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

Order Instituting Rulemaking to Enhance the Role of Demand Response in Meeting the State's Resource Planning Needs and Operational Requirements.

Rulemaking 13-09-011 (Filed November 14, 2013)

### JOINT RESPONSE OF SOUTHERN CALIFORNIA GAS COMPANY (U904G) AND SAN DIEGO GAS & ELECTRIC COMPANY (U902M) TO ADMINISTRATIVE LAW JUDGE'S RULING REGARDING POST-2014 ENERGY EFFICIENCY GOALS

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Dated: December 20, 2013

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Southern California Gas Company ("SoCalGas") and San Diego Gas & Electric

Company ("SDG&E") (collectively referred to as the "Joint Utilities") respectfully submit the

following comments to Administrative Law Judge's Ruling Regarding Post-2014 Energy

Efficiency Goals ("Ruling"), dated November 26, 2013. The Ruling requests parties to respond

to the following questions:

A. Does the 2013 Potential and Goals Study present a reasonable and appropriate assessment of the energy efficiency potential available for program administrators to capture? What changes, if any, should be made to improve its accuracy?

B. Is it appropriate to apply all components of energy efficiency market potential identified in the 2013 Potential and Goals Study to administrator program goals? If not, what portion should be omitted and why?

C. Are Staff's recommendations appropriate for the application of the 2013 Potential and Goals Study to post-2014 goals?

### I. RESPONSES TO QUESTIONS

The Joint Utilities support the process that the California Public Utilities Commission

("Commission") has undertaken to evaluate the cost-effective potential of energy efficiency

programs in California. The Commission staff and their consultant, Navigant Consulting, Inc.

("Navigant"), should be commended for the enormous amount of work that went into the

preparation of the draft 2013 California Energy Efficiency Potential and Goals Study ("Draft

Study"), released November 26, 2013. The Joint Utilities have been engaged in the process to

date to develop the Draft Study, but due to certain fundamental inconsistencies noted herein, in its present condition it is not suited for use to establish goals for the 2015 program year. The estimate of market potential is a cornerstone of California's energy efficiency policy, and as such, it is critically important that it be reasonable and appropriately vetted in order to meaningfully inform energy efficiency programs. Specifically, the Joint Utilities are concerned with the lack of congruence between some of the modeling inputs used in the Draft Study and the policy objectives and program rules adopted by the Commission. If unaddressed, this disconnect will result in a substantial increase in the 2015 goals relative to 2013-2014 which will have a significant impact on the planning schedule and budget request. These concerns are elaborated upon in response to the questions posed by the Ruling below.

# **A.** Does the 2013 Potential and Goals Study present a reasonable and appropriate assessment of the energy efficiency potential available for program administrators to capture? What changes, if any, should be made to improve its accuracy?

The Draft Study is a draft; it has not been finalized or approved and is still subject to revision and input. The Joint Utilities and other parties have provided input and/or asked questions that have not yet been addressed. Until all comments by parties have been addressed, including the concerns over the lack of congruence between the Draft Study and energy efficiency programs discussed herein, the utilization of the Draft Study to inform and guide policy at this point is premature.

The Joint Utilities have concerns with some of the modeling inputs utilized in the Draft Study. For example:

• <u>Emerging Technologies</u>: The Joint Utilities have some concerns that the inputs used to model emerging technologies in the Draft Study are overly aggressive. There is a high level of uncertainty associated with the impact of emerging technologies. The Draft Study attempts to adjust for that risk, however, the Joint Utilities do not believe that the risk adjustment is adequate it does not include future building codes, TRC threshold levels, incentive funding, equipment cost changes, environmental costs market branding, and level of competition which may emerge for a particular products.

- <u>Tankless Water Heaters</u>: SoCalGas believes that the Draft Study overestimates the potential from tankless water heaters and their accelerated growth rates over time. Tankless water heaters can yield significant energy savings beyond traditional storage water heaters; however, the equipment and installation costs are uneconomical for most households. In addition to the upfront unit cost of approximately \$1,000, tankless water heaters also require additional installation costs for electrical outlets, venting, and upgraded gas piping. Due to the current low cost of natural gas, the payback period on such upgrade will exceed the life of the water heater. Despite aggressive marketing by SoCalGas, the number of tankless water heaters rebated in 2012 remained low at 4,000 units and is projected to be comparable in 2013. The Draft Study, however, presents an overly optimistic forecast of 54,000 units in 2012 which increases rapidly to 91,000 units in 2020. The Draft Study should be revised to better calibrate to market conditions.
- <u>Price Signal</u>: The Joint Utilities would like the potential model to include an additional parameter to differentiate the consumer's value for gas versus electricity, either in measureable terms such price elasticity or perceived value between the two commodities. Various studies have reported differing values for gas and electric, showing gas demand to be more inelastic (less likely to change), possibly because space and water heating are perceived as a necessity, whereas turning off some lights can be optional. Furthermore, in the past few years, American consumers are enjoying an abundant supply of natural gas at historic low and stable prices. Therefore, price signals for gas conservation, either for behavior modification or replacement with highly efficient appliances is not top of mind for natural gas consumers as they are willing to modify behavior to save money on goods with the most bang for the buck. Due to the low cost of natural gas, consumers are reluctant to

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pay upfront for the most efficient gas appliances for a small reduction in their gas bills. The Draft Study should take this into account.

• <u>Codes & Standards</u>: SoCalGas has expressed concern with the modeling inputs and policy used in the formulation of the Codes & Standards ("C&S") estimates. Currently, the Draft Study includes interactive effectives from electric measures that renders an overall negative C&S therm goal for SoCalGas in 2015. SoCalGas is a gas-only utility and should not have an artificially lower therm savings potential and reduced cost-effectiveness due to the actions of Southern California Edison or other electric providers. Each utility should be accredited the energy efficiency costs and benefits associated with the actions of their own programs. Such logic is the current Commission policy. In the 2013-2014 program period and previous program cycles, the Commission has relied upon C&S inputs for SoCalGas planning and reporting without interactive effects. The Draft Study should be modified to establish alignment with Commission policy.

# **B.** Is it appropriate to apply all components of energy efficiency market potential identified in the 2013 Potential and Goals Study to administrator program goals? If not, what portion should be omitted and why?

The Joint Utilities believe that the Draft Study is not appropriate for use to establish energy efficiency goals in 2015 because it lacks consistency and coordination with the energy efficiency proceeding.<sup>1</sup> It is principally important that the inputs used to establish the goals be synchronized with the *ex ante* values that IOUs use to measure actual progression towards the adopted goals and report program results. Unfortunately, the current form of the Draft Study does not meet this objective, and instead continues the apples-to-oranges approach to energy efficiency that the Commission has sought to overcome. The Commission in D.09-09-047 (at pages 31 and 32) acknowledges the necessity and importance of the alignment of the potential savings and updated assumptions and has updated goals to reflect this alignment:

<sup>&</sup>lt;sup>1</sup> Rulemaking 09-11-014.

"In D.09-05-037, we acknowledged certain remaining inconsistencies between the savings assumptions underlying our goals and those applied in measuring utility accomplishments against our adopted goals. The DEER, which holds the collective savings assumptions applied in planning and updated through evaluation, has been continually updated as required by the Commission to ensure the most accurate estimates of actual load impacts resulting from ratepayer investments in energy efficiency. While, D.09-05-037 addressed the most consequential of these discrepancies, by adjusting the therm components of PG&E and SDG&E's goals to account for interactive effects measured when evaluating utility performance against the adopted goals, the decision also acknowledged that there "may also be a need in this proceeding to further consider changes to our existing goals to better match the most recent savings parameters of the DEER...

Staff's analysis found that a cumulative goals decrement of 20% and 15% to KWh and KW respectively would be necessary in order to correct all program years between 2004 and 2012 for the discrepancy between existing goals assumptions and 2008 DEER. The analysis found that a goals decrement of 5% and 1% respectively would be necessary in order to correct the annual goals adopted for 2009, 2010, and 2011."

The Joint Utilities have identified the following areas impacted due to the misalignment among the Draft Study and the policy objectives and program requirements of energy efficiency programs.

<u>Ex Ante Values</u>: The modeling inputs utilized in the Draft Study are not aligned with the values that the Commission requires the IOUs to use to report activity. Specifically, the Draft Study relies upon a dated version of the Database for Energy Efficient Resources (DEER), not the latest version of DEER, which in conjunction with the newly adopted Title 24, is set to take effect on July 1, 2014. The IOU programs are required to implement these changes and modify *ex ante* values; however, the potential fails to account for these downward adjustments. Similarly, in the Commission's process to set 2013-2014 *ex ante* values, the Commission Staff issued workpaper dispositions which generally adopted values lower than previously approved workpapers. The Draft Study should account for the latest *ex ante* information so that there is a level of consistency between the potential and goals and the IOU's ability to achieve those goals.

- <u>Industry Standard Practice ("ISP")</u>: The Draft Study includes potential for measures, particularly in the industrial sector that the Commission Staff have deemed to be ISP. As such they have been prohibited from being included in approved customer projects. This policy has been implemented in the Custom Measure Project Archive ("CMPA") process which has limited the offering of IOU measures for these types of opportunities. For example, the Draft Study identifies significant potential in the oil extraction and production sectors; however, the Commission Staff has deemed a lot of the measures in this sector to be ISP, including select pump-off controllers, certain variable frequency drives applications, and some steam generators. This disconnect also applies to injection molding machines and server virtualization opportunities.
- <u>Operation & Maintenance Measures ("O&M")</u>: The Draft Study includes significant achievable potential for O&M measures, particularly in the industrial sector. The Joint Utilities agree with the model output that there are substantial energy savings in this segment that should be addressed; however, IOU programs are largely discouraged from pursuing such opportunities. When the Joint Utilities have requested to incent customers on such activities, they have been disallowed by Commission Staff through the CMPA process. The Commission should offer consistent guidance in this area. The Joint Utilities feel that it is appropriate to pursue these cost-effective energy savings opportunities with customers; however, the projects need to be approved by Commission Staff. If not, then the Draft Study should be modified to reflect only potential that is allowed by Commission Staff to actually be achievable by IOU programs.
- <u>Compact Fluorescent Lamps ("CFLs")</u>: The Draft Study demonstrates that costeffective potential remains for CFLs; however as a policy, IOU programs are limited in offering general purpose CFLs as a measure in programs. Specifically, for SDG&E there is 34.5 GWh potential in 2015 for basic CFLs in the Draft Study. This CFL potential should be removed.

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Behavior Programs: SoCalGas recommends its therms savings estimate from the ٠ potential model for behavior programs be excluded from the goal for 2015. SoCalGas is behind the electric utilities in the deployment of Advanced Meters and has just begun the installation late 2012 with expected completion by 2017. Due to the direct linkage between behavioral conservation expenditures and the AMI risksharing mechanism for the same period, it is inappropriate for SoCalGas to fund behavioral program efforts using gas surcharge energy efficiency funds until deployment has completed. As noted in SoCalGas testimony for its 2013-2014 EE program cycle Application, the cost-effectiveness of SoCalGas' AMI efforts is contingent upon behavioral conservation benefits that are expected to flow from operation of the AMI system in conjunction with associated conservation marketing and information efforts. SoCalGas is required to report on conservation benefits attributable to AMI deployment (D.10-04-027 at COL 7, OP 4, OP 5) and the conservation benefits achieved that are directly linked to the risk sharing mechanism enacted by the AMI Decision (D.10-04-027 at OP 2, OP 5). To claim therms savings for behavior for both energy efficiency program and AMI would run counter to the risk-sharing mechanism approved in D.10-04-027 for SoCalGas' AMI system.

The above lack of congruence creates a substantial disconnect that should be addressed by the Commission prior to the adoption of the goals. The aforementioned items represent areas of potential that are unachievable as IOU programs are not allowed to capture those energy savings. As a result, the Joint Utilities propose that the Draft Study be modified two-fold; first to utilize the latest versions of DEER (DEER 2014) and non-DEER workpapers, and second, to remove the areas of unachievable potential from the goals.

The Ruling includes a table of the proposed IOU goals for 2013 and beyond, giving the appearance that the goals are either flat or have slightly decreased from 2013-2014 into 2015. This is not the case and parties should note this inaccuracy. The proposed goals, when compared to the actual goals adopted by the Commission for 2013-2014, increase substantially. In fact the

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goals increase as much as 21% for SoCalGas and 42% for SDG&E (see table below). Such an increase to CPUC IOU goals is not warranted given the unachievable potential discussed above, will have a substantial effect on the 2015 planning process, potentially requiring significant adjustments to program design and meaningful budget increases. At the December 11 Prehearing Conference,<sup>2</sup> the ALJ noted his expectation that the IOUs would offer programs in 2015 that essentially mirrored those in 2013-2014, with no substantive portfolio changes. If the goals increase by more than 20%, such an expectation is most likely not feasible.

Goals	SoCalGas			SDG&E			
	GWh MW		Therms	GWh	MW	Therms	
2013			24.0	162	36	2.2	
2014			22.3	156	33	2.1	
2015			27.0	198	33	3.0	
% Increase over 2014			21%	27%	0%	43%	

\*IOU Program Goals only.

# C. Are Staff's recommendations appropriate for the application of the 2013 Potential and Goals Study to post-2014 goals? If not, why not, and how should they be changed?

As discussed in the responses to questions A and B above, the Joint Utilities have identified areas where the Draft Study is clearly inconsistent with established policy objectives and program rules; and as a result, the Draft Study is simply not appropriate for use as a basis to set 2015 energy efficiency goals. Furthermore, the Draft Study remains a draft and is necessarily incomplete given that there are multiple comments made and questions asked by the Joint Utilities and others throughout the process that have yet to be addressed. Taken as a whole, these reasons require further adjustments and consideration to be made to the Draft Study prior to it being appropriate to use to set energy efficiency goals.

The Joint Utilities understand that the timing required to address the comments provided by parties previously and those contained herein will exceed the timeframe envisioned by the Commission for the IOUs to submit 2015 program plans. In the aforementioned Prehearing

<sup>&</sup>lt;sup>2</sup> In Rulemaking 13-11-005, ALJ Edmister conducted a Prehearing Conference on Phase I issues on December 11, 2013.

Conference, the ALJ expressed the desire for IOUs to submit their 2015 program plans on March 3, 2014. It is critical that this schedule remain in place in order to guarantee finality as soon as possible to allow time for contract extensions and ensure a smooth transition to 2015 that minimizes the need for a ramp up period. Given the importance of adhering to the schedule, the Joint Utilities alternatively propose that the Commission rely upon the currently approved potential and goals study to establish the goals for 2015. This study, Analysis to Update Energy Efficiency Potential, Goals, and Targets for 2013 and Beyond,<sup>3</sup> was prepared by Navigant in 2012 and approved by the Commission to establish goals for the 2013-2014 program period. <sup>4</sup> The Draft Study contains a recommended goal for 2015 (see table below), which was developed on a consistent basis with the goals adopted for the 2013-2014 program period. Its use would allow the Commission to meet its aggressive schedule and develop consistency between 2015 and the 2013-2014 program period. Furthermore, it would allow Commission Staff and Navigant additional time to ensure sufficient time for meaningful stakeholder input and vetting to address the comments of parties, make modeling adjustments, and finalize the study for use starting at the beginning of the rolling cycle program years in 2016.

Incremental Market Potential	ΙΟυ	2013	2014	2015	2016	2017	2018	2019
Electric Savings (GWh/yr)	PG&E	599	593	599	609	596	583	587
	SCE	660	678	712	728	744	752	743
	SDG&E	162	156	152	143	142	158	153
Peak Savings (MW/yr)	PG&E	114	100	100	101	97	99	100
	SCE	149	144	148	147	146	147	141
	SDG&E	36	33	31	29	28	33	31
Gas Savings Including Interactive Effects (MMMT/yr)	PG&E	21.0	20.3	20.0	21.1	21.0	21.5	22.5
	SCG	24.0	22.3	21.4	21.0	20.9	21.3	21.8
	SDG&E	2.2	2.1	2.2	2.4	2.7	3.1	3.3

\*IOU Program Goals only.

<sup>&</sup>lt;sup>3</sup> Navigant issued its report, Analysis to Update Energy Efficiency Potential, Goals, and Targets for 2013 and Beyond on May 8, 2012. Navigant issued an addendum, Addendum to the Analysis to Update Energy Efficiency Potential, Goals, and Targets for 2013 and Beyond on September 4, 2012.

<sup>&</sup>lt;sup>4</sup> Decision 12-11-015.

#### II. ADDITIONAL CONSIDERATIONS

The California Independent System Operator's ("CAISO") recent release of their Demand Response and Energy Efficiency Roadmap ("Roadmap") shows that locational EE is becoming increasingly important particularly as Southern California is faced with addressing the loss of the San Onofre Nuclear Generating System. The 2011 Potential Study began the exploration of locational energy savings potential and the California Energy Commission is working to increase the locational granularity of EE forecasts and will further that effort for the 2015 IEPR cycle (Roadmap at page 5). The Joint Utilities look forward to the future expansion of the Draft Study to include locational EE potential.

The CAISO's Duck Curve (Roadmap at page 7) shows the significant shift in system peak in the next few years from the traditional mid-afternoon peak to a much later peak between 6pm and 9pm. This shift necessarily changes the cost-effectiveness of measures and will mean a potential change in the mix of portfolio measures. The Draft Study should address this shift as soon as practicable as the shift in system peak will occur in the near future and potentially overlap in the upcoming program filing for 2015. SDG&E's increase in the saturation of solar generation installations makes this a sooner reality than the rest of the state. This also points to the importance of locational EE potential.

### III. CONCLUSION

The Joint Utilities appreciate this opportunity to provide comments on post-2014 energy efficiency goals and are committed to working with the Commission Staff and Navigant to improve the process that determines the potential and goals for energy efficiency in California.

DATED at Los Angeles, California, on this 20th day of December, 2013.

Respectfully submitted,

/s/ Steven D. Patrick

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