**BEFORE THE PUBLIC UTILITIES COMMISSION**
**OF THE STATE OF CALIFORNIA**

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| Application of Pacific Gas And Electric Company (U 39-E) for Approval of 2008-2020 Air Conditioning Direct Load Control Program | Application No. 07-04-009 (Filed April 6, 2007) |

# REPLY BRIEF OF THE UTILITY REFORM NETWORK CONCERNING PG&E'S AC CYCLING PROGRAM


Nina Suetake, Staff Attorney
**THE UTILITY REFORM NETWORK**
711 Van Ness Avenue, Suite 350
San Francisco, CA 94102
Phone: (415) 929-8876
Fax: (415) 929-1132
Email: nsuetake@turn.org


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## I. Introduction

Pursuant to Rule 13.11 of the Rules of Practice and Procedure of the California Public Utilities Commission (Commission or PUC), The Utility Reform Network (TURN) files this reply to Pacific Gas and Electric Company's (PG&E) Opening Brief regarding its Air Conditioning Cycling Program. PG&E has failed to demonstrate that its proposed $367 million AC Cycling program is reasonable or prudent, therefore the Commission should not authorize PG&E's program as it is filed.

## II. PG&E ratepayers do not need an AC cycling program that will cost more than it is worth to them.

PG&E's claim that TURN does not question the need for an AC program in PG&E's service territory is not entirely accurate.[1] While TURN has expressed its general support for AC cycling programs, TURN most decidedly questions the need for an AC cycling program that is *not cost-effective*. PG&E mistakenly equates the need for an AC cycling program to obtaining an AC cycling program at any cost. Ratepayers should not be forced to pay for programs that are too expensive and do not provide adequate benefits to justify the cost. TURN's testimony and opening brief provide specific recommendations that will allow the Commission to create an AC cycling program for PG&E that is cost-effective, thereby avoiding PG&E's mistake. TURN notes that PG&E does not address the cost-effectiveness of its program, or lack thereof, in its opening brief.

## III. PG&E's evidence shows that Programmable Communicating Thermostats will negatively affect PG&E's ability to enroll customers in the program.

PG&E's arguments in favor of Programmable Communicating Thermostats (PCT) actually indicate that customers may respond favorably to a switch-only program.

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[1] PG&E Opening Brief, p. 2.

In its August 31 report, PG&E indicated that 65% of the 8,087 program participants had selected switches over PCTs.[2] In its opening brief, PG&E stated that this response may have been the result of marketing that inadvertently encouraged switch selection over PCTs.[3] This indicates that customers can be swayed by PG&E's marketing and could continue to be encouraged to select switches over PCTs by tailoring the marketing materials. Obviously, if PG&E's program is limited to switches, then customer selection would no longer be an issue.

PG&E's analysis indicates that offering a switch-only program would be preferable to offering a program that offers customers the choice between a switch or PCT. PG&E tested a switch-only solicitation and a PCT-only solicitation to see how they performed in comparison to the standard program, which offers both technologies. PG&E states that the single-technology solicitations it tested had a higher response rate than the standard solicitation.[4] Although PG&E is quick to declare that the PCT-only solicitation produced the highest response rate,[5] PG&E's proposal in this application is to offer both technologies. PG&E's proposed program would therefore presumably result in a lower response rate than if PG&E offered switches alone.

PG&E argues that TURN has not explained how PG&E can obtain its goal of enrolling 27 percent of its air conditioning load (400,000 customers) in the program without offering customers the option of choosing the PCT.[6] PG&E states that Southern California Edison (SCE) has only achieved a 15 percent penetration of its eligible customer population with AC switches even offering a much higher one-time enrollment

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[2] PG&E-7.
[3] PG&E Opening Brief, p. 6.
[4] *Id*
[5] Id.
[6] PG&E Opening Brief, pp. 2-3.

incentive and annual bill credits of up to $200.00.[7] PG&E, however, has not provided any evidence to indicate that SCE would actually enroll more people by offering a PCT, nor provided specific evidence to prove SCE could increase its enrollment up to 27 percent by offering PCTs. This evidence actually supports TURN's contention that PG&E's enrollment goal is unreasonably high. PG&E's aggressive targets practically ensure that it will have to spend more money on incentives to entice more customers to the program. In addition to the risk contingency allowance, PG&E contemplates the need to return to the Commission for even more funds to help reach its enrollment target.[8] Since dual-technology solicitations have a lower response rate than single technology solicitations, the inclusion of PCTs along with the switches is not likely to assist PG&E in meeting its aggressive goals.

## IV. PG&E's claim that the 2006 heat storm demonstrates the need for an AC cycling program does not consider the problem of PCTs and the persistence of demand response.

PG&E states that the 2006 heat storm unquestionably demonstrated the need for an AC cycling program in PG&E's service territory. While it may be true that PG&E may need an AC cycling program to deal with such events, evidence provided by PG&E indicates that a PCT-heavy program will not provide the load relief necessary to deal with heat storm events. As explained in TURN's opening brief, using a thermal offset strategy with PCTs will deliver only short-term load reductions and produces most of the load reduction during the first hour of an event.[9] The 2006 heat storm, however, lasted two weeks (from July 15th through July 28th). While PCT's may be useful for short events such as brief transmission constraints or local distribution problems, PCTs will not be able to provide consistent load reduction to assist with lengthy heat storm events.

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[7] PG&E Opening Brief, p. 7.

[8] PG&E-5, p. 7-9, lines 16-19; *see also* TURN Opening Brief, p. 20.

[9] TURN Opening Brief, pp. 11-12; *see also* TURN DR 3-8, AB 907 Program Summaries, PG&E, November 2006.

**V. PG&E has failed to provide adequate assurance the California Independent System Operator (CAISO) will rely on the presumed load reductions from this program for its procurement practices.**

PG&E's program is primarily an emergency dispatch program, and the CAISO has indicated that such programs are not sufficiently "available" to be considered a viable resource adequacy product.[10] This means that the CAISO would continue to procure backstop resources for the load, and PG&E customers will have to pay for this program (while obtaining no benefits) as well for the electricity procured by the CAISO.

PG&E only addressed this issue by stating that this program qualifies for resource adequacy credit under the Commission's existing rules and that it could be later revised to reflect changes to resource adequacy rules or the evolution of the CAISO's Market Redesign and Technical Upgrade (MRTU).[11] While the Commission may "count" the program's proposed load reductions for PG&E's resource adequacy targets, this designation means very little to ratepayers if the CAISO continues to procure backstop resources for the load.

Although PG&E states that it can revise its program to address changes to resource adequacy rules or the MRTU, PG&E blithely ignores the fact that such modifications would substantially alter the nature of the program that customers signed up for. Changes to the program could result in different customer enrollment rates and may require significant alterations to PG&E's marketing materials. It is also possible that PG&E may need to provide greater incentives to customers if the anticipated number of events increases due to these modifications. All these changes will impact the cost-effectiveness and viability of the program and cannot simply be brushed under the table at this point. It would be much more reasonable for PG&E to wait for the MRTU to be fully developed and the Commission to complete its assessment of the integration of

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[10] TURN Opening Brief, p. 7; *see also* Footnote 26.

[11] PG&E Opening Brief, pp. 12-13.

demand response programs with the CAISO's needs in R. 07-01-041 before moving forward with this program.

## VI. Lack of coordination between PG&E's AMI Program and AC Cycling program will result in a hodgepodge of communications and load control systems.

PG&E argues that potential upgrades to its advanced metering program do not warrant a delay to the AC cycling program.[12] If PG&E selects an AMI technology that can be used to communicate with the PCT or switches, PG&E will operate two different communications systems. While PG&E argues that it would not *own* redundant systems since it is contracting out the paging services to another company, it is clear that PG&E ratepayers would be *paying* for two different systems. Despite the fact that PG&E states that the cost to maintain the paging system is minimal, it does not change the fact that such redundancy may have been avoided had PG&E simply waited to better integrate this AC cycling program with its AMI program. PG&E's vision for the future apparently entails a hodgepodge of disparate devices, communications systems, and programs which all must be separately maintained and operated. It would be more reasonable to coordinate both the AMI and AC cycling programs so that PG&E ratepayers can obtain maximum benefits from two programs that are well-coordinated and integrated.

## VII. PG&E makes several assertions that are not supported by the record.

PG&E asserts that small commercial customers may provide load reductions that significantly exceed those of residential customers;[13] however, the record does not support this statement. PG&E also cites a portion of its testimony that merely states the load from commercial customers with some cooling load.[14] PG&E's own analysis shows that C&I customers less than 20 kW (assumed by PG&E to be 85% of the C&I customer enrolled) would provide load relief that is equal to or less than that provided by

[12] PG&E Opening Brief, pp. 9-10.
[13] PG&E Opening Brief, p. 11.
[14] PG&E Opening Brief, p. 11 (citing PG&E-1, pp. 4-3 through 4-4).

residential customers.[15] PG&E's data also shows an almost total lack of interest on the part of small commercial customers to enroll in the program,[16] and, if commercial customers are not enrolled, clearly they will not be able to provide load reductions that will significantly exceed those of residential customers.

PG&E also states that it is likely that allowing AC Program participants to also join the CPP program will result in additional DR beyond that provided from the AC program.[17] Such a statement, if true, would have consequences for the cost-effectiveness of this program. PG&E, however, has no evidence to support such an assertion and it is merely hoping that such a result occurs.

PG&E also asserts that, as of October 26, 2007, 55 percent of the 27,817 customers enrolled in PG&E's 2007 AC program selected a PCT.[18] This information was not provided as part of the record of this proceeding and parties have not had an opportunity to assess the statement. There is no information to indicate whether PG&E changed its marketing practices or literature. Given that PG&E has already shown that marketing can have an effect on the technology that customers choose, such information is vital to the overall assessment of this program.

## VIII. Conclusion

PG&E has proposed program is not cost-effective and fraught with uncertainties that should be resolved before going forward. PG&E ratepayers should not be forced to pay for this $367 million program. For the reasons stated above and in TURN's opening brief, TURN respectfully requests that the Commission deny PG&E's request as filed and recommends the following modifications to the program:

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[15] PG&E Direct Testimony, Table 4-3, p. 4-13.

[16] PG&E-7, p. 8. Although PG&E mailed marketing brochures to 20,000 commercial customers, it only enrolled 78 customers.

[17] PG&E Opening Brief, p. 11.

[18] PG&E Opening Brief, p. 6.

1) The Commission should delay PG&E's AC Cycling program until it can be adequately coordinated with the efforts in R.07-01-041 and R.05-12-013 as well as PG&E's own attempts to modify its SmartMeter program.

2) The Commission should direct PG&E to address the issue of the lack of persistence in the load impact of PCTs.

3) The Commission should direct PG&E to provide supplemental testimony describing how the User Guide for MRTU Release 1 will affect PG&E's AC Cycling program design.

4) The Commission should direct PG&E to meet with the Energy Division and the CAISO to specifically discuss how the program is or can be structured to meet the CAISO's needs. Such a discussion may reduce confusion over this program and would help ensure that the program does indeed address CAISO's concerns.

5) The Commission should modify PG&E's program to include all of the following recommendations so that the program will actually result in a positive benefit for PG&E's ratepayers:
    - Use the appropriate discount rate for the cost-effectiveness analysis.
    - Limit the program to only residential customers;
    - Exclude PCTs and limit the direct load control equipment to only air conditioner cycling Switches;
    - Prohibit customers from participating simultaneously in both critical peak price (CPP) tariffs and direct load control,
    - Reject PG&E's proposed risk contingency allowance;
    - Redesign the program tariff to allow for direct load control during weekends and not just weekdays as originally proposed by PG&E.
    - Either delay the program entirely or ramp up the installation schedule more slowly than proposed so that the program more closely coincides with PG&E's actual need for new capacity resources.

6) In the alternative, if the Commission rejects TURN's recommendations to modify PG&E's program, TURN recommends that the Commission require PG&E to issue a new RFP for a direct load control program and design a program that is actually cost-effective.

November 9, 2007

Respectfully submitted,

/S/

Nina Suetake, Staff Attorney

THE UTILITY REFORM NETWORK
711 Van Ness Avenue, Suite 350
San Francisco, CA 94102
Phone: (415) 929-8876 x 308
Fax: (415) 929-1132
Email: nsuetake@turn.org

CERTIFICATE OF SERVICE

I, Larry Wong, certify under penalty of perjury under the laws of the State of California that the following is true and correct:

On November 9, 2007 I served the attached:

**REPLY BRIEF OF THE UTILITY REFORM NETWORK CONCERNING PG&E'S AC CYCLING PROGRAM**

on all eligible parties on the attached lists to **A.07-04-009**, by sending said document by electronic mail to each of the parties via electronic mail, as reflected on the attached Service List.

Executed this November 9, 2007, at San Francisco, California.

/S/

Larry Wong

**Service List for A.07-04-009**

nsuetake@turn.org
lms@cpuc.ca.gov
magq@pge.com
pxo2@pge.com
rboland@e-radionic.com
jwwd@pge.com
LST3@pge.com
LATc@pge.com
SRH1@pge.com
pthompson@summitblue.com
mrw@mrwassoc.com
jeff@jbsenergy.com
Karen.Herter@h-m-g.com
agc@cpuc.ca.gov
dnl@cpuc.ca.gov
kjb@cpuc.ca.gov
skg@cpuc.ca.gov
shn@cpuc.ca.gov
dhungerf@energy.state.ca.us
msherida@energy.state.ca.us