

## PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE

Revision



April 13, 2020

**Advice Letter 5646-E**

Erik Jacobson  
Director, Regulatory Relations  
Pacific Gas and Electric Company  
77 Beale Street, Mail Code B10C  
P.O. Box 770000  
San Francisco, CA 94177

**SUBJECT: Request of Joint Investor-Owned Utilities for Approval of the Public Release of License Rights to Intellectual Property to Open Source Pursuant to Public Utilities Code Section 851 and General Order 173**

Dear Mr. Jacobson:

Advice Letter 5646-E is effective as of March 18, 2020, per Resolution E-5057 Ordering Paragraph.

Sincerely,

A handwritten signature in cursive script that reads "Edward Randolph".

Edward Randolph  
Deputy Executive Director for Energy and Climate Policy/  
Director, Energy Division

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September 26, 2019

**ADVICE LETTER 4078-E**

(Southern California Edison Company - U 338-E)

**ADVICE LETTER 3433-E**

(San Diego Gas & Electric Company – U 902-E)

**ADVICE LETTER 5646-E**

(Pacific Gas and Electric Company - U 39-E)

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA  
COMMUNICATIONS DIVISION

**SUBJECT:** Request of Joint Investor-Owned Utilities for Approval of the Public Release of License Rights to Intellectual Property to Open Source Pursuant to Public Utilities Code Section 851 and General Order 173

**PURPOSE**

Pursuant to Section 851 of the California Public Utilities Code and General Order (GO) 173, Southern California Edison Company (SCE), on behalf of SCE, Pacific Gas and Electric Company (PG&E), and San Diego Gas & Electric Company (SDG&E) (collectively, the IOUs), respectfully request authority to release the following cybersecurity research and development (R&D) applications described in *4b* below to the open-source community under the terms and conditions specified in the License Agreement designated as the Berkeley Software Distribution Three Clause (BSD3) License Agreement. A true and correct copy of the License Agreement is attached as Attachment A. Although the open-source license agreement of pre-commercial information and tools is a standard process for incenting the development of commercially beneficial cybersecurity applications as intended by the business case for the Machine to Machine Automated Threat Response (MMATR) project approved by the Commission in Advice Letter (AL) 4516-E, the IOUs are requesting approval out of an abundance of caution under Section 851 pursuant to the intellectual property requirements of Decision (D.)12-12-031 approving the 21st Century Energy Systems (CES-21) program.<sup>1</sup>

The IOUs believe that making these R&D applications more broadly available will have a positive impact in mitigating cybersecurity threats to the electricity grid. This request is

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<sup>1</sup> D.12-12-031, p. 73.

consistent with the release of CES-21 intellectual property approved in CPUC Resolution E-4943 on October 17, 2018.<sup>2</sup> For these reasons, the IOUs respectfully urge the Commission to approve this advice letter without delay.

## **BACKGROUND**

The IOUs, as part of the CES-21 Program, have acquired and now possess certain intellectual property they believe, if further developed, could result in products that will enhance the ability of California and nationwide utilities to protect Critical Infrastructure. The CES-21 Program, through on-going and collaborative cybersecurity research and development efforts, has developed three new applications that the IOUs and Lawrence Livermore National Laboratory (LLNL) believe can be developed into practical, commercial applications once released to the open-source community.

Pursuant to Resolution E-4943, the Commission agreed that it is desirable for those who are interested in developing the results of the CES-21 research into practical, commercial applications to be given an opportunity to do so with minimum restrictions or impediments. Although these entities would be required to sign an open-source license agreement, they would not be required to pay a license fee and the terms and conditions for the open source license would be “user friendly” since the selected terms and conditions are already familiar to the open source community. Although other models (such as selecting a single entity that would pay the IOUs and LLNL for the right to develop applications that use the results of the CES-21 effort) may result in some near-term revenues to the IOUs’ customers, the amount of any revenues is likely to be insignificant when compared to the benefits that would result from accelerating the development of tools that would help the IOUs in addressing cybersecurity threats.

Competition among multiple entities (some of which may not be known to the IOUs and LLNL) using the open-source model should encourage the development of multiple products and applications sooner than other more restrictive licensing models (such as a single-source license) would provide.

The three specific applications that the IOUs and LLNL would like to offer to the industry on an open-source basis are described below (see *4b* for further detail on the applications):

1. Exploits, Malware and Vulnerabilities (EMV) Scoring Application enables a repeatable EMV prioritization scoring process that allows a focus on cyber defense operations for the most impactful issues while managing the analysis of other cyber concerns to be addressed during regularly scheduled maintenance.
2. Structured Threat Observable Tool Set (STOTS) enables users to capture and send Structured Threat Information eXpression (STIX) observed data objects for

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<sup>2</sup> Jointly submitted: SDG&E Advice Letter 3175-E; SCE Advice Letter 3726-E; PG&E Advice Letter 5215-E.

remediation regarding changes in industrial control system configurations, network architecture, and Syslog entries.

3. SimView is a web-based visualization tool for graphically exploring data from cyber-physical simulations.

The targeted licensee(s) for these three open-source products would be unique to each product. In other words, each of these products will be available under separate open source licensing agreements.

- I. Releasing this research as open source to be adopted by industry vendors will not create any residual risk to the IOUs and their customers and will increase the security posture of Utilities Energy Delivery Systems improving reliability, resiliency and safety.
- II. Open source products reduce the cost to industry vendors. The increased reliability, resiliency and safety of the Utilities Energy Delivery Systems will be a significant value given the improved customer service.

### **COMPLIANCE WITH GENERAL ORDER 173**

#### **Rule 3 Requirements**

SCE is permitted to submit this advice letter seeking CPUC approval under Section 851 because the company believes it has satisfied the eligibility requirements set forth in Rule 3 of GO 173:

- 3a: *The activity proposed in the transaction will not require environmental review by the CPUC as a Lead Agency under California Environmental Quality Act (CEQA).*

The transaction is not a “project” for the purposes of the California Environmental Quality Act (CEQA). There is no work that requires CEQA review because the transaction involves only a licensing of intellectual property on an open-source basis and no direct or indirect environmental impacts will occur as a result of the transaction.

- 3b: *The transaction will not have an adverse effect on the public interest or on the ability of the utility to provide safe and reliable service to customers at reasonable rates.*

This transaction is in the public interest and will not diminish the ability of the utility to provide safe and reliable service to customers at reasonable rates.

In fact, the IOUs expect that the open-source licenses will result in the vendor community’s development and commercialization of new cybersecurity solutions,

that IOUs and other utilities can deploy, thereby increasing the security posture of Utilities Energy Delivery Systems improving reliability, resiliency and safety.

This advice letter will not increase any other rate or charge, cause the withdrawal of service, or conflict with any rate schedule or rule.

- 3c: *Any financial proceeds from the transaction will either be booked to a memorandum account for distribution between shareholders and ratepayers during the next general rate case or be immediately divided between shareholders and ratepayers based on a specific distribution formula previously approved by the Commission for that utility.*

No financial proceeds are expected.

- 3d: *If the transaction results in a fee interest transfer of real property, the property does not have a fair market value in excess of \$5 million.*

Not applicable because no real property is at issue.

- 3e: *If the transaction results in a sale of a building, the building does not have a fair market value in excess of \$5 million.*

Not applicable because no sale of a building is at issue.

- 3f: *If the transaction is for the sale of depreciable assets, the assets do not have a fair market value in excess of \$5 million.*

Not applicable because no sale of an asset is at issue.

- 3g: *If the transaction is a lease or a lease-equivalent, the total net present value of the lease payments, including any purchase option, does not have a fair market value in excess of \$5 million, and the term of the lease will not exceed 25 years.*

Not applicable because no lease or lease-equivalent is at issue.

The applications likely have minimal market value pending further development by third parties for commercial use.

The total net present value of the applications is below the \$5 million limit for eligibility in GO 173.

- 3h: *If the transaction conveys an easement, right-of-way, or other less than fee interest in real property, the fair market value of the easement, right-of-way, or other interest in the property does not exceed \$5 million.*

Not applicable because no transfer of an interest in real property is at issue.

*3i: The transaction will not materially impact the ratebase of the utility.*

The transaction will have no impact on ratebase.

*3j: If the transaction is a transfer or change in ownership of facilities currently used in regulated utility operations, the transaction will not result in a significant physical or operational change in the facility.*

Not applicable because no transfer or change in ownership of facilities is at issue.

*3k: The transaction does not warrant a more comprehensive review that would be provided through a formal Section 851 application.*

This transaction is typical of transactions for which the Section 851 Pilot Program was developed. This transaction does not contain any issues that would trigger a need for a more comprehensive review via a formal Section 851 application.

#### **Rule 4 Requirements**

Rule 4 requires that the following information be included in advice letters submitted under GO 173:

*4a: Identity and addresses of all parties to the proposed transaction.*

#### **San Diego Gas & Electric Company, Seller**

8330 Century Park Court MS 42C  
San Diego, CA 92123

#### **Southern California Edison Company, Seller**

2244 Walnut Grove Ave.  
Rosemead, CA 91770

#### **Pacific Gas and Electric Company, Seller**

77 Beale St.  
San Francisco, CA 94105

#### **Open Source Community, Licensee(s)**

*4b: A complete description of the property, including its present location, condition, and use.*

##### **Intellectual Property**

1. Exploits, Malware and Vulnerabilities (EMV) Scoring Application fills the gaps of other vulnerability scoring methods by including exploits, malware, applicability, consequence and guidance that feeds into actionable indicators and courses of action. It incorporates the asset owner's view for applicability, consequences and how to apply the guidance for defense of

their systems. Storing the analysis results enables learning and refinement with use, resulting in faster future analyses. Analysis sections can be tailored to the utility's needs and capabilities, with the stored results enabling reevaluation as the adversary's or defender's capabilities evolve. The EMV Scoring Application provides a repeatable process that adds context, identifies the most critical cyber issues for judicial use of limited cyber security resources, can be tailored with data driven design, and is moving toward the value of graph theoretics to match today's dynamic environment of multiple threat methods.

2. Structured Threat Observable Tool Set (STOTS) provides users modular, customizable and platform agnostic tools to monitor selected aspects of their network environment. STOTS enables users to generate and transmit Structured Threat Information eXpression (STIX) observed data objects for notification and or remediation. The STIX objects are capable of transmitting details regarding devices added to or removed from a network, changes made to a device configuration within the network, as well as filtered Syslog entries from existing equipment. The flexibility and standardized format of the STIX objects will allow for enhanced abilities to share data amongst utilities and ultimately provide better protection for critical infrastructure regarding illicit changes in industrial control system configuration and network architecture.
3. SimView provides a visual method for exploring results from simulations. It aids in analysis of numerical results and provide insights not possible when examining large amounts of textual data. SimView provides the ability to simultaneously visualize data from multiple simulations (e.g. communications simulation and transmission power flow simulation). Additionally, the simulation playback can be paused, fast forwarded, and rewound.

Each of these products will be available under separate Berkeley Software Distribution (BSD) three clause (BSD3) open source licensing agreements.

*4c: Transferee's intended use of the property.*

Since there are likely to be multiple entities that will have rights to use the intellectual property, the individual uses of the intellectual property may vary among these entities. But it is likely that any Licensee would try to incorporate the Joint IOU intellectual property into Licensee's technology already being developed and then use the result to develop and commercialize cybersecurity products that can protect the grid. For clarity, the model proposed by the IOUs and LLNL is a license model, so ownership of the IP would remain with the original owner of this intellectual property.

*4d: A complete description of the financial terms of the proposed transaction.*

The BSD3 open source license agreement with no financial terms is attached.

*4e: A description of how the financial proceeds of the transaction will be distributed.*

No financial proceeds are expected.

*4f: A statement of the impact of the transaction on ratebase and any effect on the ability of the utility to serve customers and the public.*

The transaction will have no impact on ratebase.

This transaction is in the public interest and will not diminish the ability of the utility to serve customers and the public.

If the transaction results in the development and availability of new cybersecurity solutions, the IOUs and other utilities will increase the security posture of Utilities Energy Delivery Systems improving reliability, resiliency and safety.

*4g: For sales of real property and depreciable assets, the original cost, present book value, and present fair market value, and a detailed description of how the fair market value was determined (e.g., appraisal).*

Not applicable because no sale is at issue.

*4h: For leases of real property, the fair market rental value, a detailed description of how the fair market rental value was determined, and any additional information necessary to show compliance with Rule 3(g).*

Not applicable because no real property is at issue.

*4i: For easements or rights-of-way, the fair market value of the easement or right-of-way and a detailed description of how the fair market value was determined.*

Not applicable because no easements or rights-of-way are at issue.

*4j: A complete description of any recent past (within the prior two years) or anticipated future transactions that may appear to be related to the present transaction, such as sales or leases of real property that are located near the property at issue or that are being transferred to the same transferee; or for depreciable assets, sales of similar assets or sales to the same transferee.*

There is one example in the prior two years of a transaction related to the present transaction. On January 17, 2018 SDG&E submitted Advice Letter 3175-E.<sup>3</sup> This

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<sup>3</sup> Jointly submitted: SDG&E Advice Letter 3175-E; SCE Advice Letter 3726-E; PG&E Advice Letter 5215-E.

was a Joint Advice Letter on behalf of the Joint Utilities for four applications that the IOUs and LLNL wanted to offer to the industry on an open source basis. On September 27, 2018 in Resolution E-4943, the Commission approved the Joint Advice Letter.

CES-21 will sunset in October 2019 and no future related transactions are anticipated other than the expectation that the IOUs will be able to deploy the vendor-developed products and services.

*4k: Sufficient information and documentation (including environmental documentation) to show that all of the eligibility criteria stated in Rule 3 have been met.*

As presented in the discussion on Rule 3, SCE believes that all applicable eligibility criteria stated in Rule 3 have been satisfied.

*4l: The filing utility may submit additional information to assist in the review of the advice letter, including recent photographs, scaled maps, drawings, etc.*

- Berkeley Software Distribution-3 (BSD-3) Open Source License Agreement

*4m: Environmental Information: If the applicant believes that the transaction is not a project under CEQA, the applicant shall include an explanation of its position.*

Please see SCE's response to Rule 3a above.

### **TIER DESIGNATION**

Pursuant to Section 851, GO 96-B, and GO 173, this advice letter is submitted with a Tier 3 designation.

### **EFFECTIVE DATE**

This advice letter shall become effective when approved by the Director of the Energy Division, the Executive Director, or the Commission.

### **NOTICE**

Anyone wishing to protest this advice letter may do so by letter via U.S. Mail, facsimile, or electronically, any of which must be received no later than 20 days after the date of this advice letter. Protests should be submitted to:

CPUC, Energy Division  
Attention: Tariff Unit  
505 Van Ness Avenue  
San Francisco, California 94102  
E-mail: [EDTariffUnit@cpuc.ca.gov](mailto:EDTariffUnit@cpuc.ca.gov)

Copies of the protest should also be sent via e-mail to the attention of the Energy Division at [EDTariffUnit@cpuc.ca.gov](mailto:EDTariffUnit@cpuc.ca.gov). A copy of the protest should also be sent via e-mail to the address shown below on the same date it is mailed or delivered to the Commission.

Gary A. Stern, Ph.D.  
Managing Director, State Regulatory Operations  
Southern California Edison Company  
8631 Rush Street  
Rosemead, CA 91770  
Telephone (626) 302-9645  
Facsimile: (626) 302-6396  
E-mail: [AdviceTariffManager@sce.com](mailto:AdviceTariffManager@sce.com)

Laura Genao  
Managing Director, State Regulatory Affairs  
c/o Karyn Gansecki  
Southern California Edison Company  
601 Van Ness Avenue, Suite 2030  
San Francisco, California 94102  
Facsimile: (415) 929-5544  
E-mail: [Karyn.Gansecki@sce.com](mailto:Karyn.Gansecki@sce.com)

Attn: Megan Caulson  
Regulatory Tariff Manager  
8330 Century Park Ct. – CP31D  
San Diego, CA 92123-1550  
E-mail: [MCaulson@sdge.com](mailto:MCaulson@sdge.com)

Erik Jacobson  
Director, Regulatory Relations  
c/o Megan Lawson  
Pacific Gas and Electric Company  
77 Beale Street, Mail Code B13U  
P.O. Box 770000  
San Francisco, California 94177  
Facsimile: (415) 973-3582  
E-mail: [PGETariffs@pge.com](mailto:PGETariffs@pge.com)

There are no restrictions on who may submit a protest, but the protest shall set forth specifically the grounds upon which it is based and must be received by the deadline shown above.

In accordance with General Rule 4 of GO 96-B, SCE is serving copies of this advice letter to the interested parties shown on the attached GO 96-B list and, in accordance with Resolution ALJ-244, on the Energy Division, the Commission Public Advocates Office, the Commission CEQA Team ([clu@cpuc.ca.gov](mailto:clu@cpuc.ca.gov); [jnr@cpuc.ca.gov](mailto:jnr@cpuc.ca.gov); [jmu@cpuc.ca.gov](mailto:jmu@cpuc.ca.gov)). Address change requests to the GO 96-B service list should be directed by electronic mail to [AdviceTariffManager@sce.com](mailto:AdviceTariffManager@sce.com) or at (626) 302-4039. For changes to all other service lists, please contact the Commission's Process Office at (415) 703-2021 or by electronic mail at [Process\\_Office@cpuc.ca.gov](mailto:Process_Office@cpuc.ca.gov).

Further, in accordance with Public Utilities Code Section 491, notice to the public is hereby given by submitting and keeping the advice letter at SCE's corporate headquarters. To view other SCE advice letters submitted with the Commission, log on to SCE's web site at <https://www.sce.com/wps/portal/home/regulatory/advice-letters>.

For questions, please contact Owen K. Goldstrom at 714-895-0230 or by electronic mail: [Owen.Goldstrom@sce.com](mailto:Owen.Goldstrom@sce.com).

**Southern California Edison Company**

/s/ Gary A. Stern, Ph.D.  
Gary A. Stern, Ph.D.

GS:jh:jm  
Enclosure

## Attachment A

SCE Advice Letter 4078-E

SDG&E Advice Letter 3433-E

PG&E Advice Letter 5646-E

Berkeley Software Distribution-3 (BSD-3)

Open Source License Agreement

## Exhibit A

### Berkeley Software Distribution-3 (BSD-3) Open Source License Agreement

September 29, 2017

Berkeley Software Distribution Three Clause (BSD-3) Agreement

Copyright (c) <year>, <copyright  
holder> All rights reserved.

Redistribution and use in source and binary forms, with or without  
modification, are permitted provided that the following conditions are  
met:

- \* Redistributions of source code must retain the above  
copyright notice, this list of conditions and the following  
disclaimer.
- \* Redistributions in binary form must reproduce the above copyright  
notice, this list of conditions and the following disclaimer in the  
documentation and/or other materials provided with the  
distribution.
- \* Neither the name of the <organization> nor the  
names of its contributors may be used to endorse or promote products  
derived from this software without specific prior written  
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WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE  
DISCLAIMED. IN NO EVENT SHALL <COPYRIGHT HOLDER> BE LIABLE FOR ANY  
DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES  
(INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR  
SERVICES;  
LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED  
AND  
ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT  
(INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF  
THIS  
SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.



# ADVICE LETTER SUMMARY

## ENERGY UTILITY



MUST BE COMPLETED BY UTILITY (Attach additional pages as needed)

Company name/CPUC Utility No.: Southern California Edison Company (U 338-E)

Utility type:

- ELC       GAS       WATER  
 PLC       HEAT

Contact Person: Darrah Morgan  
 Phone #: (626) 302-2086  
 E-mail: AdviceTariffManager@sce.com  
 E-mail Disposition Notice to: AdviceTariffManager@sce.com

EXPLANATION OF UTILITY TYPE

ELC = Electric      GAS = Gas      WATER = Water  
 PLC = Pipeline      HEAT = Heat

(Date Submitted / Received Stamp by CPUC)

Advice Letter (AL) #: 4078-E

Tier Designation: 3

Subject of AL: Request of Joint Investor-Owned Utilities for Approval of the Public Release of License Rights to Intellectual Property to Open Source Pursuant to Public Utilities Code Section 851 and General Order 173

Keywords (choose from CPUC listing): Compliance, Section 851

AL Type:  Monthly  Quarterly  Annual  One-Time  Other:

If AL submitted in compliance with a Commission order, indicate relevant Decision/Resolution #:

Does AL replace a withdrawn or rejected AL? If so, identify the prior AL:

Summarize differences between the AL and the prior withdrawn or rejected AL:

Confidential treatment requested?  Yes  No

If yes, specification of confidential information:

Confidential information will be made available to appropriate parties who execute a nondisclosure agreement. Name and contact information to request nondisclosure agreement/ access to confidential information:

Resolution required?  Yes  No

Requested effective date:

No. of tariff sheets: -0-

Estimated system annual revenue effect (%):

Estimated system average rate effect (%):

When rates are affected by AL, include attachment in AL showing average rate effects on customer classes (residential, small commercial, large C/I, agricultural, lighting).

Tariff schedules affected: None

Service affected and changes proposed<sup>1</sup>:

Pending advice letters that revise the same tariff sheets: None

<sup>1</sup>Discuss in AL if more space is needed.

**Protests and all other correspondence regarding this AL are due no later than 20 days after the date of this submittal, unless otherwise authorized by the Commission, and shall be sent to:**

CPUC, Energy Division  
Attention: Tariff Unit  
505 Van Ness Avenue  
San Francisco, CA 94102  
Email: [EDTariffUnit@cpuc.ca.gov](mailto:EDTariffUnit@cpuc.ca.gov)

Name: Gary A. Stern, Ph.D.  
Title: Managing Director, State Regulatory Operations  
Utility Name: Southern California Edison Company  
Address: 8631 Rush Street  
City: Rosemead  
State: California Zip: 91770  
Telephone (xxx) xxx-xxxx: (626) 302-9645  
Facsimile (xxx) xxx-xxxx: (626) 302-6396  
Email: [advicetariffmanager@sce.com](mailto:advicetariffmanager@sce.com)

Name: Laura Genao c/o Karyn Gansecki  
Title: Managing Director, State Regulatory Affairs  
Utility Name: Southern California Edison Company  
Address: 601 Van Ness Avenue, Suite 2030  
City: San Francisco  
State: California Zip: 94102  
Telephone (xxx) xxx-xxxx: (415) 929-5515  
Facsimile (xxx) xxx-xxxx: (415) 929-5544  
Email: [karyn.gansecki@sce.com](mailto:karyn.gansecki@sce.com)

## ENERGY Advice Letter Keywords

Affiliate	Direct Access	Preliminary Statement
Agreements	Disconnect Service	Procurement
Agriculture	ECAC / Energy Cost Adjustment	Qualifying Facility
Avoided Cost	EOR / Enhanced Oil Recovery	Rebates
Balancing Account	Energy Charge	Refunds
Baseline	Energy Efficiency	Reliability
Bilingual	Establish Service	Re-MAT/Bio-MAT
Billings	Expand Service Area	Revenue Allocation
Bioenergy	Forms	Rule 21
Brokerage Fees	Franchise Fee / User Tax	Rules
CARE	G.O. 131-D	Section 851
CPUC Reimbursement Fee	GRC / General Rate Case	Self Generation
Capacity	Hazardous Waste	Service Area Map
Cogeneration	Increase Rates	Service Outage
Compliance	Interruptible Service	Solar
Conditions of Service	Interutility Transportation	Standby Service
Connection	LIEE / Low-Income Energy Efficiency	Storage
Conservation	LIRA / Low-Income Ratepayer Assistance	Street Lights
Consolidate Tariffs	Late Payment Charge	Surcharges
Contracts	Line Extensions	Tariffs
Core	Memorandum Account	Taxes
Credit	Metered Energy Efficiency	Text Changes
Curtable Service	Metering	Transformer
Customer Charge	Mobile Home Parks	Transition Cost
Customer Owned Generation	Name Change	Transmission Lines
Decrease Rates	Non-Core	Transportation Electrification
Demand Charge	Non-firm Service Contracts	Transportation Rates
Demand Side Fund	Nuclear	Undergrounding
Demand Side Management	Oil Pipelines	Voltage Discount
Demand Side Response	PBR / Performance Based Ratemaking	Wind Power
Deposits	Portfolio	Withdrawal of Service
Depreciation	Power Lines	

**PG&E Gas and Electric  
Advice Submittal List  
General Order 96-B, Section IV**

AT&T	Downey & Brand	Pioneer Community Energy
Albion Power Company	East Bay Community Energy	Praxair
Alcantar & Kahl LLP	Ellison Schneider & Harris LLP	
	Energy Management Service	
Alta Power Group, LLC	Engineers and Scientists of California	Redwood Coast Energy Authority
Anderson & Poole	Evaluation + Strategy for Social Innovation	Regulatory & Cogeneration Service, Inc.
	GenOn Energy, Inc.	SCD Energy Solutions
Atlas ReFuel	Goodin, MacBride, Squeri, Schlotz & Ritchie	
BART	Green Charge Networks	SCE
	Green Power Institute	SDG&E and SoCalGas
Barkovich & Yap, Inc.	Hanna & Morton	
P.C. CalCom Solar	ICF	SPURR
California Cotton Ginners & Growers Assn	International Power Technology	San Francisco Water Power and Sewer
California Energy Commission	Intestate Gas Services, Inc.	Seattle City Light
California Public Utilities Commission	Kelly Group	Sempra Utilities
California State Association of Counties	Ken Bohn Consulting	Southern California Edison Company
Calpine	Keyes & Fox LLP	Southern California Gas Company
	Leviton Manufacturing Co., Inc. Linde	Spark Energy
Cameron-Daniel, P.C.	Los Angeles County Integrated Waste Management Task Force	Sun Light & Power
Casner, Steve	Los Angeles Dept of Water & Power	Sunshine Design
Cenergy Power	MRW & Associates	Tecogen, Inc.
Center for Biological Diversity	Manatt Phelps Phillips	TerraVerde Renewable Partners
City of Palo Alto	Marin Energy Authority	Tiger Natural Gas, Inc.
	McKenzie & Associates	
City of San Jose	Modesto Irrigation District	TransCanada
Clean Power Research	Morgan Stanley	Troutman Sanders LLP
Coast Economic Consulting	NLine Energy, Inc.	Utility Cost Management
Commercial Energy	NRG Solar	Utility Power Solutions
County of Tehama - Department of Public Works		Utility Specialists
Crossborder Energy	Office of Ratepayer Advocates	
Crown Road Energy, LLC	OnGrid Solar	Verizon
Davis Wright Tremaine LLP	Pacific Gas and Electric Company	Water and Energy Consulting Wellhead Electric Company
Day Carter Murphy	Peninsula Clean Energy	Western Manufactured Housing Communities Association (WMA)
		Yep Energy
Dept of General Services		
Don Pickett & Associates, Inc.		
Douglass & Liddell		