsible for ensuring that the Work performed fully complies with the requirements in this Agreement.

(d) Licensee shall notify PG&E at least forty-eight (48) hours before any Work, other than Routine Maintenance, is scheduled to commence.

(e) The performance of any Work shall comply with the most stringent of any requirements for such Work as contained in applicable industry standards, specific work requirements imposed by PG&E or a third party, or in any Applicable Requirements associated with the Work.

(f) Licensee shall notify PG&E in accordance with the RFA - CMRS Guidelines and Procedures within forty-eight (48) hours after Licensee has completed any Work, including Routine Maintenance, and PG&E shall have the right to inspect such Work. If PG&E elects to exercise this right, then Licensee shall pay for any costs of such inspection as part of Licensee's Customer Billing Work Order.

(g) Without restricting PG&E’s ability to pursue other remedies, PG&E may require that any nonconforming Work be remedied by Licensee or by a third party at Licensee’s expense, or terminate Licensee’s right to use the pole.

(h) Upon written notification from PG&E or a government authority that the Attachment or any Equipment is out of compliance with any Applicable Requirement or is unsafe or hazardous, Licensee shall promptly take whatever actions are necessary to come into full compliance with such Applicable Requirements or to remedy the unsafe or hazardous condition, as the case may be. Notwithstanding this, if at any time, in PG&E's sole judgment, an unsafe or dangerous condition exists, PG&E may correct such condition, including the removal or rearrangement of Licensee's Attachment and Equipment, at the sole risk and expense of Licensee.

(i) In the event PG&E determines that Licensee has made an Attachment or Equipment to a Pole without fully complying with this Agreement (including any Applicable Requirement), PG&E may, in addition to pursuing other remedies, require that the Licensee remove its Attachment or Equipment at Licensee's expense and Licensee shall reimburse PG&E for all related costs such as inspection fees and pole loading calculation fees. Licensee shall pay

any penalties authorized by any Applicable Requirement, including the decisions of the California Public Utilities Commission in connection with the unauthorized attachments. Licensee shall also pay for the back rental fees associated with the attachment. Payment of any penalties or fees does not affect Licensee's other obligations and liabilities under this Agreement or under any Applicable Requirement. If Licensee fails *to* remove its unauthorized attachment or an unsafe or dangerous condition exists, PG&E may correct such condition, including the removal or rearrangement of Licensee's attachment, at the sole risk and expense of Licensee. At PG&E's sole discretion, PG&E may permit Licensee's Attachment or Equipment to remain in place so long as Licensee has met all conditions and requirements determined by PG&E, including the payment of all fees, penalties, and costs.

(j) Licensee shall reimburse PG&E for any damage to a Pole in connection with the use, repair, or restoration of a Pole by Licensee.

(k) Licensee, with PG&E's prior written approval, may make changes to an Attachment authorized hereunder provided the change does not involve any change in the position of any PG&E equipment or facilities or third party equipment or facilities.

(l) In the event that PG&E must rearrange any existing attachments to accommodate a new or modified Attachment or Equipment by Licensee, then Licensee agrees to pay PG&E's costs, including PG&E’s contractor, for said rearrangement promptly upon demand. Licensee understands that PG&E may, from time to time, have to rearrange Licensee's Attachments or Equipment for the provision of PG&E’s electric utility service or to permit additional attachments in the Licensed Space. PG&E shall provide written notice to Licensee before Licensee's Attachment or Equipment is rearranged. When the rearrangement is being made to accommodate new or modified attachments for the provision of PG&E's electric utility service, Licensee will, upon demand, promptly pay its share of the rearrangement costs, which shall equal PG&E's total cost to rearrange non-PG&E attachments divided by the total number of attachments that are rearranged.

(m) In the event that PG&E, or a joint owner of a jointly owned Pole, must expand or replace an existing Pole (Replacement Pole) to accommodate a new or modified Attachment by Licensee, then Licensee agrees to pay the costs associated with the Replacement Pole. If PG&E notifies Licensee that a Replacement Pole is otherwise needed to permit additional attachments, then Licensee will fully cooperate with PG&E in connection with such changes, including promptly notifying PG&E of whether the Licensee desires to maintain its Attachment or Equipment. If Licensee elects to maintain its Attachment or Equipment, then Licensee will pay its share of the costs of the Pole expansion or replacement, including the costs associated with the change-out, as invoiced by PG&E.

(n) Licensee shall reimburse PG&E for any inspection fees within thirty (30) days of receiving an invoice from PG&E. If PG&E identifies any deficiencies as part of the inspection, PG&E will provide the Licensee with the inspection results.

8. REMOVAL OF AN ATTACHMENT OR EQUIPMENT FROM A POLE

(a) Licensee shall not remove any Attachment or Equipment from a Pole without PG&E's prior written approval. Licensee shall submit detailed information to PG&E concerning Licensee's plans for removing any Attachment or Equipment at least thirty (30) days prior to performing such Work. Provided Licensee has received PG&E's written approval of Licensee's plans to remove the Attachment or Equipment, Licensee may then remove the Attachment after giving PG&E at least forty-eight (48) hours prior written notice of the date and time such removal is to begin. Removal of an Attachment or Equipment from any Pole without PG&E's prior written approval (except for purposes of promptly replacing the Attachment with an identical Attachment) shall constitute a termination of Licensee's right to use such Pole and forfeiture by the Licensee of any Annual License Fee paid by the Licensee.

(b) PG&E may reclaim any space occupied by the Licensee upon written notification to Licensee that the space is needed so PG&E can provide utility services and Licensee's operations at this location will interfere with PG&E use and there are no other feasible alternatives, in PG&E's sole judgment, to meet PG&E's utility needs. In the case where PG&E has need of existing space which is occupied by the Attachment or Equipment of Licensee, PG&E must first give Licensee the option to pay for the cost of the rearrangement or expansion necessary to maintain its Attachment or Equipment.

(c) PG&E has the right, at any time, to remove a Pole from service or to require Licensee to remove its Attachment or Equipment from a Pole, and nothing in this Agreement shall be construed to limit PG&E's rights. PG&E may exercise these rights at any time and for any business reason including, without limitation, because Licensee's continued use of the Pole is inconsistent with PG&E's use of the Pole or for other business purposes, or with requirements placed on PG&E in connection with providing electric service or the taking by the power of eminent domain.

(d) Licensee shall complete removal of its Attachment within thirty (30) days of PG&E's written request to do so, unless a shorter time period is specified by PG&E based upon the circumstances. Licensee's removal of its Attachment or Equipment shall not be considered complete until Licensee has restored the Pole to its original condition, reasonable wear and tear excepted, except where PG&E notifies Licensee that restoration is unnecessary because the Pole is being removed from service or PG&E agrees otherwise. PG&E shall have the right to inspect and verify Licensee's removal of its Attachment. In the event that Licensee does not completely remove its Attachment within the time period specified by PG&E, then Licensee shall pay for any costs incurred by PG&E as a result of Licensee's failure to remove, including, but not limited to, any inspection, verification, or field visit costs incurred by PG&E. Licensee's failure to remove its Attachment within the time period specified by PG&E constitutes a material breach under this Agreement.

(e) When a Pole that contains an existing Attachment or Equipment is relocated or replaced by PG&E, and there is a suitable alternative location for a new Pole or an existing Pole which could be used by Licensee for its Attachment or Equipment, then PG&E and the Licensee

may agree that Licensee may so use the other location or Pole, and that Licensee may need to apply for electric service pursuant to PG&E's approved tariffs.

(f) When requested by PG&E, Licensee shall certify under penalty of perjury that its Attachment and Equipment are in service and in use. If Licensee fails to certify that its Attachment and Equipment are in service and in use, Licensee shall remove its Attachment and Equipment. Licensee's obligation to pay, as provided in this Section 8, shall apply. PG&E shall have the right to inspect and verify whether any of Licensee's Attachment and Equipment are in service and in use at the Licensee's sole risk and expense. In the event that PG&E determines that Licensee's Attachment or Equipment is not in service and in use, then the Licensee's Attachment or Equipment shall be removed, as provided in this Section 8, and Licensee shall be liable for all risks and costs associated with the removal

9. RESTORATION OR REPAIR OF A POLE

Restoration of PG&E's use of a Pole shall take priority over Licensee's restoration of its use; provided, however, that PG&E shall not unreasonably delay Licensee's opportunity to restore the use of its Attachment or Equipment. PG&E shall have the right to limit or prohibit any repairs to the Attachment or Equipment, if PG&E, in its sole judgment, determines that such repairs may interfere with PG&E's restoration activities. In addition, Licensee shall fully cooperate with PG&E if PG&E performs any repairs or other work on the Pole, which work may require a temporary shutdown of Licensee's Attachment and Equipment.

10. THIRD PARTY APPROVALS AND AUTHORIZATIONS

(a) Licensee represents and agrees that its Attachment or Equipment to the Pole and its use of its Attachment or Equipment, as well as its performance of its other obligations under this Agreement, shall comply with any and all "Applicable Requirements," as such Applicable Requirements may be supplemented, revised or amended in the future. Licensee further covenants and warrants that it will obtain, maintain and renew during the term of this Agreement, as necessary, any franchises, easements, licenses, permits, certificates, environmental approvals, rights, or grants from state, county, local or regulatory authorities and private owners of the Pole or any real property that are needed for an Attachment or to install any Equipment, as well as to operate or maintain them, within private or public rights-of-way. In addition, Licensee shall secure any needed private or public third party rights to install electric or communication lines related to the operation of its Attachment or Equipment. Licensee's failure to obtain or maintain in full force and effect any required approvals or authorizations shall constitute a material breach of this Agreement. In the event of such breach, PG&E may elect to terminate Licensee's Attachment Rights and Equipment Rights for any affected Pole, upon which Licensee shall immediately remove its Attachment and Equipment from the Pole. In the event Licensee fails to promptly remove its Attachment and Equipment, PG&E shall have the right to do so at Licensee's risk and expense.

(b) Licensee acknowledges that third parties have rights to portions of a Pole needed by Licensee to access or otherwise use its Attachment or Equipment, or that a Pole may be located on public or private property not owned by PG&E. This Agreement grants only the Attachment Rights and Equipment Rights expressly conveyed herein, and such rights do not include any rights to use any portions of a Pole not owned by PG&E, or any easements or right of way in, on or over public or private streets (whether within a city or not).

(c) Upon PG&E's written request, Licensee shall furnish proof that it is in compliance with this Section 10. If Licensee cannot provide adequate proof within fifteen (15) business days of a request by PG&E to furnish such proof, or any shorter period required by any regulatory or governmental entity requesting such proof, Licensee shall be in material breach of this Agreement. In addition to any other remedies available to PG&E at law or equity, PG&E may direct Licensee to promptly remove its Attachment and Equipment from each Pole for which such proof was sought but not provided. Further, PG&E reserves the right to remove the Attachment and any Equipment, at Licensee's sole risk and expense, if not removed by the Licensee within forty eight (48) hours of notification to do so. Licensee shall not reinstall its Attachment and Equipment without written approval from PG&E.

(d) Licensee's interest under this Agreement shall be and remain solely a revocable license for an Attachment and Equipment to a Pole. Any assertion, statement, or claim of rights by Licensee, or that Licensee has acquired an assignment, license, easement, lease, sublease or any form of transfer or conveyance of PG&E rights in, on, over, under, along, through or across private or public property, other than a revocable license for an Attachment and Equipment to the space owned by PG&E, shall constitute a default under this Agreement.

11. REGULATORY MATTERS

(a) Each license granted under this Agreement will be subject to CPUC General Order No. 69-C, which is incorporated by reference herein.

(b) To the extent that this Agreement is subject to the jurisdiction of any regulatory authority, PG&E and Licensee acknowledge that this Agreement may be subject to such changes, modifications or termination as that regulatory authority may direct from time to time in the exercise of its jurisdiction. Notwithstanding this, Licensee represents that it is not aware of any facts that would justify a complaint to the CPUC, FCC or any other regulatory authority concerning the prices, terms or conditions of this Agreement.

12. INDEMNIFICATION AND LIMITATION OF LIABILITY

(a) Licensee shall indemnify, defend and hold harmless PG&E, its parent company, affiliates, directors, shareholders, invitees, employees, agents, contractors, successors and assigns, from any and all costs, liabilities, claims and expenses, including those from death or injury to any person or from a loss or damage to any real, personal or other property, or any fines, penalties, or interest caused by, arising from or in any way connected with or relating to (i)

Licensee's breach of any obligation, duty, representation or warranty contained in this Agreement, or (ii) any act or omission by Licensee, or by any of Licensee's employees, agents, contractors, affiliates, or invitees in connection with this Agreement, or (iii) damages in any way connected with Licensee's Attachments or ancillary Equipment, or (iv) any Work performed by Licensee, or its employees, agents, or contractors, or (v) claims, including claims related to wildland fires, arising from the failure of a Pole on which Licensee has an Attachment where such Attachment caused, or is alleged to have caused or contributed to the loading on the Pole to be out of conformance with any Applicable Requirement (including, but not limited to, General Order 95), notwithstanding circumstances where PG&E may be alleged or determined to have been contributorily, concurrently, or jointly negligent (which shall not include gross negligence or willful misconduct) and that this was the direct or proximate cause of any such damage or injury. The obligations of Licensee under this Section 12 shall arise at such time, if any, that any claim is made, or loss is incurred by PG&E, and the entry of judgment or the litigation of any claim shall not be a condition precedent to the obligations of Licensee hereunder.

(b) Licensee shall promptly notify PG&E of the existence of any matters to which Licensee's defense and indemnity obligations apply. Licensee shall defend at its own expense with mutually acceptable counsel any such matter; provided that PG&E shall at all times also have the right to fully participate in the defense and consent to any settlement or compromise.

(c) IN NO EVENT SHALL PG&E BE LIABLE TO LICENSEE FOR ANY INCIDENTAL, INDIRECT, SPECIAL, CONSEQUENTIAL, OR PUNITIVE DAMAGES (INCLUDING LOSS OF CUSTOMERS OR GOOD WILL, OR LOST REVENUE OR PROFITS), FOR ANY CAUSE OF ACTION, WHETHER IN CONTRACT OR TORT, ARISING IN ANY MANNER FROM THIS AGREEMENT OR THE PERFORMANCE OR NON-PERFORMANCE OF OBLIGATIONS HEREUNDER, REGARDLESS OF THE CAUSE OR FORESEEABILITY THEREOF. FURTHER, PG&E'S AGGREGATE LIABILITY SHALL BE LIMITED TO THE TOTAL AMOUNT OF LICENSE FEES RECEIVED BY PG&E UNDER THIS AGREEMENT.

(d) In addition, Licensee agrees that PG&E shall not be liable for any damage or injury of any kind or nature to any Attachment, Equipment, custom poles, fixtures or site improvements of Licensee or to Licensee's employees, agents, servants, or independent contractors or any other third party invitees of Licensee, notwithstanding the circumstances that PG&E may be alleged or determined to have been contributorily, concurrently, jointly, independently, or solely negligent (which shall not include gross negligence or willful misconduct) and that this was the direct or proximate cause of any such damage or injury.

13. TITLE AND RISK OF LOSS

(a) PG&E's ownership interest in any Pole shall not be affected by Licensee's Attachment or Equipment to the Pole.

(b) Except as otherwise provided for herein, Licensee shall retain its ownership of the Attachment and any Equipment at all times.

14. INSURANCE

(a) At all times during the term of this Agreement, Licensee shall maintain at its own expense, and shall require its subcontractors that perform any Work pursuant to this Agreement to also maintain, insurance coverage as described below with insurance companies authorized to do business in the state of California, with an A.M. Best's Insurance Rating of not less than A-, VII. In no way do these minimum insurance requirements limit or relieve Licensee of the obligations assumed elsewhere in the Agreement, including but not limited to Licensee's defense and indemnity obligations:

Workers' Compensation Insurance with statutory limits, as required by the state having jurisdiction over Licensor's employees, and Employers' Liability Insurance with limits of not less than:

(i) Bodily Injury by accident- $1,000,000 each accident
(ii) Bodily Injury by disease- $1,000,000 policy limit
(iii) Bodily Injury by disease- $1,000,000 each employee.

Commercial General Liability Insurance, written on an occurrence and not claims-made basis, covering all operations by or on behalf of Licensee arising out of or connected with this Agreement, including coverage for bodily injury; property damage; product/completed operations liability; and (i) liability of Licensee that would be imposed without the Agreement or (ii) liability assumed by the Licensee in a contract or agreement that is an "insured contract." Such insurance shall maintain a per occurrence limit of not less than five million dollars ($5,000,000) and ten million dollars ($10,000,000) in the aggregate. Such insurance must not exclude coverage due to wildfires or for firefighting expense. The requirements of this paragraph may be met by any combination of primary and excess/umbrella liability coverage.

Commercial Automobile Liability Insurance covering bodily injury and property damage with a combined single limit of not less than $1,000,000 each accident. Such insurance shall cover liability arising out of the use of Licensee's owned, non-owned and hired automobiles.

Umbrella/Excess Liability Insurance, written on an occurrence and not claims-made basis, providing coverage excess of the underlying Employers' Liability, Commercial General Liability, and Commercial Automobile Liability insurance, on terms at least as broad as the underlying coverage, with limits of not less than $18,000,000 per occurrence and in the aggregate.

(b) Primary Insurance/Waiver of Subrogation/Additional Insured. The insurance policies required above shall apply as primary insurance to, without a right of contribution from, any other insurance or self-insurance program maintained by or afforded to PG&E, its parent and subsidiaries, and their respective officers, directors, shareholders, agents, and employees, regardless of any conflicting provision in Licensee's policies to the contrary.

To the extent permitted by Applicable Law, Licensee and its insurers shall be required to waive all rights of recovery from or subrogation against PG&E, its parent and subsidiaries, and

their respective officers, directors, shareholders, agents, employees and its' insurers on the insurance policies required above.

The Commercial General Liability and Umbrella/Excess Liability insurance required above shall name PG&E, its parent and subsidiaries, and their respective officers, directors, shareholders, agents and employees, as additional insureds for liability arising out of the acts or omissions of Licensor, its employees or agents.

(c) Insurance Certificate. At the time the Agreement is executed, and prior to any Attachment or the installation of any Equipment upon a Pole, and within five (5) business days after coverage is renewed or replaced, Licensee shall furnish to PG&E certificates of insurance evidencing the coverage required above. PG&E uses a third party vendor, Exigis, to confirm and collect insurance documents. Licensee and its insurance broker will be required to register as "service provider." Certificates of insurance and endorsements shall be signed and submitted by a person authorized by that insurer to bind coverage on its behalf, and submitted through the Exigis website at: https://prod1.exigis.com/pge. Helpline: 1 (888) 280 0178.

Certificate Holder
Pacific Gas and Electric Company
c/o Exigis
https://prod1.exigis.com/pge.

(d) All deductibles, co-insurance, and self-insured retentions applicable to Licensee's insurance above shall be paid by Licensee. Licensee shall provide PG&E with at least thirty (30) days' prior written notice in the event of cancellation of coverage. PG&E's receipt of certificates that do not comply with the requirements of this Section 14, or Licensee's failure to provide certificates, shall not limit or relieve Licensee of the duties and responsibility of maintaining insurance in compliance with the requirements in this Section 14 and shall not constitute a waiver of any of the requirements in this Section 14. Failure to provide and maintain such insurance shall constitute a default under this Agreement.

15. TERMINATION RIGHTS

(a) In addition to its other termination rights contained herein, PG&E may terminate this Agreement, any Attachment and Equipment authorized pursuant to this Agreement, or the right to file an RFA - CMRS for a new Attachment and Equipment, at any time during the term of this Agreement by giving Licensee at least thirty (30) days, or such shorter period as may be required by the CPUC or by any governmental authority or property rights holder, prior written notice to that effect. At the expiration of the thirty (30) day notice period for termination of this Agreement, all rights of Licensee hereunder to use the Poles affected by the notice of termination shall end.

(b) In addition to the preceding termination right, if Licensee defaults in any of its obligations under this Agreement PG&E may terminate this Agreement and/or any and all permissions or approvals hereunder pursuant to Section 16 below.

(c) Unless otherwise specified in a notice of termination by PG&E, Licensee shall remove the Attachment and Equipment and restore the Pole, in accordance with Section 8, within thirty (30) days of any termination, cancellation or expiration of its rights to use a Pole.

16. EVENTS OF DEFAULT

(a) In addition to the other events of default specified herein, if Licensee fails to fully perform any of its obligations under this Agreement, then PG&E shall have the right to declare such failure to be an event of default hereunder. Licensee will have 30 days from the date of the default to cure the default to PG&E's satisfaction, except for a failure by Licensee to fully comply with any Applicable Requirements or where such failure raises safety concerns in PG&E's sole judgement.

(b) The occurrence of any of the following events shall constitute an event of default by Licensee hereunder:

(i) Licensee files for protection under the Bankruptcy Code of the United States or any similar provisions under the laws for the State of California;
(ii) Licensee has a receiver, trustee, custodian or similar official appointed for all or substantially all of its business or assets; or
(iii) Licensee makes an assignment for the benefit of its creditors.

(c) In addition to any other rights of PG&E hereunder or at law or equity, if the Licensee fails to cure a default to PG&E's satisfaction by the end of the cure period specified in section 16.a, then PG&E may elect to: (1) cure the event of default at Licensee's sole risk and expense, and Licensee, on demand, will reimburse PG&E for the entire expense thereby incurred or (2) terminate the Attachment and Equipment and require that Licensee remove the terminated Attachment and Equipment in accordance with Section 8.

(d) In addition to the above remedies for an uncured default, PG&E shall have the right to immediately suspend Licensee's ability to make new Attachments or Equipment pursuant to this Agreement until Licensee establishes the event of default has been cured to PG&E's satisfaction.

(e) The above remedies in the event of a default shall not limit PG&E's right to seek CPUC authorization to seek suspension or other penalties in the event of multiple or continuing defaults by evoking the expedited dispute resolution process in Section 17.

(f) If PG&E fails to comply with a term or condition of this Agreement, Licensee shall provide written notice to PG&E of such non-compliance. PG&E shall then have thirty (30) days from receipt of such notice to reasonably cure such non-compliance. If such a cure is not completed within the thirty (30) day period, or if a cure is not possible within such thirty (30) day period and PG&E has not taken steps to effect such cure, then Licensee may pursue its legal remedies relating to such non-compliance.

17. DISPUTE RESOLUTION

(a) Except as may otherwise be set forth expressly herein, all disputes arising under this Agreement shall be resolved as set forth in this Section 17. To be eligible for resolution under this Section 17, all disputes concerning payments must be invoked within sixty (60) business days of the payment due date.

(b) PG&E and Licensee shall attempt in good faith to resolve any dispute arising out of or relating to this Agreement promptly by negotiations between an authorized representatives of each of the Parties. Any dispute which cannot be resolved between the authorized representatives shall be referred to an officer or designee, of each of the Parties for resolution. PG&E or Licensee may give the other Party written notice of any dispute. Within twenty (20) days after delivery of such notice, the designated parties shall meet at a mutually acceptable time and place, and thereafter as often as they reasonably deem necessary to exchange information and to attempt to resolve the dispute. If the matter has not been resolved within thirty (30) days of the first meeting, the Parties will consider and decide whether the dispute should be submitted to mediation.

(c) All negotiations and any mediation conducted pursuant to this Section 18 shall be confidential and shall be treated as compromise and settlement negotiations, to which Section 1152.5 of the California Evidence Code shall apply, which section is incorporated in this Agreement by reference.

(d) Notwithstanding the foregoing provisions, either PG&E or Licensee may seek immediate equitable relief, a preliminary injunction or other provisional judicial remedy.

(e) PG&E and Licensee shall continue to perform their obligations under this Agreement pending final resolution of any dispute arising out of or relating to this Agreement.

(f) If PG&E and Licensee, after good faith efforts to resolve a dispute under the terms of this Agreement (as provided in Subpart b above), cannot agree to a resolution of the dispute, either party may pursue whatever legal remedies may be available to such party, at law or in equity, before a court of competent jurisdiction and with venue in Los Angeles County, California.

18. TAXES AND LIENS

(a) Licensee shall pay when due any and all taxes or assessment resulting from any Attachment or Equipment on any Pole including, but not limited to, special assessments and governmental fees of any kind whatsoever which may be levied or assessed upon any personal property which Licensee has caused to be placed or maintained upon PG&E's facilities, or against Licensee's business and shall keep PG&E's property and facilities, including any Poles, free from all liens, including but not limited to mechanics liens, and encumbrances by reason of the use, occupancy, or maintenance of PG&E's facilities or property by Licensee or by any person claiming under Licensee. It is further agreed that in the event Licensee fails to pay the

above-mentioned taxes, assessments, or liens when due, PG&E shall have the right to pay the same and invoice Licensee for the amount thereof and Licensee shall pay the same upon demand together with interest at the maximum rate allowed by law from the date of such expenditure by PG&E.

(b) In addition, Licensee shall reimburse PG&E for any increases in taxes levied against any Pole directly attributable to an increase in the assessed book or market value of any Pole as a result of the improvements constructed thereon or replacement thereof by Licensee, any fee, tax, or other charge that a federal, state or local government may assess against PG&E for occupancy or use of a Pole by Licensee, and any amount of increase in the amount of PG&E's tax liability determined by the Internal Revenue Service to result from the attachment of Licensee's Attachment or Equipment on any Pole (or any modifications to and/or replacements of a Pole by Licensee). PG&E shall send Licensee an invoice documenting any taxes or assessment due hereunder and the Licensee shall reimburse PG&E in accordance with Section 18.

19. PAYMENT OF INVOICES

All amounts payable to PG&E under the provisions of this Agreement shall, unless otherwise specified, be due and payable within thirty (30) days of the invoice date. If full payment is not received by PG&E by the payment due date, then interest shall be charged by PG&E on any unpaid amount at the rate of 1.5% per month until payment in full is made. Nonpayment of any amount when due shall constitute a default of this Agreement.

Payments should be made to PG&E at the following address:

Pacific Gas and Electric Company
P.O. Box 997300
Sacramento, CA 95899-7300

20. NOTICE

Notices hereunder must be in writing and transmitted by United States mail or by personal delivery to PG&E. Such notices shall be deemed given: (a) upon receipt in the case of personal delivery or confirmed facsimile transmittal; (b) two (2) days after it is sent by certified mail, with a return receipt requested, (c) three (3) days after deposit in the mail, or the next day in the event of overnight delivery

If to PG&E: Pacific Gas and Electric Company
Attn: Manager – Joint Utilities – Tenant Program
1850 Gateway Blvd.
Concord, CA 94520
Telephone: (925) 270-2729

If to _____ _____
Attn: _____
Telephone:
Fax:

21. DISCLAIMER

PG&E MAKES NO REPRESENTATION OR WARRANTY WHATSOEVER CONCERNING THE AVAILABILITY, SUITABILITY OR CONDITION OF ANY POLE. PG&E MAY DETERMINE, IN ITS SOLE DISCRETION, THAT ANY REQUESTED POLE IS NOT AVAILABLE OR SUITABLE FOR AN ATTACHMENT OR EQUIPMENT. FURTHERMORE, IT IS SPECIFICALLY UNDERSTOOD AND HEREBY ACKNOWLEDGED BY LICENSEE THAT ANY POLE MADE AVAILABLE HEREUNDER, TO THE MAXIMUM EXTENT PERMISSIBLE BY LAW, WILL BE PROVIDED BY PG&E ONLY ON AN "AS-IS" BASIS AND WITHOUT ANY WARRANTY BY PG&E ABOUT THE CONDITION OF THE POLE OR ITS SUITABILITY FOR LICENSEE'S PURPOSES. FURTHER, LICENSEE'S RIGHTS HEREUNDER SHALL BE SUBORDINATE TO PG&E's USE OF THE POLE FOR UTILITY AND OTHER SERVICES AND SUBJECT TO ANY EXISTING USES OF THE POLE AND ANY CONTIGUOUS PROPERTIES.

22. GENERAL PROVISIONS

(a) Maintenance of Records by Licensee. For the term of this Agreement and for one (1) year after its termination, Licensee shall maintain records sufficient to demonstrate to PG&E whether Licensee is in full compliance with the requirements of this Agreement. Licensee shall promptly comply with any request by PG&E for such records.

(b) Notices, Review or Inspection Rights of PG&E. Any notices, review or inspection by PG&E, whether made or not, shall not relieve Licensee of any responsibility, obligation, or liability assumed under this Agreement. Licensee further agrees not to hold PG&E liable for any loss or damages from any notices, review or inspection by PG&E, or PG&E's failure to notify, review or inspect, and to indemnify PG&E under Section 12 from any third-party claim that PG&E's notices, review or inspection, or failure to notify, review or inspect resulted, directly or indirectly, in any loss or damage.

(c) California Law. This Agreement, and performance pursuant to it, shall be governed, interpreted, construed, and regulated by the laws of the State of California.

(d) Assignment. PG&E may sell, convey, assign or otherwise transfer, in whole or in part, its interest in this Agreement at any time without the consent of Licensee. Licensee may not assign, transfer, sublease, or sublet any right, obligation, or privilege given to it hereunder. Subject to the foregoing, this Agreement shall inure to the benefit of and be binding upon the respective successors and assigns of the parties hereto.

(e) Interpretation. The language of each part of this Agreement shall be construed simply and according to its fair meaning, and shall not be construed either for or against either Party.

(f) Nature of Rights. Nothing in this Agreement shall obligate PG&E to grant Licensee permission to use any Poles in the future or to provide permission to use other Poles under the same terms and conditions as set forth in this Agreement. Nothing in this Agreement shall preclude PG&E from granting any third-party permission to use available capacity on a Pole in ways that do not interfere with the rights granted to Licensee under this Agreement.

(g) Invalidity of Provisions. To the extent that any terms or provisions of this Agreement shall be finally determined by a court of competent jurisdiction to be invalid, (i) such invalidity shall not affect, release or modify any other terms or provisions, and (ii) in lieu of each such provision which is invalid, illegal or unenforceable, there shall be substituted or added as part of this Agreement a legal, valid and enforceable provision which shall be selected to be as similar as possible, in achieving the economic and business objectives of the Parties, to such illegal, invalid or unenforceable provision.

(h) Non-Waiver. The failure of PG&E to enforce any provision of this Agreement or the waiver thereof in any instance, shall not be construed as a general waiver or relinquishment on its part of any such provision but the same shall nevertheless be and remain in full force and effect.

(i) Incorporation Clause. This Agreement, including attached Exhibits, incorporates all the covenants and understandings between PG&E and Licensee regarding the subject matter of this Agreement. No other verbal agreements or understandings exist between the Parties nor shall any be binding upon either PG&E or Licensee unless reduced to writing and signed by the Parties. Any addition, variation or modification to this or any other Agreement shall be ineffective unless made in writing and signed by the Parties.

(j) Radio Frequency Emission ("RFE") Compliance. Licensee shall be responsible, at its sole cost and expense, for ensuring compliance with all regulations relating to RFE. Licensee shall provide PG&E with site-specific RFE exposure guidelines for personnel working in proximity to an Attachment, and a certificate that the Attachment, when analyzed in conjunction with any other Equipment at or near the Pole, will be in compliance with any applicable RFE standards. Such certificate shall be prepared by a qualified radio frequency engineer at least thirty (30) days prior to initiation of the installation. If Licensee desires to make

any changes to its Attachment or Equipment, then Licensee shall provide PG&E with a new certificate at least thirty (30) days prior to such change. PG&E will cooperate with Licensee, where possible, to allow Licensee to place required signage on a Pole where this is necessary to comply with RFE regulations. In addition, Licensee shall use its best efforts to minimize the RFE impact on health of workers and on future uses of the Pole.

(k) Electric and Magnetic Fields. In recent years there have been numerous scientific studies about the effects of electric and magnetic fields ("EMF"). This information will be made available to the Licensee upon request.

(l) Performance in Stead. Should Licensee fail to make any payment or perform any act or obligations required under this Agreement, then PG&E, at its option (without any obligation to do so and without releasing Licensee from any consequences hereunder due to its failure to perform as required hereunder) may: (i) make such payment or perform such act or obligation in such manner and to such extent as PG&E may deem necessary to protect PG&E's rights; (ii) commence, appear in and defend any action or proceeding purporting to affect PG&E's rights or interests; (iii) pay, purchase, contest or compromise any encumbrance, charge or lien which, in the sole judgment of PG&E affects or may affect PG&E's rights or interests; and (iv) in exercising any such powers, incur any liability and expend such reasonable amounts as PG&E, in its sole discretion, may deem necessary. Licensee shall promptly reimburse, defend, and indemnify PG&E against all liability, loss, cost or expense arising from its performance pursuant to this provision.

(m) Exhibits. Exhibits referenced herein are incorporated by said reference and may only be modified as described herein or by a written agreement of the Parties. Specifically included as exhibits to this Agreement hereto are:

Exhibit A: Request for Access - CMRS
Exhibit B: Schedule of Fees

(n) Confidentiality. Notwithstanding any language to the contrary in any applicable non-disclosure or confidentiality agreement between the Parties,. PG&E may, without the prior consent of the Licensee, provide confidential or proprietary information related to this Agreement to a governmental or regulatory entity that requests such information.

SIGNATURES

By signing below, the signatories hereto represent and warrant that they have been duly authorized to sign this Agreement on behalf of the Party for whom they sign.

[LICENSEE], a _____	**PACIFIC GAS AND ELECTRIC COMPANY, a California corporation**
By: **Print:** **Name:** **Title:** **Date:**	**By:** **Print:** **Name:** **Title:** **Date:**

EXHIBIT A
APPLICATION FOR POLE & CONDUIT ATTACHMENT
TELCO CONTACT PERMIT - CMRS

Pacific Gas and Electric Company

WM Notification No. _____

PART 1 REQUEST FOR ACCESS BY APPLICANT (To PG&E)

Date _____

PG&E – Joint Utilities Department
850 Stillwater Rd
West Sacramento, CA 95605

Overhead License Agreement _____
Prior Agreement Number _____
Application Number _____
Applicant Job Number _____

Permittee Company _____

In accordance with the executed agreement between the Permittee and PG&E, we hereby request access to poles and/or conduits/ducts, located at _____
_____*in the City of* _____*, as described in the attached drawings.*

Requestor Company _____ Phone _____

Address _____

Requestor Authorization Signature _____ Email _____

Requestor Authorization Name _____ Title _____

ATTACHMENTS APPLIED FOR UNDER THIS APPLICATION

No. of Poles Contacted (new) _____ No. of Anchors Contacted (new) _____

No. of Risers Installed (include sketch) _____ No. of Poles Cable Rebuild (exist[6]) _____

No. of Poles Overlashed (exist[6]) _____ Cable size over 2" (diameter in inch) _____

Total vertical feet of Pole used for Telco equipment (Antenna / Equip) _____ No. of Poles contacted by Antenna ____

PART 2 FINAL AUTHORIZATION BY PG&E (To Permittee)

You are hereby authorized for installation.

PG&E Authorization Signature _____ Date _____

PG&E Authorization Name _____ Title _____

PG&E Job No(s) _____ Contact Permit No. _____

PART 3 NOTICE OF COMPLETION BY APPLICANT
(To PG&E Area Telco Project Manager with 10 days after completion)

We hereby notify you that the work authorized above has been completed and is ready for your inspection.

Permittee Authorization Signature _____ Date _____

Permitee Authorization Name _____ Title _____

Notes: _____

1. PART (1) & (3) to be completed by applicant, part (2) to be completed by PG&E.
2. PG&E's authorization must be secured before the Permittee's facilities are attached.
3. This application shall be submitted to PG&E for all new attachments and rebuilds, overlash or modification of all existing facilities.
4. At PG&E request, Permittee shall be able to provide the authorized Telco Contact Permit (this form) for all attachment.
5. The Permittee shall exercise the access rights to the pole(s) and/or conduit(s) within 90 days of the authorization in Part 2.
6. Applicant to provide Contact Permit Number for existing facilities (see Note 4).
7. Applicant Field Data Sheet must be included with application
8. Failure to respond to PG&E requests for information after application submittal may result in a rejection of the application.

EXHIBIT B

SCHEDULE OF FEES

Pacific Gas and Electric Company

OVERHEAD FACILITIES
ESTIMATED UNIT COST
MAKE READY & REARRANGEMENT WORK

Process Fees (Based on Poles/Application Package)

Year	2014	2015	2016	2017	2018
1 - 49 Poles	$214	$214	$222	$231	$231
50 - 99 Poles	$277	$277	$288	$300	$300
100 – 199 Poles	$554	$554	$576	$599	$599
>200 Poles	$660	$660	$686	$714	$714

Map Fees

Year	2014	2015	2016	2017	2018
Mapping Hourly Rate	$99	$103	$107	$111	$116

Mapping hourly rate shall be charged by half hour increments with a minimum of a half hour charge per office visit. Number of maps copied per hour is approximately 10-20 maps (varies by scope of request).

Engineering Fees (estimate) actual costs will be billed

Year	2014	2015	2016	2017	2018
Engineering Hourly Rate	$138	$144	$149	$155	$161
Pole loading Calc/Pole	$159	$165	$172	$179	$186
Pole Replacement Estimating/Pole	$1104	$1152	$1192	$1240	$1288

Construction Facility Rearrangements Cost $/Crew day

Year	2014	2015	2016	2017	2018
4 man Construction Crew	$6848	$7122	$7407	$7703	$8011

Construction figures do not include engineering. Connection fee for OH svc 1 employee, up to 1hr travel time
4man crew figures are based on 8-hour work day

Construction Pole Replacement $/pole (estimate) actual costs will be billed

Year	2014	2015	2016	2017	2018
City and County of San Francisco (Area 1)	$20,300	$21,112	$21,956	$22,834	$23,748
Bay Area/Peninsula (San Mateo and Santa Clara Counties) (Areas 1, 3)	$20,300	$21,112	$21,956	$22,834	$23,748
Bay Area/East Bay (Alameda, Contra Costa and Marin Counties) (Areas 2, 7)	$20,300	$21,112	$21,956	$22,834	$23,748
Outside Bay Area (Area 3 South; Areas 4, 5, 7)	$16,500	$17,160	$17,846	$18,560	$19,302
Transmission Poles (All Areas)	$25,000	$26,000	$27,040	$28,121	$29,246

Rates are based on PG&E's actual system average pole replacement cost. In heavy vegetation areas expect significant increase.

Project Management

Year	2014	2015	2016	2017	2018
Project Management Hourly Rate	$105	$109	$114	$118	$122

All dollar figures are based on PG&E's actual standard labor cost.
2015 – 2018 rate is forecasted to include 4% escalation rate.

Engineering Advance

Licensee shall remit a $2,500 engineering advance with each RFA-CMRS. PG&E shall provide Licensee a receipt for such advance within seven (7) business days. The amount of the engineering advance is subject to increase by PG&E at any time. PG&E will apply the engineering advance to the cost of the work order. Any RFA-CMRS submitted by Licensee to attach to the same Pole after expiration of the above 12-month period will also require the submittal of a new engineering advance.

Pacific Gas and Electric Company

POLE AND CONDUIT ATTACHMENT FEE

I. POLE ATTACHMENT RATE CALCULATION MODEL

The pole attachment rates are calculated based on the depreciation accrual rate schedule submitted to the CPUC, Energy Division annually. The previous year's submittal is used to calculate the pole attachment rated for the following year (i.e. 2003 schedule submitted in 2004 determines rental rate for 2005).

A. Historical Net Cost of a Bare Pole (Account 364 Only, Previous Year):

$$\frac{\text{Account 364 - Deprn Reserve - Accum Def Income Taxes - 15\% of Net Pole Investment}}{\text{Number of Equivalent Poles}}$$

B. Depreciation Expense (Account 364 Only, Previous Year) % :

$$\text{Deprn. Rate for Gross pole Invest.} \times \frac{\text{Gross Pole Invest}}{\text{(Net Pole Invest - Def. Inc. Tax)}}$$

C. Administrative Expense % (Total Electric, Previous 5 Year Average):

$$\frac{\text{Electric A \& G Expenses}}{\text{Gross Plant - Depr Reserve - Accum Def. Income Taxes}}$$

D. Maintenance & Operating Expenses % (Electric, Previous 5 Year Average):

$$\frac{\text{[Account 593] (Electric Overhead Only)}}{\text{[Invest - Depr Reserve - Accum Def Income Taxes] (Electric Overhead \& Underground)}}$$

E. Normalized Taxes % (Company Total, Previous 5 Year Average):

$$\frac{\text{Accounts (408.1 + 409.1 + 410.1 + 411.4) - 411.1}}{\text{Gross Plant - Deprt Reserve - Def Income Taxes}}$$

F. Total Operating Cost for Poles:

F = A * [B + C + D + E]

G. Annual Rental Rate per foot (or one attachment):

G = 7.4% of Total Operating Cost for Poles (F) = 0.0740 * F

II. CONDUIT ATTACHMENT RATE CALCULATION MODEL

[Intentionally Omitted]

PACIFIC GAS AND ELECTRIC COMPANY

CHAPTER 5

PG&E'S TELECOMMUNICATIONS NETWORK

PACIFIC GAS AND ELECTRIC COMPANY
CHAPTER 5
PG&E'S TELECOMMUNICATIONS NETWORK

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PACIFIC GAS AND ELECTRIC COMPANY
CHAPTER 5
PG&E'S TELECOMMUNICATIONS NETWORK

A. Introduction

The Information Technology (IT) organization has been an integral part of Pacific Gas and Electric Company (PG&E, the Company, or the Utility) for over half a century. From its early beginnings, through advancements in technology, increased requirements around quality, reliability, safety, and the introduction of new business opportunities beyond the generation and delivery of energy, the PG&E IT organization has grown as a responsive, efficient, and reliable partner, working closely with its client organizations. For over three decades, IT has provided this level of support and assistance to PG&E's New Revenue Development Department (NRD) as a key business partner, and will continue to do so.

B. The Telecom Infrastructure and Operations Group

With a dedicated and experienced staff of about 300, the Telecommunications (Telecom) Infrastructure and Operations (I&O) group is a significant portion of the overall IT organization. The I&O group is responsible for the installation, monitoring, and maintenance of PG&E telecommunications and network equipment throughout the service territory. As explained in Chapter 2 of PG&E's testimony, PG&E owns, operates, and maintains several thousand miles of fiber optic cables and microwave facilities. This extensive telecom network provides the ability to remotely operate Utility equipment and systems.

I&O encompasses various skillsets including construction and maintenance technicians, enterprise network monitoring, engineering, project management, program management, advanced support teams, product specialists, inspection, and documentation teams. With its highly trained and dedicated workforce, I&O has extensive experience in designing, building, and maintaining highly-available and reliable networks, circuits, and services for the Utility. This workforce is dedicated to IT activities in support of gas and electric operations. The entire PG&E workforce is experienced and accustomed to putting employee and public

safety first. IT is currently supporting NRD in its various ventures and will continue to do so while performing in the same capacities.

The high level of support provided by the IT organization is possible, in large part, due to the many training and educational opportunities that PG&E offers—which the IT Department supports—both internal and external to PG&E. IT offers training on new equipment installed in the various networks, ongoing technical training, training on product/installation/maintenance standards, and mentorship programs. These offerings help to create an environment that fosters a highly-trained, reliable, and competent workforce. The granting of PG&E's request for a Certificate of Public Convenience and Necessity (CPCN) to operate as a Competitive Local Exchange Carrier would not pose any additional safety risks to the Company or its employees.

C. Processes, Procedures, and Controls

IT has stringent process and procedures in place for its (internal PG&E) clients (including NRD) to engage I&O for new construction, maintenance, and repair. A front door process provides a single point of contact for new project and construction work. IT also has a "24 x 365" Enterprise Network Control Center that provides a single point of contact for any operations and maintenance issues the clients of the IT organization may have. A rigorous change management process is in place, which includes the incorporation of methods of procedure (MOP) and circuit impact analysis to ensure proper client notification and minimize the possibilities of mis-configuration.

IT has decades of experience with a multitude of network technologies. The networks that support the gas and electric Utility are highly-reliable and resilient and able to maintain an acceptable level of service in the face of faults and challenges to normal operations. Critical Utility operations circuits and functions have diverse connections and backup equipment.

In the event of an incident that disrupts Utility and third-party data traffic simultaneously, it is standard policy and practice to prioritize and restore Utility data traffic before restoring third party data traffic. In the case of outages that affect gas and electric Utility services, as well as PG&E's wholesale and retail telecommunications services, PG&E's wholesale and retail telecommunications services will be restored once gas and electric Utility services have been restored.

D. Existing and Future Outside Plant Infrastructure

PG&E first began installing fiber optic cable plant in the early 1990s. By the mid 1990s, PG&E entered into the first of many agreements with third-party carriers to supply fiber optic infrastructure to PG&E through various arrangements. Today, the PG&E fiber optic cable outside plant infrastructure is a combination of PG&E-owned fiber, third-party fiber installed on PG&E infrastructure with strands leased to PG&E, and third-party fiber not installed on PG&E infrastructure. This infrastructure is distributed throughout the PG&E service territory, with the largest concentration on the San Francisco peninsula.

Existing PG&E fiber optic cable outside plant infrastructure on electric distribution infrastructure is primarily located in the communications space with a very small percentage located in the electric zone. Due to challenges in safely and efficiently accessing the fiber for maintenance and repair, PG&E has discontinued the practice of installing fiber in electric supply areas on distribution poles. Generally, others may not use the existing optical fiber in the electric space on electric distribution facilities. All future construction of new overhead fiber optic cable outside plant shall be installed exclusively in the communications space on electric distribution infrastructure.

The existing fiber optic cable outside plant infrastructure installed on electric transmission infrastructure is located in both the electric space, as well as the communications space. Future construction of new overhead fiber optic cable outside plant infrastructure installed on electric transmission infrastructure shall be in either the electric space, as optical ground wire; or the communications space, as all-dialectic self-supporting cable.

E. Safety

Granting of PG&E's application for a CPCN would not raise safety issues for PG&E employees, contactors, or the public. The same employees and contractors that presently support the existing PG&E networks, and the NRD and their customers on a daily basis, will perform the same activities to supporting the new telecommunications services.

The safety of the Utility's gas and electric data is paramount and will be achieved via physical diversity. Gas and electric data will be physically separated from telecom customer data. Telecom customer data will be carried on different fibers, different active equipment, and different networks than Utility

data. This physical separation will likewise protect telecom customer data from intrusion or monitoring by regulators of PG&E's gas and electric operations.

PG&E has extensive experience in keeping customer data secure through the use of technologies, such as our existing Utility billing system. Telecom customer data will not be monitored, routed, switched, connected, or otherwise transported to any destination other than the end points specified by the customer. A rigorous change management process is in place which includes the incorporation of MOPs to ensure telecom equipment is properly configured.

PACIFIC GAS AND ELECTRIC COMPANY

APPENDIX A

STATEMENTS OF QUALIFICATIONS

PACIFIC GAS AND ELECTRIC COMPANY
STATEMENT OF QUALIFICATIONS OF DEBORAH T. AFFONSA

Q 1 Please state your name and business address.

A 1 My name is Deborah T. Affonsa, and my business address is Pacific Gas and Electric Company, 77 Beale Street, San Francisco, California.

Q 2 Briefly describe your responsibilities at Pacific Gas and Electric Company (PG&E or the Company).

A 2 I am Vice President of the Customer Service organization.

Q 3 Please summarize your educational and professional background.

A 3 I received: a Bachelor of Science degree in Business Administration from Villanova University; a Master of Arts degree in Organizational Dynamics from the University of Pennsylvania; and completion of the Advanced Management Program from Harvard Business School.

In 2006, I joined PG&E Corporation as a Senior Director in the Corporate Strategy and Development Department, working on evaluating potential new business opportunities, managing the corporate-wide strategic planning process and leading teams in the evaluation and development of utility strategies around key issues and growth opportunities. In 2012, I joined the Company as Vice President of Corporate Strategy, where I was responsible for driving the development and implementation of a detailed, integrated, cross-functional 5-year forward-looking plan for achieving and maintaining the Company's vision of becoming the leading utility in the United States. I also identified emerging trends in the utility industry, recognizing interdependencies, potential synergies and conflicts to assist senior management in prioritizing and making decisions. I also managed the Company's benchmarking and continuous improvement efforts. I assumed my present position in 2014, responsible for all elements of operation for PG&E: contact centers; local offices; account management; business development; and customer outreach and experience.

Q 4 What is the purpose of your testimony?

A 4 I am sponsoring the following testimony in PG&E's application for a Certificate of Public Convenience and Necessity to operate as a Competitive Local Exchange Carrier:

- Chapter 1, "Introduction."

Q 5 Does this conclude your statement of qualifications?

A 5 Yes, it does.

PACIFIC GAS AND ELECTRIC COMPANY
STATEMENT OF QUALIFICATIONS OF AARON A. AUGUST

Q 1 Please state your name and business address.

A 1 My name is Aaron A. August, and my business address is Pacific Gas and Electric Company, 1850 Gateway Boulevard, Concord, California.

Q 2 Briefly describe your responsibilities at Pacific Gas and Electric Company (PG&E).

A 2 I am Director of PG&E's Business Development and Energy Solutions organizations.

Q 3 Please summarize your educational and professional background.

A 3 I received a Bachelor of Science degree in Business Administration from California State University, Hayward; and have completed leadership programs from Stanford Graduate School of Business and Utility Executive Course training from the University of Idaho.

In 2013, I joined PG&E as the Central Valley Region Director of Energy Solutions and Service within the Customer Care organization, responsible for leading division teams of sales and service professionals. Working with PG&E business customers to help educate and implement energy efficiency solutions to support their business and overall energy efficiency portfolio goals. In 2016, I co-led PG&E's realignment of the sales and service functions within the Customer Care organization, creating business channels and customer-centered segments. Once completed I owned all sales work associated to the realignment; this being my current role. Responsible for all account management and business development of the PG&E business customer base. Prior to PG&E, I held a variety of leadership roles at a global telecommunications conglomerate, most recently Sales Director of Advanced Products. Additional roles at the same organization and industry included: Director of: Business Operations; Sales Operations; Contact Center Operations; Finance; Service Delivery; and overall sales management.

Q 4 What is the purpose of your testimony?

A 4 I am sponsoring the following testimony in PG&E's application for a Certificate of Public Convenience and Necessity to operate as a Competitive Local Exchange Carrier:

- Chapter 2, "Business Plan."

Q 5 Does this conclude your statement of qualifications?

A 5 Yes, it does.

PACIFIC GAS AND ELECTRIC COMPANY
STATEMENT OF QUALIFICATIONS OF KAREN KHAMOU

Q 1 Please state your name and business address.

A 1 My name is Karen Khamou, and my business address is Pacific Gas and Electric Company, 245 Market Street, San Francisco, CA.

Q 2 Briefly describe your responsibilities at Pacific Gas and Electric Company (PG&E).

A 2 I am Director for the Electric Grid Interconnection team, overseeing: all wholesale and retail generation interconnection to the PG&E system; wholesale load contracts; and Joint Utility poles.

Q 3 Please summarize your educational and professional background.

A 3 I hold two degrees from the University of California, Berkeley: a Bachelor of Science degree in Conservation and Resource Studies from the College of Natural Resources; and a Master of Science degree in Global Health and Environment from the School of Public Health. I am currently Director of the Electric Grid Interconnection, bringing over 16 years of experience to the role.

Prior to this new role, I was Chief of Staff of Transmission Operations, after serving as Acting Director of the State Infrastructure Projects team, where I led PG&E's efforts with: High-Speed Rail; CalTrain Modernization; and the WaterFix/EcoRestore programs. I was previously in Energy Policy and Procurement as Manager of the Renewable Energy Policy and Planning team. I helped champion issues such as: Senate Bill 350 (Clean Energy and Pollution Reduction Act of 2015); and implementation of the 33 percent Renewables Portfolio Standard at the California Public Utilities Commission and other state agencies. I have also has worked in both Regulatory Relations and Regulatory Affairs on the Greenhouse Gas Cap and Trade Program and renewables.

Prior to joining PG&E in 2009, I worked in the Office of Climate Change at the California Air Resources Board (ARB), working with various ARB divisions and multiple public stakeholders to design strategies for the Assembly Bill 32 Scoping Plan, including authoring the transportation sector analysis section of the Scoping Plan. I have experience: conducting

cost-benefit analyses; assessing market policies; and coordinating public outreach events on complex climate change issues. My past experience also includes providing technical and analytical support to senior ARB management on multiple control technologies to attain Clean Air Act air quality standards.

My experience also includes working at the Natural Resources Defense Council and The San Francisco Foundation, where I worked on environmental and community issues.

Q 4 What is the purpose of your testimony?

A 4 I am sponsoring the following testimony in PG&E's application for a Certificate of Public Convenience and Necessity to operate as a Competitive Local Exchange Carrier:

- Chapter 4, "PG&E's ROW Procedures."

Q 5 Does this conclude your statement of qualifications?

A 5 Yes, it does.

PACIFIC GAS AND ELECTRIC COMPANY
STATEMENT OF QUALIFICATIONS OF RICHARD A. PATTERSON

Q 1 Please state your name and business address.

A 1 My name is Richard A. Patterson, and my business address is Pacific Gas and Electric Company, 77 Beale Street, San Francisco, California.

Q 2 Briefly describe your responsibilities at Pacific Gas and Electric Company (PG&E).

A 2 I am a Senior Manager in the Economic and Project Analysis Department.

Q 3 Please summarize your educational and professional background.

A 3 I received a Bachelor of Science degree in Electrical Engineering from the University of California, Berkeley, and a Master's degree in Business Administration in Finance, from California State University, Hayward.

In 1985, I joined PG&E as an Analyst in the Revenue Requirements Department, working on modeling and forecasting of capital expenditures, depreciation, and related items for short- and long-term planning and rate cases. In 1986, I transferred to the Rates Department to work on marginal cost analysis, returning to the Revenue Requirements Department in 1987 as a Senior Analyst, responsible for preparing forecasts of book and tax depreciation for planning and rate filings. From 1988-1992, I was a Supervisor in the Revenue Requirements Department, where I was responsible for the development of PG&E's depreciation policies. In 1992, I transferred to the Financial Planning and Analysis Department as a Senior Financial Analyst. I assumed my present position in 1994.

Q 4 What is the purpose of your testimony?

A 4 I am sponsoring the following testimony in PG&E's application for a Certificate of Public Convenience and Necessity to operate as a Competitive Local Exchange Carrier:

- Chapter 3, "Revenue Sharing."

Q 5 Does this conclude your statement of qualifications?

A 5 Yes, it does.

PACIFIC GAS AND ELECTRIC COMPANY
STATEMENT OF QUALIFICATIONS OF DAVID WRIGHT

Q 1 Please state your name and business address.

A 1 My name is David Wright, and my business address is Pacific Gas and Electric Company, 77 Beale Street, San Francisco, CA.

Q 2 Briefly describe your responsibilities at Pacific Gas and Electric Company (PG&E).

A 2 I am responsible for Information Technology (IT) infrastructure solutions design, build and program management.

Q 3 Please summarize your educational and professional background.

A 3 Professional; British Army, Engineering Corps, Comcast IT and Field Engineering; Education; Field Construction, Royal School of Military Engineering; and Stanford Management Program.

Q 4 What is the purpose of your testimony?

A 4 I am sponsoring the following testimony in PG&E's application for a Certificate of Public Convenience and Necessity to operate as a Competitive Local Exchange Carrier:

- Chapter 5, "PG&E's Telecommunications Network."

Q 5 Does this conclude your statement of qualifications?

A 5 Yes, it does.