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California Energy Commission
1516 Ninth Street
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Dear Commissioners:

DOCKET 08-IEP-1A

DATE OCT 16 2008

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RE: Docket No. 08-IEP-1A; 2008 Integrated Energy Policy Report Update

I. INTRODUCTION

San Diego Gas & Electric Company (SDG&E) and Southern California Gas Company (SoCalGas) hereby respectfully submit their comments to the draft 2008 Integrated Energy Policy Report Update (Draft Report) prepared under the direction of the IEPR Committee of the California Energy Commission (CEC or Commission). SDG&E and SoCalGas participated in the IEPR process and appreciate this additional opportunity to provide further input in finalizing the CEC's 2008 IEPR Update. Accordingly, SDG&E and SoCalGas provide the following comments, clarifications and recommendations for Commission consideration.

II. CHAPTER 1: California's Renewable Energy Future

SDG&E would like to commend the CEC on its commitment to identifying obstacles to reaching the 33% renewables goal and determining how to overcome these obstacles. The Draft Report gives an exhaustive list of various challenges facing the Renewable Portfolio Standard (RPS) program. Our specific comments regarding the recommendations put forth in the Draft Report are outlined below:

Joint Transmission Projects:

The Draft Report recommends identifying and implementing ways to remove barriers to joint publicly owned utility (POU) and investor owned utility (IOU) transmission projects. Specifically, the Draft Report recommends using the 2009 IEPR and 2009 Strategic Transmission Investment Plan processes as forums to identify and evaluate regulatory policy changes that would reduce both legal and market obstacles to joint project development. SDG&E looks forward to actively participating in this forum, and would like to emphasize the following points. First, many of the old joint-use transmission agreements (e.g., the agreement associated with the Southwest Powerlink [SWPL]) have significant problems in the current market, reflecting the need for newer and better-structured agreements. Second, transmission agreements are extremely long-lived. Thus, they must be structured to work in both the current market and be able to evolve as the market changes over the decades. Finally, we expect the California Independent System Operator (CAISO) to maintain a level playing field for transmission and that it will not create special structures for the sole benefit of a few. Special structures can lead to sub-optimum results where not all members' interests are aligned, providing perverse incentives.

As indicated by the Draft Report, the municipal utilities claim that the CAISO tariff does not provide the “same degree of...asset optimization as bilateral contract agreements” and assert that “firm physical rights” are preferred to the CAISO’s use of locational marginal pricing (LMP) and financial transmission rights. (Page 16) SDG&E believes it is important to point out that the overwhelming evidence—both in the United States and in other countries around the world—indicates that “firm physical rights” are inherently inconsistent with “asset optimization”. In order to provide “firm physical rights”, transmission providers must necessarily limit the use of transmission assets in order that the physical right be preserved for a wide-range of uncertain system conditions. In addition, physical rights fail to effectively accommodate the value of grid access under different system conditions; i.e., in some hours it would be more efficient for the physical rights holder to forego its use of the grid in favor of other users. LMP and financial transmission rights provide an efficient mechanism for allocating grid access when not all desired uses of the grid are simultaneously feasible.

Transmission Barriers:

The Draft Report notes stakeholders’ acknowledgment that California’s Renewable Energy Transmission Initiative (RETI) could overlap with “other forums” and encourages “coordination between efforts to avoid duplication.” (Page 15) SDG&E echoes this concern and believes California’s RETI process needs to take into account the initial determinations of the Western Governors’ Association (WGA) Western Renewable Energy Zones (WREZ) initiative regarding the renewable resource development potential in areas of the WECC that are outside of those covered by the California RETI. These areas include Alberta, Canada, Idaho, Montana, Wyoming, Utah, Colorado and New Mexico. Failure to consider this renewable resource development potential could result in the need to repeat California RETI transmission studies if economically attractive potential exists outside of the California RETI study area.

Environmental and Land Use Issues:

The Draft Report notes that parties have stressed the need to “educate the public and local governments on the importance of achieving the state’s renewable and greenhouse gas reduction goals” and observes that “difficult choices...must be made to accomplish those goals.” (Page 18) SDG&E believes that support for these goals and for the difficult decisions that are needed to accomplish these goals, will be easier to obtain if the CAISO’s comment that “existing transmission should be fully used before new transmission expands the environmental footprint” (page 17) is reinforced with data and analysis. To date, there is little in the way of data and analysis that demonstrates the extent to which the transfer capability of the existing WECC grid (a) has historically been used, and (b) is expected to be used in the future considering the anticipated large increase in renewable generating capacity and the associated decrease in the operation of existing fossil-fired generation.

Contracting Issues:

While acknowledging the various obstacles impeding the RPS program, the Draft Report makes the recommendation that the California Public Utilities Commission (CPUC) take control of the procurement process for new renewable resources and conduct its own evaluation of proposals based upon cost criteria, as well as likely project success, locational benefits, and land use and environmental considerations, without the direct participation of the IOUs. It is unclear as to how this recommendation would remove or mitigate the current obstacles facing the RPS program. Moreover, the recommendation fails to identify how the CPUC, with its limited resources, would conduct an RPS procurement process differently, or how the current RPS procurement process fails to address the criteria outlined in the CEC’s recommendation.

This recommendation also seems to imply that the current RPS procurement process is defective. Response to the IOUs' RPS request for offers (RFOs) has been robust and is increasing. IOUs have contracted and continue to contract for the necessary projects to meet their obligations. According to the CPUC, if all capacity under contract approved and currently pending before the CPUC were to come online by 2010, the State would exceed the current RPS target.¹ Moreover, through the RFO process and the use of least cost best-fit evaluation principles, the IOUs are able to achieve procurement goals at the lowest possible cost to customers. As recognized at the July 21, 2008 workshop and in this Draft Report one of the major reasons for delay in the State meeting its 20% RPS goal is the ability to get the renewable projects built and licensed. The CPUC has acknowledged that developers' progress has been extremely slow, resulting in substantial delays in project on-line dates. Additionally, the need for more transmission and the issues surrounding getting the necessary lines licensed and built in a timely manner continues to hinder renewable development. To the extent that there is concern over the extent to which these factors are properly evaluated in the procurement process, the solution is not to move renewable solicitations to the CPUC where the same problems would exist, but to consider whether the existing procurement process can be improved in a way that minimizes these failures.

SDG&E also questions how this recommendation would be implemented. The CPUC has recently issued a proposed decision finding it to be in the public interest to expedite the final phase out of DWR's remaining involvement in supplying electric power to retail utility customers, and to return full responsibility to the IOUs.² This position is diametrically opposed to the CEC suggestion that the State, through the CPUC, socialize the RPS procurement process.

The Draft Report also calls for greater transparency regarding signed RPS contracts, recommending that the IOUs be required to provide aggregated information on contract prices, project locations, and schedules to assure policy makers that RPS contracts are providing the greatest strategic and economic value to the State. In addition, the Draft Report recommends that the CPUC make public the aggregate amount of above market funds being allocated to RPS contracts. Public information regarding signed RPS contracts is currently available on the CPUC website, as the IOUs are required to file RPS Compliance filings twice a year.³ To the extent the CEC is not getting the information it needs, SDG&E repeats its invitation to CEC staff to participate in our Procurement Review Group (PRG). The PRG is an information sharing process, and it would be very helpful to get CEC staff input and perspective. Participation in the PRG process would provide the CEC the requisite information sought through these recommendations and a front line view of the IOUs' RPS procurement process.

The Draft Report also recommends that the CEC and the CPUC should work collaboratively to develop a pilot program to provide feed-in tariffs (FITs) for renewable projects larger than 20 MW, based on the results in the collaborative evaluation and options report on feed-in tariffs that will be completed by the end of 2008. SDG&E supports the use of feed-in tariffs for small renewables that are unable to compete, due to their limited size and scale, in utility competitive solicitations. SDG&E also believes that the 1.5MW project cap established in AB1969 appropriately identifies those renewable providers that are typically too small to compete effectively in utility solicitations for renewable energy. The competitive RPS program for renewable systems greater than 1.5MW can best assure bundled customers pay competitive prices for renewable power, and no eligible renewable provider has indicated

¹ CPUC Presentation entitled, *Status of California's Renewable Portfolio Standard*, June 30 CEC Workshop on Feed-in Tariffs. http://www.energy.ca.gov/portfolio/documents/2008-06-30_workshop/Status_of_California_RPS_CPUC.pdf

² Proposed Decision of ALJ Pulsifer, Decision Authorizing Measures to Facilitate Removal of Department of Water Resources From the Role of Supplying Electric Power (October 2008)

³ See 2008 RPS Compliance Reports available at <http://www.cpuc.ca.gov/PUC/energy/electric/RenewableEnergy/compliance.htm>

difficulty participating in SDG&E's renewable solicitations. Though FITs have been touted as a tool that would enable the IOUs to achieve 20% renewables by 2010 and higher renewable goals in the future, it should be noted that FITs are a procurement and contracting tool. FITs will not overcome the acknowledged major barriers to renewable development in California, which are transmission, siting, and permitting.

Moreover, FITs ignore locational costs (congestion, transmission, integration, firming costs) and as such, unless properly limited, would not result in an efficient mix of resources. Additionally, unless required for all utilities including POUs, the most optimal generation locations might be ignored. Absent a way of socializing costs, FITs would impose greater costs on utilities in locations most conducive to small renewable installations, while others avoid these costs, even though the beneficiary is the entire state.

Before even considering whether to expand FITs for project sizes above 1.5MW for smaller utilities like SDG&E, California needs to gain experience with making FITs work for smaller renewable projects, and to resolve the numerous resource planning complications of smaller utilities.

RPS Integration Issues and Price Impacts:

The CEC has initiated an important conversation regarding system needs, price impact, and other important considerations in moving towards a 33% renewables goal. SDG&E asks the CEC to give special attention to the concerns voiced by the CAISO during the August 21 IEPR workshop on the Impacts of Higher Levels of Renewables on the Electricity system. As the CAISO pointed out during the workshop, moving to higher levels of renewable power may involve the need for a substantially different grid and resources mix than we have today. These changes will need to be integrated with renewables development and will take time to develop. The cost of these required changes needs to be considered in the study of increased levels of renewable supply. The studies reviewed at this workshop either ignored or had only a limited focus on operating issues. The CEC Intermittency Analysis Project (IAP) study is a start, but much more needs to be done. The CAISO is still completing work on the operational impacts of 20% renewables, and analysis of 33% is scheduled for later this year. It is critical that the CEC incorporate findings from this work in any conclusions it may draw.

As discussed above, numerous obstacles must be overcome before a 33 % Renewable Portfolio Standard is achievable without excess cost to ratepayers or threats to reliability. As a result, the following measures would have to be adopted in conjunction with a 33% RPS to ensure that such a mandate would be fair, achievable and affordable:

- The requirement should apply equally to all load serving entities (LSEs), including POUs;
- Program costs (including any added cost for transmission, firming and integration) should not be subjected to the existing AB1X cost cap;
- Renewable energy credits (RECs) should be permitted from both within and outside the State;
- A ratepayer cost protection mechanism that considers all relevant costs and benefits in the bid evaluation process, and ensures renewable procurement is affordable, should be implemented by the CPUC;
- The existing flexible compliance provisions and permissible excuse for lack of transmission should be maintained; and

- System reliability should be protected by requiring the CPUC, CEC and CAISO to study reliability issues and needs, and to adopt a mitigation plan (including the authority to suspend any yearly procurement requirement) if reliability is jeopardized.

SDG&E highly recommends that the CEC integrate its work with the on-going CPUC staff study, and the planned CAISO study, examining the barriers and implementation issues associated with achieving a 33% renewables energy mix. These studies, involving the participation of the IOUs, CAISO and other stakeholders, will examine the costs of and obstacles to reaching higher renewable levels and determine how to best solve these issues. It would be a waste of State resources for the CEC to perform its own duplicative study when they could contribute to a broader based analysis.

The CAISO has stressed the need for further examination of “energy storage technologies.” (Pages 21, 26, 36) SDG&E believes it is important to consider the extent to which existing energy storage capability within California can be used to address integration issues that may arise with large increases in intermittent generation. Existing energy storage capability includes the large Castaic and Helms pump/storage/generation facilities as well as the California utilities’ hydroelectric storage/generation facilities in the Sierra Nevada mountains. In addition, the hydroelectric storage/generation facilities in the Pacific Northwest (both in the United States and in Canada) offer significant amounts of potential energy storage capability that could be used to modulate the hour-to-hour ramping requirements imposed by large amounts of intermittent generation.

Gas price risk:

The Draft Report indicates that the Integrated Energy Policy Report Committee believes that the “planning process” is a better way to deal with gas price risk than it is to use adjusted discount rates. (Pages 6, 57) SDG&E and SoCalGas agree but would caution against the use of risk analyses which assume long-term gas price trajectories without any consideration of how such prices affect other aspects of the economy. As has been demonstrated many times, high prices of critical fuel-stocks (such as oil and natural gas) have strong effects on supply and demand which, in turn, significantly temper the capacity to maintain such high prices for extended time periods. This feedback effect needs to be accounted for in gas price risk analyses.

III. CHAPTER 2: Energy Efficiency and Demand Forecasting

SDG&E believes the first three recommendations at the end of Chapter 2 correctly task the CEC staff and other stakeholders to work together to solve problems concerning quantifying energy efficiency savings, incorporating them into the demand forecast and investigating and evaluating alternative forecasting methodologies to use for varying forecasting purposes. SDG&E forecasters, energy efficiency program designers, and resource planners look forward to participating in such a working group, but caution that it will be difficult to accomplish such a daunting task in the time allotted for workshops in the current 2009 IEPR schedule.

IV. CHAPTER 3: Electric Procurement Practices and Resource Planning Activities

SDG&E is generally in agreement with the Long Term Procurement Planning (LTPP) recommendations. The IOUs, CPUC and CEC staff and other interested parties have been working together in a collaborative effort for many months on designing the next long term plan filings. To date, tentative agreements have been reached on standardized forms that can be used in both the LTPP proceeding and in the CEC’s IEPR. In addition, the parties have agreed on many common planning assumptions or methodologies that can be used to allow for better comparisons and State level

aggregations and to perform a 20 year analysis so that the longer term implications of the decisions that will be made in the next planning cycle can be determined.

As the Draft Report indicates, SDG&E believes that “uncertainties associated with market conditions, regulation, and technology severely limit the value of analysis beyond 10 years.” (Page 58) Nevertheless, SDG&E also believes that planning horizons need to encompass time periods well beyond 10 years. Because much electric infrastructure has economic lives in the 25 to 60 year range (some even longer), longer-term planning assumptions have to be made and analysis conducted. It would be unfair to consumers to value new infrastructure investments only on the benefits they confer during a 10-year planning horizon when it is well known that such investments will confer benefits for many more years into the future.

SDG&E would recommend that the CEC staff continue to spend time in the working groups being organized by the CPUC so that the CEC’s concerns can be addressed and integrated as part of the on going all party process. This would be more constructive and maximize the use of the CEC and utility resources instead of a duplicative process to analyze the LTPP plans via the 2009 IEPR.

SDG&E is not in agreement with the recommendations in this chapter regarding procurement and siting. Our objections to these recommendations are the same as those expressed in response to a similar recommendation in Chapter 1. SDG&E strongly recommends against turning the RFO process into a CEQA or plant licensing process. This will just serve to slow down and create more costs in a process that is already long and costly enough for both IOU customers and developers. Instead, SDG&E suggests that the CEC actively participate in the on-going LTPP process, which will address issues surrounding the RFO process.

V. CHAPTER 5: Evaluation of the Self-Generation Incentive Program

SDG&E and SoCalGas offer the following comments on Chapter 5 regarding (1) TIAX’s approach for assessing the cost benefits of the Self Generation Incentive Program (SGIP); (2) which technologies should be eligible for SGIP going forward; and (3) the CEC’s recommendations related to eliminating non-by-passable and standby charges. SDG&E and SoCalGas also offer comments on the value of utility-owned combined heat and power (CHP) assets.

TIAX Cost/Benefit Analysis Approach and Method

Chapter 5 offers a high level overview of TIAX’s cost benefit approach. SDG&E and SoCalGas discussed TIAX’s approach extensively in prior comments filed regarding the CEC’s August 18, 2008 workshop, but cannot identify what changes have been made by TIAX since the workshop since the draft consultant report has not yet been made available to the public. Table 5 would indicate that many of the benefits may be double counted (e.g. economic impacts and indirect economic benefits and other may be non-existent (e.g., gas price moderation), while some costs seem to be missing (e.g., capital costs from a societal perspective).

Macroeconomic Benefits of Self Generation

Chapter 5 indicates that “Self-Generation Incentive Program-funded projects have resulted in greater economic activity within California, with \$1.689 billion value added to the state.” (Page 95) With the total statewide SGIP amount of 263.1 MW, this implies \$6.4 million of increased economic activity in California per MW. An impact of this magnitude is likely the result of not considering offsetting impact of (1) reduced spending on conventional generation; and (2) reduced utility customer spending due to higher rates. If these factors have been omitted, the analysis is faulty.

IOU ownership of distributed generation technologies

SDG&E and SoCalGas believe it also makes sense for IOUs to be able invest in efforts to further a sustainable energy future, and would like to be able to pursue these options in a manner that would not interfere with competitive energy markets where appropriate and cost effective and in line with utility or customer operations. Utility ownership of distributed generation (DG) at customers' facilities will increase penetration of DG and will allow for more efficient and cost-effective DG to be installed.

Customers are interested in utility ownership of CHP at their facilities since they: (1) lack upfront capital and SGIP incentives for engine and micro-turbine CHP; (2) do not have interested third party providers; and/or (3) do not have the knowledge or comfort in operating and maintaining CHP. SEU can fill these customer needs by owning, operating and maintaining CHP at customer facilities. It would be helpful if the CEC would endorse utility ownership of DG where appropriate.

SGIP Moving Forward – Eligible Technologies

The Report lists a number of recommendations for eligible SGIP technologies going forward. SDG&E and SoCalGas offer the following comments:

1. Overall efficiency. SDG&E and SoCalGas agree with the IEPR's recommendation (at page 96) that SGIP eligibility should be based on overall efficiency and system performance regardless of fuel type. However, SoCalGas and SDG&E would not limit this to renewable fuels. If a natural gas fired technology is cost effective, efficient, and meets all applicable air pollution control district regulations, it should be eligible.

2. Alternative and Renewable Fuels.

SDG&E and SoCalGas strongly agree with the IEPR's recommendation that the "CPUC should consider re-instituting formerly eligible engine and turbine technologies that operate on landfill gas, digester gas from dairy waste or wastewater treatment processes, or biodiesel." (At pg. 96). SDG&E and SoCalGas will continue to work with the CPUC, CEC, and Legislature to get these technologies reinstated in SGIP, and are very encouraged by, and supportive of, the CPUC's unanimously adopted legislative policy⁴ to identify, as a priority for 2008, new SGIP legislation to expand the suite of eligible technologies. If successful, this policy would lead to amending Section 379.6 of the Public Utilities Code to delete the requirement that SGIP payments only be awarded to projects using wind or fuel cell technologies by 2008 and return the decision of which technologies are eligible back to the CPUC.

SDG&E and SoCalGas believe it makes sense for micro-turbines, gas turbines, and internal combustion engines to be re-instated as eligible technologies if they provide environmental benefits and are cost effective. SDG&E and SoCalGas support efficient CHP projects, especially those that use renewable fuel. Reinstating these technologies to the portfolio of eligible SGIP technologies will provide more options for customers with a wide range of needs, and will help further transformations in the distributed generation market.

⁴ January 10, 2008 Public Agenda 3206 page 16 approved No. 5: MODIFY SELF GENERATION INCENTIVE PROGRAM TO ALLOW THE CPUC TO DETERMINE ELIGIBLE TECHNOLOGIES.

SDG&E and SoCalGas note that data supporting this proposition was published last month by Itron Inc. in its *CPUC Self-Generation Incentive Program Seventh Year Impact Evaluation Report* (Itron Report)⁵.

Based on these data, SDG&E and SoCalGas believe CHP systems may be the first technologies to become widely implemented at some point without subsidies. To encourage these technologies in an “all of the above” strategy, again, these should be re-instated as eligible for SGIP incentives. SDG&E and SoCalGas are mindful that these technologies have emissions; however, to the extent that these technologies are efficient, cost effective, and meet all appropriate emission standards, SDG&E and SoCalGas believe they should be broadly supported and SGIP eligible.

Self-Generation and Energy Storage:

The IEPR update states that “[t]he CPUC should consider providing self-generation incentives for energy storage” (see page 96). SDG&E and SoCalGas support this recommendation with one qualification, and that is that energy storage technology should be eligible for SGIP incentives if and only if it is coupled with a then-currently eligible technology like fuel cells or wind. Stand alone energy storage systems should not be eligible. In part, the issue is that some battery storage vendors foresee marketing to customers who aim to engage in electric arbitrage with energy storage systems. SDG&E and SoCalGas do not believe that gas ratepayers should fund this sort of arrangement.

SDG&E and SoCalGas note that a SGIP Program Modification Request (PMR) for advanced energy storage systems was submitted, reviewed and endorsed by the SGIP Working Group — subject to the above-stated caveat — and is being considered by the CPUC who is expected to render a decision on this matter in the near future.

Non-bypassable and standby charges:

The IEPR update recommends that the CPUC should “[e]liminate all non-bypassable charges for distributed generation and CHP regardless of interconnection voltage and standby reservation charges.” SDG&E notes that the CEC made this same recommendation in the 2007 IEPR and that SDG&E commented extensively on this matter then. Without re-stating the complete text of its concerns, SDG&E offers a summary of its concerns and the record as follows:

- departing load charges currently paid by CHP and DG customers were established by D.03-04-030;
- SDG&E tariff schedule DL-CRS (Departing Load Cost Responsibility Surcharge) was established to ensure remaining bundled customers were held indifferent with respect to costs that would otherwise be shifted to them as a result of load departing from the system;
- to allow CHP and DG customers to avoid these costs would result in a cost-shift to all other remaining customers contrary to the intent of the CPUC’s decision and State law⁶; and
- SDG&E supports cost based rates (i.e., rates that reflect costs customers incur on the system)

⁵ http://www.sdenery.org/uploads/SGIP_7th_Year_Impact_Evaluation_FinalReport_20081001.pdf

⁶ PUC Code, Section 366.2(d)(1) states that “it is further the intent of the legislature to prevent any cost shifting of recoverable costs between customers.”

As stated previously, SDG&E and SoCalGas are strong proponents of cost-effective and efficient DG and CHP. While any special treatment for DG in the form of incentives, subsidies or discounts may be desirable to make DG projects more profitable to developers, such special treatment does impact other customers. If the economics of CHP and DG investments are insufficient and the CEC and CPUC believe additional subsidies are warranted, these additional subsidies should be provided through non-by-passable charges (e.g., CSI and SGIP) and not buried in the overall rate designs. SDG&E and SoCalGas welcome the opportunity to work with the CEC and CPUC to resolve this important issue.

Minor Corrections:

Two minor corrections are suggested for page 90 of the Report (additions are in bold italics and deletions are in strike-out:

1) Metered Performance Data: Itron collected metered performance data for distributed generation systems supported by the Self Generation Incentive Program from 2002 through 2006. ***For selected sites,*** ~~The~~ metered data include electric net generator output, fuel consumption, and useful recovered thermal energy (heat).

2) Cost Breakdown Worksheets: Self-Generation Incentive Program applicants are required to submit a Cost Breakdown Worksheet, which details eligible and ineligible cost elements for the installation. ***For Program years 2001 through 2004,*** ~~t~~he eligible costs are used to determine the value of the incentive. ***For program years 2005 through 2008, SGIP incentives are calculated strictly on a kW times \$/kW basis.*** (emphasis added)

SoCalGas and SDG&E support efforts to further explore and gain experience with a wide range of technologies — as suggested by the CEC and Itron — so as to facilitate a market transformation. This “all of the above” strategy is also consistent with the national energy policy dialogue. SoCalGas and SDG&E are mindful that technologies have different strengths, weakness, best uses, and cost drivers. As a result, these technologies, along with other technologies like advanced energy storage, should be encouraged and, as recommended in the Report, reinstated in SGIP.

VI. CONCLUSION

For the all reasons outlined above, SDG&E and SoCalGas respectfully request that the CEC incorporate the foregoing comments, recommendations and clarifications into the final 2008 Integrated Energy Policy Report Update.

Yours sincerely,

Bernie Orazco