PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3298



November 30, 2016

Advice Letter 5035-G

Ronald van der Leeden Director, Regulatory Affairs Southern California Gas 555 W. Fifth Street, GT14D6 Los Angeles, CA 90013-1011

SUBJECT: Expedited Advice Letter Requesting Approval of the Winter Demand Response Programs

Dear Mr. van der Leeden:

Advice Letter 5035-G is effective as of November 10, 2016, per Resolution G-3522 Ordering Paragraphs.

Sincerely,

Edward Randolph

Director, Energy Division

Edward Randofah





555 W. Fifth Street, GT14D6 Los Angeles, CA 90013-1011

Tel: 213.244.2009 Fax: 213.244.4957 RvanderLeeden @semprautilities.com

September 27, 2016

Advice No. 5035 (U 904 G)

Public Utilities Commission of the State of California

<u>Subject</u>: Expedited Advice Letter Requesting Approval of the Winter Demand Response Programs

Southern California Gas Company (SoCalGas) hereby requests California Public Utilities Commission (Commission) approval of its proposed Winter Demand Response Programs pursuant to the directive issued by the Commission's Energy Division on September 13, 2016.

Purpose

In response to the Commission's directive, SoCalGas requests expedited approval of its Winter Demand Response Programs to be in place for customer participation by December 1, 2016.

Background

On August 22, 2016, the Commission, along with staff at the California Energy Commission, the California Independent System Operator, and the Los Angeles Department of Water and Power, issued a joint agency Aliso Canyon Gas and Electric Reliability Winter Action Plan (Winter Action Plan) which determined that there is a possibility of gas curtailments in the winter of 2016. Furthermore, the Winter Action Plan proposed the development and implementation of gas demand response programs for core and non-core customers to mitigate the risk of natural gas curtailments.²

On September 13 2016, the Commission's Energy Division Director, Edward Randolph, issued a letter (Energy Division Letter) directing SoCalGas to file an expedited Tier 3 Advice Letter (AL) proposing winter demand response programs no later than September 27, 2016,

¹ Winter Action Plan, at pp. 7-8.

² Winter Action Plan, at pp. 5-6.

so that the Commission has enough time to process the information and render a resolution in advance of December 1, 2016.³

SoCalGas' Winter 2016-2017 Demand Response Programs

The Energy Division Letter noted that SoCalGas' programs should be designed to incent reductions in natural gas consumption on peak gas demand days when the SoCalGas system reliability is anticipated to be stressed, and should leverage its advanced meter system as much as possible to measure the load reductions. As such, SoCalGas proposes a total of three winter demand response programs; where two of the programs are tailored to SoCalGas' core customers and one program is tailored to SoCalGas' non-core customers.

A. Natural Gas Conservation Notification Campaign

- a. Overview: SoCalGas proposes implementing a "Natural Gas Conservation Notification Campaign" from December 1, 2016 through March 31, 2017, targeted to all residential and small-medium business customers in the SoCalGas service territory. The goal of the campaign is to stimulate voluntary reductions in gas usage on forecasted gas system stressed days, similar to the statewide California Independent System Operator (CAISO) "Flex Alert" campaign, which is also voluntary. On declared "event" days, public notifications encouraging consumers to reduce gas will deploy through mass media channels, such as radio, digital radio, and digital displays. Additionally, a consistent awareness-building campaign to educate consumers about the need to conserve natural gas will run throughout the duration of the 16-week campaign. The campaign will also promote the use of SoCalGas advanced meterenabled tools that help customers better manage and control their natural gas use, including SoCalGas weekly Bill Tracker Alerts.
- b. Eligibility Criteria: The "Natural Gas Conservation Notification Campaign" will be implemented on a mass market basis, with communications targeted to all core residential and small-medium business customers within SoCalGas' service territory. All SoCalGas customers are eligible to participate and respond to the call for the voluntary gas reduction.
- **c. Notification Mechanisms:** When system conditions warrant, the SoCalGas System Operator will call a "Natural Gas Conservation Alert" and will notify the SoCalGas communications department to issue a notification to all core customers through mass media marketing channels, which could include paid media (radio), digital radio, social media, and proactive earned media outreach.
- d. Customer Notification Process: The Natural Gas Conservation Notification Campaign would augment SoCalGas' annual winter communications campaign, which educates customers through consistent awareness-building about the need to conserve natural gas. This campaign allows for the flexibility to swap out on-going awareness messages quickly with notification announcements encouraging customers

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³ Energy Division Letter, at p.2.

to voluntarily reduce gas usage on declared gas system stress days. A key feature of the campaign would be to encourage customers to sign up for notification messages that will announce the next-day or same-day gas system stress day event. Notification messages would be announced through channels such as radio spots, digital displays, and direct-to-consumer outreach support, such as emails, digital/social media, SoCalGas.com/My Account notifications, call center interactive voice response reminders, and news media communications.

- **e. Event Windows:** SoCalGas anticipates that notifications to reduce gas usage will be initiated on a "next day," or potentially "day-of" basis. Notifications would request that customers voluntarily reduce usage, such as lowering their thermostat or deferring natural gas appliance usage, such as dishwashers or clothes dryers, to a different day.
- f. Incentive Structure: As described above, the goal of this mass market campaign is to stimulate voluntary reductions in usage on declared gas system stress day events. Consistent with the statewide CAISO electric "Flex Alert" campaign, the mass-marketing campaign will not include monetary incentives or rewards and is open to everyone in the service territory. An incentive-based pilot program for select groups of residential customers is described in Section B, below.
- **g. Proposed Budget:** The overall budget for the Natural Gas Conservation Notification Campaign is \$2.5 million. This budget includes the following: research, creative development, plan execution, and paid media.
- h. Plan for Launching the Program by December 1, 2016: Upon Commission approval of the Winter Demand Response Memorandum Account (WDRMA) filed in Advice No. 5027, the 16-week campaign will launch December 1, 2016 through March 31, 2017. Phase one, through October, includes discovery and research to set goals of the campaign and establish benchmarking based on other programs in the industry with similar scope. This phase will allow SoCalGas to leverage best practices and inform the brand development and communications approach. Phase two, through November, will include creative development and content and media creation. Phase three, through March 2017, will include launch and implementation.
- i. Metrics for Success: Customer engagement metrics will include measurement of awareness through enrollment for notifications, email open and click-through rates, website visit/click-through metrics, and post-campaign analysis through campaign reports, and Advanced Meter Infrastructure (AMI) data to determine energy savings on "event" days (as described in greater detail in Section B.i, below).

⁴ Approval of Advice No. 5027 must be received by SoCalGas by no later than October 1, 2016 for this program to launch December 1, 2016. Each additional one-week delay in the approval of Advice No. 5027 could result in up to two additional weeks of delay in the December 1, 2016 program launch date.

B. Natural Gas Conservation Pilot Rebate Program

- a. Program Overview: SoCalGas proposes to implement a pilot program to evaluate the effectiveness of using rebates to incent reduced gas usage in response to the Natural Gas Conservation Notification Campaign events described above. This pilot will facilitate evaluation of the cost-effectiveness and savings impacts of an incentivized gas usage reduction approach. Programs of a similar nature, such as Southern California Edison's (SCE's) Peak Time Rebate program, have had challenges meeting cost-effectiveness criteria, as outlined in SCE's bridge funding proposal filed with the Commission earlier this year, which requested decommissioning of the Peak Time Rebate (PTR) program (without direct control technology) because it was not cost-effective.⁵
- b. Eligibility Criteria: SoCalGas proposes to send program enrollment solicitations to a total of approximately 60,000 SoCalGas residential customers that fall within three different "treatment groups" to encourage these customers to "opt-in" to the Natural Gas Conservation Pilot Rebate Program. Two of the treatment groups would be comprised of a random sample of 25,000 customers each, where one of the 25,000 customer treatment groups would consist of residential customers with advanced meters randomly selected from those enrolled within SoCalGas' "My Account" online customer portal, and the other 25,000 customer treatment group would be randomly selected from customers with advanced meters currently not registered for My Account. These two treatment groups, while separate and independent, would be incorporated into a broader set of conservation pilot treatments already planned and currently being implemented as part of the Advanced Meter (AM) project's 2016-2017 conservation "test and learn" campaign heating season pilots, thus leveraging the existing experimental design structure, control groups, and data preparation already in place for these AM pilots. Customers in these two treatment groups would also consist of those who are in the top two usage quartiles and who are not enrolled in the California Alternate Rates for Energy (CARE) Program. This approach will allow for a side-by-side comparison of the cost-effectiveness of the Natural Gas Conservation Pilot Rebate Program in terms of its ability to produce energy reductions on peak days as compared to several behavioral treatments that SoCalGas is also piloting this winter.

⁵ P. 16, Southern California Edison Company's (U 338-E) Proposal for Approval of its 2017 Demand Response Program and Bridge Funding Authorization, filed February 1, 2016. In Decision (D.) 16-06-029, p.87, the Commission subsequently authorized funding for SCE in 2017 to discontinue SCE's PTR and PTR-ET programs in 2017.

⁶ SoCalGas possesses a valid e-mail address for customers currently registered in My Account, which thus facilitates marketing the pilot rebate program and enrolling customers through e-mail in addition to direct mail.

⁷ For further details regarding the AM 2016-2017 conservation "test and learn" campaign behavior change pilots already being implemented for this upcoming heating season in support of AM goals and regulatory directives, please refer to the SoCalGas Advanced Meter Semiannual Report, August 31, 2016, Nexant-prepared "Appendix E – Evaluation of Southern California Gas Company's 2015-2016 Conservation Campaign," p.61 available at https://www.socalgas.com/regulatory/A0809023.shtml.

An additional treatment group would be constructed from the approximately 11,000 customers within SoCalGas' service territory with an installed and registered Ecobee Smart Thermostat.⁸ Customers in this treatment group would also be required to have an advanced meter, and further eligibility screening may be applied so as to avoid overlap or customer confusion with SCE and SoCalGas' Smart Thermostat Rebate program and associated SCE-provided bill credits. To be eligible to receive an end-of-winter rebate tied to reductions in gas usage on event days, pilot program participants would need to enroll in the pilot rebate program and also enroll to receive the Natural Gas Conservation Notification described above.

- c. Notification Mechanisms: When system conditions warrant, the SoCalGas System Operator will call a "Natural Gas Conservation Alert," and will notify the SoCalGas communications department to issue a notification to all core customers through mass media marketing channels, which could include paid media (radio), digital radio, social media, and proactive earned media outreach. Pilot participants who have "opted in" to the Natural Gas Conservation Pilot Rebate Program would receive event e-mail notifications customized for and specific to the pilot program, e.g., reinforcing the end-of-winter rebate associated with conserving in response to these alerts.
- d. Customer Notification Process: The Natural Gas Conservation Pilot Rebate program would leverage the same notification approaches as outlined under SoCalGas' proposed Natural Gas Conservation Notification Campaign. In addition to these approaches, customers selected for the pilot rebate program would receive an initial "Welcome Kit" through direct mail and/or e-mail at the beginning of December 2016 informing them of their eligibility to enroll in the pilot, and providing details regarding how to enroll in both the pilot program and the associated Natural Gas Conservation Notifications. This initial communication would also clearly explain how customers could earn an end-of-winter rebate tied to the volume of therms customers conserve during notification event days.
- e. Event Windows: SoCalGas anticipates that notifications to reduce gas usage will be initiated on a "next day," or potentially "day-of" basis. Notifications would request that customers voluntarily reduce usage, such as lowering their thermostat or deferring natural gas appliance usage, such as dishwashers or clothes dryers, to a different day, and would remind them of the rebate they would be eligible to receive at the end of the winter period tied to the cumulative number of therms they conserve during any Natural Gas Conservation Notification event days.
- f. Incentive Structure: Pilot participants who both enroll in the program and sign-up to receive notifications would be eligible for a \$2.50 rebate for every therm they conserve during a Natural Gas Conservation Notification event day. Customers who are not currently registered for SoCalGas' "My Account" customer portal would also be eligible

⁸ The rebate pilot for SoCalGas customers with an installed smart thermostat would exclude customers with a "NEST" thermostat to avoid conflict with the "Winter Seasonal Savings Pilot." SoCalGas plans to implement a pilot in parallel this winter involving NEST thermostats as proposed in Advice No. 5028.

to receive an additional \$5 for signing up to receive these notifications. This additional incentive is not necessary for customers currently registered for My Account as SoCalGas already has a valid e-mail address associated with the My Account users' accounts. These approaches are consistent with Energy Division staff suggestions and recommendations, as well as with the very simple incentive calculation approach utilized within electric utility peak time rebate programs.

September 27, 2016

At the end of the winter, SoCalGas would provide enrolled participants a single rebate calculated based on the total therms they conserved across all of the notification event days. The upward limit per participant for this end of winter rebate would be \$30 for My Account-registered customers, and \$35 for those not registered for My Account (given the additional notification sign-up incentive).

Pilot participants in the Ecobee Smart Thermostat treatment group will either receive the same rebate structure outlined above, or alternatively, one that offers a somewhat different end-of-winter rebate structure. As an example, these smart thermostat pilot participants could be offered \$15-\$25 for enrolling and another \$15-\$25 at the end of the winter period for: 1) not opting out during the winter months (through March), and 2) allowing Ecobee to remotely lower thermostat set-points during this same timeframe.⁹

To calculate the therms saved by each enrolled pilot participant during notification events, and factoring in that the variation in residential gas usage from day to day in the winter may be quite different from that of electric usage during the summer, SoCalGas plans to conduct a baseline accuracy assessment to identify the most accurate settlement baseline methodology. Both the SCE Save Power Days program and the San Diego Gas and Electric (SDG&E) Reduce Your Use programs apply a top 3-in-5 settlement baseline methodology for calculating the reduction that each customer provides, but this may not be an appropriate baseline for residential gas usage in the winter. SoCalGas' baseline accuracy assessment will leverage historical interval data from SoCalGas' advanced meters, testing the accuracy of the top 3-in-5 settlement baseline accuracy relative to other options (e.g., top 10-in-10, top 2-in-5, etc.). SoCalGas will finalize the settlement baseline methodology after conducting this assessment.

- **g. Proposed Budget:** The overall budget for the Natural Gas Conservation Pilot Rebate Program is \$2.02 million. This budget includes the following: marketing and communications, direct implementation non-incentive, and incentives.
- h. Plan for Launching the Program by December 1, 2016: The pilot rebate program is targeted to launch in early December, upon Commission approval of

⁹ SoCalGas is currently evaluating the feasibility of both rebate structure alternatives, as well as different program structure alternatives, for participants in the Ecobee Smart Thermostat treatment group.

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Advice No. 5035

the WDRMA filed in Advice No. 5027, and will continue through March 31, 2017. End-of-winter rebates will be awarded to customers at the conclusion of this period. Phase one, which runs through mid-October, consists of in-depth pilot program design research, evaluation, and planning. Phase two, running from mid-October through late November, consists of creative development, design, legal review, and production of pilot program direct outreach elements (e.g., direct mail and e-mail program marketing solicitations, website elements, etc.). Phase three consists of the project launch targeted for early December followed by periodic direct communications through February or early March. Phase four, initiating in April, includes program measurement and evaluation, including calculation of enrolled pilot participants' earned rebates. Rebates earned will be mailed to customers at the conclusion of Phase four.

i. Metrics for Success: Customer engagement metrics will include measurement of awareness through enrollment for notifications, email open and click-through rates, website visit/click-through metrics, and post-campaign analysis through campaign reports, and AMI data to determine energy savings on "event" days.

The estimated gas savings for rebate pilot participants on event days are a critical metric to measuring the pilot program effectiveness. Gas savings on event days will be estimated by applying the best practices that have been developed for electric Demand Response (DR) programs measurement and evaluation in California. In 2008, the Commission and joint electric Investor-Owned Utilities¹¹ (IOUs) developed California's Load Impact Protocols, which required the utilities to conduct annual evaluations of all DR programs in the state. These evaluations have leveraged the wide availability of interval data from smart meters to estimate the hourly load reductions that customers deliver for every electric DR event day throughout the state. To apply these best practices, SoCalGas will work with Nexant, which developed the Load Impact Protocols on behalf of the joint IOUs in 2008 and has since conducted more DR load impact evaluations in California than any other evaluator. Most notably, Nexant has leveraged smart meter data from millions of customers to conduct the SCE Save Power Day load impact evaluation for each of the past four program years (2013-2016), in addition to dozens of other evaluations that leveraged smart meter data. As in all of its electric DR evaluations, Nexant will summarize the model validation, methods chosen (and why), overall results and disaggregated results for these gas DR evaluations.

C. Noncore, Non-Electric Generation, Natural Gas Conservation Notifications

a. Overview: SoCalGas proposes to encourage a voluntary natural gas conservation response from its noncore customers by posting "Natural Gas Conservation"

Approval of Advice No. 5027 must be received by SoCalGas by no later than October 1, 2016 for this program to launch December 1, 2016. Each additional one-week delay in the approval of Advice No. 5027 could result in up to two additional weeks of delay in the December 1, 2016 program launch date.

¹¹ The IOUs consist of SDG&E, SCE, and Pacific Gas and Electric Company (PG&E).

notifications to Envoy, SoCalGas' electronic bulletin board (EBB) for forecasted gas system stressed days. These notifications will be supplemented by communication to noncore customers directly through SoCalGas Account Executives.

- **b.** Eligibility Criteria: The Noncore "Natural Gas Conservation" notifications will target informing noncore customers of an anticipated stress to the SoCalGas gas system, and ask for voluntary reduction of gas use.
- c. Notification Mechanisms: When system conditions warrant, the SoCalGas System Operator will call a "Natural Gas Conservation" event. The SoCalGas System Operator will then post a "Natural Gas Conservation" notification to Envoy expeditiously and in advance of a potential natural gas curtailment event when feasible.
- d. Customer Notification Process: The "Natural Gas Conservation" notification will be a "Critical Notice" publically accessible through http://envoy.sempra.com. Additionally, all noncore customers with an Envoy account will receive an email and/or text of the notice, depending on how the customer has set up their account settings. SoCalGas Account Executives will also attempt to directly inform noncore customers of the alert.
- **e. Event Window:** SoCalGas anticipates that "Natural Gas Conservation" notifications will primarily be initiated on a "next day" or "day-of" basis. These alerts will request customer voluntary reductions in natural gas use over the course of the entire gas system stressed event.
- f. Incentive Structure: The goal of this noncore customer "Natural Gas Conservation" notification is to stimulate voluntary reductions in usage on declared gas system stressed days. These messages are designed to provide noncore customers with an early signal that the gas system is anticipated to be stressed. The incentive to participate in a voluntary gas conservation response by these customers is to help avoid, minimize or mitigate the risk and magnitude of escalating an event to a natural gas curtailment, which would affect noncore customers before core customers. The notification will provide advance notice to noncore customers to use their best judgement and voluntarily react and/or plan for a ramp down of their operations in preparation for a potential escalation to a gas curtailment event. The alert notifications and noncore customer participation will not include monetary incentives or rewards. The
- **g. Proposed Budget:** No incremental costs are anticipated for this program as currently scoped.
- h. Plan for Launching the Program by December 1: Implementation of Noncore Natural Gas Conservation Alert notifications will commence at the start of December 1, 2016, and will conclude on March 31, 2017.

¹² SoCalGas Rule No. 23, B. Priority of Service.

¹³ Noncore rates are generally lower than core rates. Current rate schedules may be referenced at: https://www.socalgas.com/regulatory/tariffs/tariffs-rates.shtml.

i. Metrics for Success: For this winter, SoCalGas will compare noncore customers' hourly consumption patterns by observing pre-Gas Conservation Alert day, post-Gas Conservation Alert day, and during-Gas Conservation Alert day usages to observe effectiveness and participation rates of noncore customers.

Incorporation of Winter Demand Response Programs Revenue Requirement in Rates

On September 15, 2016, SoCalGas filed Advice No. 5027 requesting approval to establish a WDRMA to record the costs of the above Winter Demand Response Programs. Cost recovery and cost allocation of the WDRMA balance will be addressed in the next General Rate Case and/or Cost Allocation Proceeding.

Protest

Anyone may protest this AL to the Commission. The protest must state the grounds upon which it is based, including such items as financial and service impact, and should be submitted expeditiously. At the direction of Energy Division, SoCalGas respectfully requests that the protest period be shortened. Protests must be made in writing and received by October 3, 2016, which is within six days of the date this Expedited AL was filed with the Commission. There is no restriction on who may file a protest. The address for mailing or delivering a protest to the Commission is:

CPUC Energy Division Attention: Tariff Unit 505 Van Ness Avenue San Francisco, CA 94102

Copies of the protest should also be sent via e-mail to the attention of the Energy Division Tariff Unit (<u>EDTariffUnit@cpuc.ca.gov</u>). A copy of the protest should also be sent via both e-mail <u>and</u> facsimile to the address shown below on the same date it is mailed or delivered to the Commission.

Attn: Sid Newsom Tariff Manager - GT14D6 555 West Fifth Street Los Angeles, CA 90013-1011 Facsimile No. (213) 244-4957

E-mail: snewsom@SempraUtilities.com

Attn: Elizabeth Baires Regulatory Affairs Case Manager 555 West Fifth Street Los Angeles, CA 90013-1011 Facsimile No. (213) 244-4957

E-mail: ebaires@SempraUtilities.com

Effective Date

In accordance with the Energy Division letter, this Expedited AL is designated as Tier 3 pursuant to General Order (GO) 96-B and, as such, requires a Commission resolution to approve. SoCalGas respectfully requests that a Commission resolution on this Expedited AL be issued immediately for implementation of the program no later than December 1, 2016.

Notice

A copy of this AL is being sent to SoCalGas' GO 96-B service list and the Commission's service lists in R.13-09-011, A.14-12-017, A.15-06-020, and A.15-07-014. Address change requests to the GO 96-B should be directed by electronic mail to tariffs@socalgas.com or call 213-244-3387. 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.

Ronald van der Leeden Director, Regulatory Affairs

Attachments

CALIFORNIA PUBLIC UTILITIES COMMISSION

ADVICE LETTER FILING SUMMARY ENERGY UTILITY

MUST BE COMPLE	TED BY UTILITY (A	attach additional pages as needed)
Company name/CPUC Utility No. SOUTHERN CALIFORNIA GAS COMPANY (U 904G)		
Utility type:	Contact Person: Sid Newsom	
☐ ELC	Phone #: (213) 244-2846	
☐ PLC ☐ HEAT ☐ WATER	E-mail: SNewsom@semprautilities.com	
EXPLANATION OF UTILITY TYPE (Date Filed/ Received Stamp by CPUC)		
		(Date Phew Received Stainp by Cr OC)
ELC = Electric GAS = Gas PLC = Pipeline HEAT = Heat WATER = Water		
Advice Letter (AL) #: 5035		
Subject of AL: Expedited Advice Letter Requesting Approval for of the Winter Demand Response Programs		
Subject of AL. Expedited Advice Letter Requesting Approvarior of the writter Demand Response Frograms		
V		
Keywords (choose from CPUC listing): Energy Efficiency		
AL filing type: Monthly Quarterly Annual One-Time Other		
If AL filed in compliance with a Commission order, indicate relevant Decision/Resolution #:		
Does AL replace a withdrawn or rejected AL? If so, identify the prior AL No		
Summarize differences between the AL and the prior withdrawn or rejected AL1: N/A		
Does AL request confidential treatment? If so, provide explanation: No		
Resolution Required? Xes No		Tier Designation: \square 1 \square 2 \boxtimes 3
Requested effective date: <u>After Commission Approval</u> No. of tariff sheets: <u>0</u>		
Estimated system annual revenue effect: (%): N/A		
Estimated system average rate effect (%): N/A		
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: N/A		
Turni benedules directed. 14/11		
Service affected and changes proposed¹: N/A		
Service affected and changes proposed. 14/A		
Pending advice letters that revise the same tariff sheets: N/A		
Tending device retters that revise the same turn sheets. 14/14		
Protests and all other correspondence regarding this AL are due no later than 20 days after the date of this filing, unless otherwise authorized by the Commission, and shall be sent to:		
CPUC, Energy Division Southern California Gas Company		
Attention: Tariff Unit	A	Attention: Sid Newsom
505 Van Ness Ave.,		55 West 5th Street, GT14D6
San Francisco, CA 94102		Los Angeles, CA 90013-1011
EDTariffUnit@cpuc.ca.gov		SNewsom@semprautilities.com
	7	Tariffs@socalgas.com

 $^{^{\}rm 1}$ Discuss in AL if more space is needed.