Application No: _	07-09-
Exhibit No.:	
Witness:	Michael McClenahan

Application of San Diego Gas & Electric Company (U 902 E) for Approval of a Power Purchase Agreement with Envirepel Energy, Inc., for Authority to Recover the Costs of Such Power Purchase Agreement in Rates and for Issuance of Certain Findings Related to Compliance with Renewable Portfolio Standard Program Requirements.

Application 07-09-___(Filed September 26, 2007)

DIRECT TESTIMONY OF MICHAEL McCLENAHAN SAN DIEGO GAS & ELECTRIC COMPANY

**redacted, public version **

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA September 26, 2007

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PREPARED DIRECT TESTIMONY OF MICHAEL McCLENAHAN

I. QUALIFICATIONS

My name is Mike McClenahan. My business address is 8306 Century Park Court, San Diego, California, 92123-1593. I am employed by SDG&E as Director, Procurement and Portfolio Design. My responsibilities include long-term procurement, incorporating regulatory and policy issues into commercial transactions, and portfolio planning. I joined the Electric and Gas Procurement group in September, 2002.

I received my Bachelor's Degree in Industrial Technology from the California Maritime Academy. My career in electricity has spanned a broad range of functional areas, including generation operations, power system control and transmission operations, system resource planning (real-time to two-year time horizon), commercial operation (trading and risk management), market analysis, business development and market design/regulatory efforts in all major U.S. markets and several Asian markets. I have worked in both regulated (SDG&E and PG&E) and unregulated (Mirant) energy companies as well as a market service provider (Automated Power Exchange).

I have previously testified before this Commission.

II. PURPOSE

The purpose of my testimony is to describe the background of SDG&E's All Source 2007-2009 Demand Response, Renewables and Peak Capacity Request for Offers (the "2007/08/09 All Source RFO"), the RFO process, the screening and evaluation of offers, and the creation of the shortlist. I also describe the contract and amendment proposed for Commission approval and how such contract complies with Renewable Portfolio Standard ("RPS") requirements.

III. HISTORY/DETAILS OF PROJECT

As described further below, SDG&E seeks Commission approval of a power purchase agreement ("PPA") and amendment (the "First Amendment") with Envirepel Energy Inc. ("Envirepel") for the purchase of renewable energy (biomass) from Envirepel's Vista facility. The proposed PPA and First Amendment (together, the "Proposed Agreement"), will add approximately 1.5 MW of renewable energy to SDG&E's portfolio and will serve as a proof of concept project for the developer. The Proposed Agreement will contribute towards SDG&E's Annual Procurement Target ("APT") throughout its term, which expires on December 31, 2009. The PPA contains five one-year options for extension of the Proposed Agreement (at SDG&E's option), thus approval of the Proposed Agreement will support SDG&E's efforts to achieve its RPS objective of a 20% renewable portfolio by 2010. In addition, the project supports SGD&E's efforts to comply with Executive Order S-06-06, which requires that biomass resources make up 20% of the established state goals for renewable generation in 2010. Details of the project are provided in the table below.

Developer	Technology	Project History	Net Capacity (MW)	Estimated Annual Generation (MWh)	Location	On line date	Term	New or Existing
Envirepel	Biomass	New develop- ment	1.5	11,826	Vista, CA	The later of: (1) the date that deliveries begin (which can be no later than 3/1/2008); or (2) the date that the CPUC approves the project.	Approx. 22 months	New

IV. BACKGROUND/NEED

The 2007/08/09 All Source RFO was issued in response to the loss of resources associated with removal of the dispatchable CDWR-Williams contract (known as "Williams D") from SDG&E's portfolio. In Advice Letter 1745-E dated November 16,

2005, SDG&E updated its then-current short-term procurement plan ("STPP") and outlined a plan that presented the upfront standards (required by AB 57) governing SDG&E's procurement activities over a rolling five-year period. The quantification of portfolio elements was not updated at that time as it was still an accurate reflection of existing and planned positions. Advice Letter 1745-E was approved by the Commission. Subsequent to this approval, on December 15, 2005, the Commission issued D.05-12-021, which addressed CDWR contract reallocation issues. The primary impact on SDG&E was the loss of the Williams D contract, effective January 1, 2007. These resources (Alamitos Units #5 & #6, Huntington Beach Unit #1) – approximately 1225 MW in total – represented nearly one-third of SDG&E's supply portfolio.

Given this loss of resources, SDG&E further revised its STPP in Advice Letter 1745-E-A, which was also subsequently approved by the Commission. In that update, SDG&E presented a quantification of portfolio resources and resource adequacy positions which reflected the loss of the Williams D contract. SDG&E also outlined plans for the 2007/08/09 All Source RFO that it would conduct to replace the lost capacity. The STPP, as revised by both advice letters, reflects accurate upfront standards, consistent with AB57, for SDG&E to follow when executing transactions that implement the plan. ¹/

V. REQUESTED RELIEF

a. CPUC Approval

SDG&E respectfully requests that the Commission approve the Proposed

Agreement in an expedited fashion, and in no event later than February 1, 2008. SDG&E

 $^{^{1/}}$ AB 57 provides that an IOU's procurement plan shall include "[t]he upfront standards and criteria by which the acceptability and eligibility for rate recovery of a proposed procurement transaction will be known by the electrical corporation prior to execution of the transaction." Assembly Bill (AB) 57, Sec. 2, § 454.5(b)(7) (Stats. 2002, Ch. 835).

requests expedited treatment in order to ensure that the success of this low-cost renewable project and subsequent Envirepel projects is not delayed. SDG&E's obligation to purchase energy from the Vista project is conditioned upon Commission approval. If the facility is able to begin deliveries before the Commission approves the Proposed Agreement, SDG&E anticipates the possibility that it may take deliveries in order to avoid wasting a potential renewable resource. Accordingly, SDG&E requests that RPS eligibility be granted retroactively to generation, if any, procured under the proposed PPA prior to Commission approval of the PPA. This will help to ensure SDG&E's ability to promote this promising biomass resource.

Once Envirepel is able to prove its technology by successfully delivering to SDG&E, SDG&E will be able to procure energy from additional Envirepel facilities pursuant to PPAs that the parties have executed for larger projects using the same technology. The sooner that Envirepel is able to begin deliveries from Vista, the sooner SDG&E will be able to eliminate risk involved with the new technology and move forward with larger Envirepel projects that will have a greater impact on SDG&E's renewable portfolio.

SDG&E therefore requests the following Commission action:

- a. Approval of the Proposed Agreement without modification, including approval of full cost recovery in rates of all payments to be made by SDG&E, subject to Commission review of SDG&E's administration of the Agreement;
- Issuance of a finding that any generation procured pursuant to the Proposed Agreement constitutes generation from an eligible renewable energy resource for purposes of determining SDG&E's

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- compliance with any obligation that it may have to procure eligible renewable energy resources pursuant to the California Renewables Portfolio Standard program (Public Utilities Code §§ 399.11, et seq. or other applicable law) and relevant Commission decisions;
- c. Issuance of a finding that any generation procured pursuant to the Proposed Agreement constitutes incremental procurement or procurement for baseline replenishment by SDG&E from an eligible renewable energy resource for purposes of determining SDG&E's compliance with any obligation to increase its total procurement of eligible renewable energy resources that it may have pursuant to the California Renewables Portfolio Standard program (Public Utilities Code §§ 399.11, et seq. or other applicable law) and relevant Commission decisions;
- d. Issuance of a finding that such RPS credit is granted retroactively for generation, if any, procured under the Proposed Agreement prior to Commission approval of the Proposed Agreement; and
- e. Issuance of a finding that that there exists a risk that the deliveries contemplated in the Proposed Agreement will not occur due to factors that are not within SDG&E's control; that SDG&E's efforts to reduce the risk of such nonperformance and to minimize cost impacts are reasonable; and that SDG&E shall not be subjected to penalties for RPS delivery shortfalls due to seller nonperformance, consistent with previous decisions.

b. Cost Recovery

SDG&E proposes to use its Energy Resource Recovery Account ("ERRA") to recover the costs associated with the Proposed Agreement from bundled customers. Pursuant to D.02-10-062 and D.02-12-074, the purpose of the ERRA is to provide full recovery of SDG&E's energy procurement costs associated with fuel and purchased power, utility retained generation ("URG"), ISO-related costs, and costs associated with residual net short procurement requirements to serve SDG&E's bundled customers. The ERRA records revenues from SDG&E's Electric Energy Commodity Cost ("EECC") rate schedule adjusted to exclude California Department of Water Resources ("CDWR") purchases and commodity revenues assigned to the Non-Fuel Generation Balancing Account ("NGBA").^{2/}

c. Impact of Debt Equivalence

SDG&E respectfully requests that the Commission recognize that the impact of long-term PPAs, as well as other similar contracts, must be addressed and mitigated since rating agencies will include this obligation as a debt equivalent when assessing SDG&E's credit ratios. Although the term of the Proposed Agreement is relatively short, the exercise of the options to extend the term could create an obligation that could be treated as a debt equivalent.

Rating agencies include long-term fixed financial obligations, such as PPAs, in their credit risk analysis. These obligations are treated as additional debt during their financial ratio assessment. S&P views the following three ratios, Funds From Operation ("FFO") to Debt, FFO to Interest Expense, and Debt to Capitalization, as the critical components of a utility's credit profile. Debt equivalence negatively impacts all three

In compliance with D.03-12-063, the NGBA became effective January 1, 2004.

ratios. Unless mitigated, a PPA would negatively impact SDG&E's credit profile, as it would degrade credit ratios.

S&P has published a quantitative methodology for measuring the credit risk associated with PPAs. In D.04-12-048, the Commission adopted a modified version of the S&P approach for calculating debt equivalence, and ordered that the impacts of debt equivalence should be addressed in the utilities Cost of Capital Proceedings.^{3/} Given that SDG&E will be executing contracts for 20% or more of its overall portfolio to meet the RPS goals, it is imperative that the Commission address and mitigate the resulting overall impacts of debt equivalence to SDG&E's capital structure.

In accordance with the direction provided in D.07-02-011, SDG&E intends to seek relief from costs associated with debt equivalence issues through its Cost of Capital proceedings.^{4/}

VI. CONSISTENCY WITH CPUC DECISIONS

The 2007/08/09 All Source RFO was issued on May 24, 2006, with responses due July 7, 2006. The RFO solicited projects that would deliver in 2007, 2008 and/or 2009. Alternative II described in this RFO specifically solicited Renewable Capacity and Energy and this RFO stated that SDG&E would give preference to resources that met Resource Adequacy ("RA") needs. One of the RA requirements stated was that resources must be located in the CAISO Control Area or connected to the CAISO Controlled Grid.

³/ D.04-12-048, *mimeo*, pp. 132-133.

⁴ See, D.07-02-011, mimeo, p. 32.

The 2007/08/09 All Source RFO solicited the following resources in addition to renewables: Alternative I (Demand Response), Alternative III (Daily Fixed Strike Call Option), and Alternative IV (Tolling Agreement for Energy & Capacity). Pursuant to the RFO's requirements, agreements for the purchase of energy from these alternatives had terms of three years or less. SDG&E did not file such agreements with the Commission for approval because of the procurement authority provided by D.04-12-040, which allows SDG&E to enter into agreements with terms of less than five years without filing for preapproval.

SDG&E conducted its 2007/08/09 All Source RFO in accordance with guidance provided in D. 04-12-048. The RFO was open to all resources (conventional and renewable) bidding all types of projects (turnkeys, buyouts and PPAs). The solicitation was transparent and competitive, which is evidenced by the fact that SDG&E received twenty-four bids. While each type of offer competed with every other offer in this All Source competition, SDG&E's selection of the Envirepel/Vista renewables bid reflects SDG&E's adherence to the preferred loading order and the Commission's direction for IOUs to procure the maximum feasible amount of renewable energy in their general solicitations. ⁶

VII. OFFER EVALUATION AND SELECTION

a. Evaluation Overview for All Resources

As with other bid evaluations, SDG&E's intent in evaluating the responses to the 2007/08/09 All Source RFO was to implement a systematic approach to assess the merits of all offers without prejudice for or against a particular respondent, a particular product type or individual bid. A key component of the approach involves the establishment of two teams, the Processing Team ("PT") and the Evaluation Team ("ET"). The PT is charged with processing all incoming offers and redacting all respondent-distinguishing information in advance of forwarding offers to the ET for analysis. SDG&E's Procurement Review Group ("PRG") and Independent Evaluator ("IE") played key consultative roles during all phases of the solicitation, particularly during offer evaluation.

See, D.04-12-048, mimeo, p. 70.

SDG&E evaluated all offers via a three-step process. Offers were required to pass each level in order to advance to the next level, with the eventual short-listed offers being required to pass all levels. The following provides a general description of each evaluation level:

Level I: Check for Conformance. The ET first checked to ensure that all offers met minimum RFO criteria established for each product type. All offers meeting minimum requirements were deemed "conforming" and were advanced to Level II.

Level II: Assess Viability. All conforming offers were assessed for viability. Viability is based on pre-established, quantitative criteria unique to each product type. The ET performed this assessment based on offer data from the Redacted List. All offers passing Level II were deemed "short list candidates" and advanced to Level III.

Level III: Modeling/Detailed Analysis. All short list candidates were modeled in SDG&E's production cost model to determine performance as part of SDG&E's portfolio. Evaluation was updated based on final model dispatch of the portfolio of offers that best met SDG&E's bundled customer needs. SDG&E then developed the short list and began negotiations.

b. Processing Offers

The Processing Team ("PT") collected and documented the twenty-four offers received by the July 7, 2006 deadline. Members of this team are prohibited from any analysis or decision-making during Evaluation Levels I, II and III (as detailed below).

Once received and while in processing, only members of the processing team had access to

1 the files on the restricted server and the SDG&E RFO website was blocked from accepting 2 offers after the closing deadline. 3 Each offer received was documented in an Excel spreadsheet summarizing key characteristics such as: respondent name, alternative type, offer number, technology, price, 4 5 type of facility, product type (as available, unit firm, peaking, or baseload), offer amounts 6 (MW) and contract term. 7 The first evaluation step was to check for conformance and screen the offers. This 8 initial step was done separately for each product type. The Envirepel/Vista offer was 9 submitted as meeting the criteria for Alternative II (Renewables) Products. 10 The Envirepel/Vista offer was determined to be conforming since it met the 11 following RFO requirements: 12 a) Offer is for 1, 2 or 3 years for 2007, 2008 and/or 2009 b) Offer size minimum of 1 MW 13 14 c) Delivery to CAISO control area 15 Once SDG&E had completed the screening process and determined a list of 16 conforming offers, SDG&E determined the Renewable shortlist candidates. SDG&E 17 ranked each project based on an all-in price consisting of the offer price, congestion 18 cost/benefit, and local resource adequacy benefit, as described further below. 19 a) Offer Price – SDG&E compared offers on an annual 20 average \$/MWh basis. Energy production from the offer 21 was based on the Respondent's representation. 22 b) Resource Adequacy Credit value, system and/or local, was 23 added to each offer located in SDG&E's service area that 24 qualifies for System and/or Local RA.

1	c) Congestion costs/benefits provided by the respondents
2	were added to/subtracted from offer costs.
3	d) Offers (adjusted for items b. and c. above) that exceeded an
4	established pricing benchmark were rejected. To determine
5	the pricing benchmark,
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7	
8	, which was used as the basis for the
9	pricing benchmark.
10	The Envirepel/Vista offer met all of the requirements of Alternative II and thus was
11	included as a shortlist candidate. The ranking of the Alternative II shortlist candidates is
12	set forth in the confidential spreadsheet attached hereto as Exhibit A.
13	c. Modeling and Detailed Analysis of All Shortlist Candidates
14	In this step, SDG&E combined the shortlisted offers from all of the RFO product
15	types to determine the best combination of offers that would result in the lowest total
16	portfolio cost for SDG&E's customers. Since the products on the shortlist varied
17	substantially, from base loaded products to peaking products, they could not be compared
18	against each other on a simple \$/MWHR or \$/MW basis. Thus, SDG&E used Global
19	Energy's Capacity Expansion Model to determine the offers that best fit the need. These
20	resulting portfolios were then subjected to detailed production cost modeling to determine
21	the mix of offers that resulted in the least cost portfolio for SDG&E's bundled customers.
22	i. Major Modeling and Evaluation Assumptions
23	The Capacity Expansion Model was run for three scenarios, with each scenario
24	producing its list of preferred resources. Three scenarios were examined due to the overall

1	uncertainty at that time of the future availability of RMR contracts. The scenarios that
2	were examined were:
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18	Results of the portfolio scenarios are explained below and are included in the
19	confidential Excel spread sheet (CEM Scenarios PRG) attached hereto as Exhibit B. The
20	Vista project is listed as project "R24".
21	d. Results of Evaluation
22	The results of ranking showed that the Envirepel Vista project was the only
23	complete offer selected in all three portfolio scenarios. The Vista project was selected
24	because, in competition with all other offers in this All Source RFO, it was included in the

lowest cost portfolios that helped SDG&E meet its identified needs for Local and System RA.

e. Transmission Costs

The Proposed Agreement has zero transmission upgrade costs due to the size, location and interconnection of the project, thus no transmission costs adders were required. The project will require construction of distribution-level interconnection facilities at the project site, which, pursuant to Rule 21, will be financed by the developer.

f. Consistent Application of TODs

Due to the nature of the project (biomass) and the associated baseload generation profile, TOD factors did not play a part in the evaluation of the Proposed Agreement.

g. Impact of Debt Equivalence

SDG&E did not calculate or consider a debt equivalence adder during the evaluation of the bids received from this RFO since at the time of this RFO debt equivalence was not calculated for offers that were three years or less.

h. Offers not Selected

The Proposed Agreement resulted from a bid that was one of two renewable proposals (one of which had four pricing approaches) that SDG&E received in response to its 2007/08/09 All Source RFO. Both renewable offers were selected for the shortlist.

As the Alternative II Analysis spreadsheet reflects, the bid resulting in the Proposed Agreement was the lowest priced option when compared with the other renewable offers. Although each of the renewable offers had a bid price that was below SDG&E's pricing benchmark (as described in Section VII(b) above), all of the pricing options for the bid that was not selected were approximately \$10/MWH more expensive than Envirepel's bid price. Additionally, the Vista facility will provide both system and local resource

adequacy. The other renewable bid would not have provided local RA credit because the facilities were located outside of California. The combination of these factors made the Envirepel/Vista project an attractive choice for SDG&E.

When compared to shortlisted bids from the other three solicited resource alternatives, Envirepel remained an attractive choice. As described in Section VII(d) above, the Vista project was selected because, in competition with all other offers in this All Source RFO, it was included in the lowest cost portfolios that helped SDG&E meet its identified needs for Local and System RA. The other renewable offer was not selected in any of the scenarios.

i. PRG Participation and Feedback

SDG&E met with its PRG on six occasions to discuss the 2007/08/09 All Source RFO. On January 24, 2006, SDG&E explained the need for the RFO to its PRG. On July 14, 2006, SDG&E provided a preliminary summary of the initial responses to the RFO, discussed need with regard to SDG&E's short position and RA requirements, and described the evaluation criteria for the RFO. On August 14, 2006, SDG&E presented its shortlist candidates and discussed RA risk mitigation. On September 15, 2006, SDG&E presented its shortlist candidates again and provided a comparison of RMR costs versus offer prices. On October 13, 2006, SDG&E provided an analysis of the RA contracts submitted. On December 6, 2006, SDG&E provided an update on negotiations and informed the PRG of its intent to notify the Commission of the status of the RFO and to seek guidance on the cost-effectiveness of Demand Response programs. SDG&E did not receive any substantive comments, critiques or questions specifically regarding the Proposed Agreement from PRG members.

VIII. CONTRACT TERMS

a. Standard Terms and Conditions

SDG&E's model PPA complies with the standard terms and conditions to be incorporated into RPS agreements set forth by the Commission in D.04-06-014, as subsequently modified.

The Proposed Agreement conforms to SDG&E's model PPA to a very large extent. The only modification to "non-modifiable" RPS standard terms is set forth in the Delivery Term section of the Confirmation Letter. The duration of the Proposed Agreement is non-standard for RPS solicitations, but does comply with the RFO from which it was selected. In addition, the project is, in essence, a proof-of-concept / enabling agreement for two follow-on, larger projects from this same developer. The short term nature of the Proposed Agreement will allow SDG&E to protect its ratepayers from liability for payments pursuant to a long term contract for energy from a technology that has not yet been proven.

The confidential "Contract Terms Comparison Matrix" attached as Exhibit C compares the Commission-approved non-modifiable terms to the Proposed Agreement's non-modifiable terms.

b. Credit and Security Terms

Provisions for default security are included in the Proposed Agreement, as follows:

c. Conditions Precedent/No-Fault Termination Provisions

There is one remaining condition precedent ("CP") in the contract: Commission

approval

d. Major Contract Provisions

Term/Condition	
Type of Purchase (Renewable, etc)	Renewable
Project Location	Vista, CA
Delivery Term (months)	Approximately 22 (if approved before 3/1/2008)
IOU Option	Option to extend five (5) times for consecutive one (1) year periods
Conditions Precedent and Date Triggers	CPUC Approval
Commercial Operation Deadline (COD)	The later of (1) the date that deliveries begin (which can be no later than 3/1/2008); or (2) the date that the CPUC approves the project.
Average Actual Price (\$/MWh)	
Product Type	Non-intermittent, as-available
RPS-Eligible Certification (Yes/No)	In process (applied to the CEC, expect certification to be complete prior to 10/1/2007)
Project Capacity	2.2 MW gross 1.5 MW net
Minimum Deliveries	

Term/Condition	
Expected Deliveries	11,826 MWHs / year
Expected Payments	
Scheduling Coordinator	
Performance Assurances	
Force Majeure	
Daily Delay and Liquidated Damages	
Production Tax Credit Deadlines	
Guaranteed Milestones	
Project Development Security	

Term/Condition	
No Fault Termination	
Right of First Refusal	

IX. MPR/SEPS

SDG&E which was used as the basis for a soft benchmark during its preliminary evaluation process. Renewable bids that fell below this pricing benchmark, including the proposed project, were included in further evaluation. Because this project was solicited pursuant to an all-source RFO, it is not eligible for SEPs.

X. CREDIT TOWARD RPS COMPLIANCE; MINIMUM QUANTITY

SDG&E submits that RPS credit is appropriate in the instant case, notwithstanding the fact that the Proposed Agreement resulted from a utility solicitation of short-term contracts. The Commission addressed RPS eligibility of short-term contracts (*i.e.*, contracts of less than 10 years duration) in D.07-05-028, in which it pointed out that it had placed limitations on the ability of RPS-obligated entities to solicit short-term contracts in RPS solicitations. This limitation does not, however, extend to contracts negotiated outside of the RPS solicitation context, for example, bilateral contracts or contracts resulting from all-source solicitations. Indeed, D.04-12-048 specifically directs RPS-obligated utilities to procure "the maximum feasible amount of renewable energy" through all-source solicitations and places no limitation on the ability of the utilities to avail themselves of the short-term contracting authority granted under that decision.

⁷ D.07-05-028, *mimeo*, pp. 4-5.

In D.07-05-028, the Commission made clear that RPS credit for short-term contracts will be available only where the utility has satisfied Commission-established requirements for minimum quantities of long-term contracts (with new or existing facilities) and/or short-term contracts with new facilities.⁸ The decision states:

Beginning in calendar year 2007, each load-serving entity (LSE) obligated under the renewables portfolio standard (RPS) program must, in order to be able to count for any RPS compliance purpose energy deliveries from contracts of less than 10 years' duration ("short-term") with RPS-eligible facilities that commenced commercial operation prior to January 1, 2005 ("existing facilities"), in each calendar year enter into contracts of at least 10 years' duration ("long-term") and/or short-term contracts with facilities that commenced commercial operation on or after January 1, 2005 ("new facilities") for energy deliveries equivalent to at least 0.25% of that LSE's prior year's retail sales (the "minimum quantity").

SDG&E has met this minimum threshold. In 2007, it signed three (3) RPS contracts (the Proposed Agreement and two other agreements yet to be presented to the Commission for approval). As stated, the Proposed Agreement is for a 22 month term, and the other two agreements each have 15 year terms. The long-term contracts signed by SDG&E thus far in 2007 make up 0.49% of SDG&E's 2006 retail sales, which exceeds the minimum threshold required by D.07-05-028. Therefore, SDG&E should be permitted to count all generation procured pursuant to the Proposed Agreement toward RPS compliance.

Id. at p. 7; see, Pub. Util. Code § 399.14(b).

XI. PROJECT VIABILITY

	Overall Summary Viability Scor	C/ASSCSSIIICIIC.
	Participant Qualifications and I	Project Plan
	Previous Experience	Sufficiency of Current Plan
Development		
Permitting		
Financing		
Construction		
Operation		

a. Project status (new, existing, repowered, project expansion etc.)

The Envirepel/Vista project is a new facility. The City of Vista performed the required land use planning review for the project and completed a formal CEQA study of the project in the summer of 2006. Independent engineering studies were performed on the project and public presentations were conducted by Envirepel during this time. The City of Vista Planning Commission approved the Projects' Special Use Permit on December 19, 2006.

1	b. Level of technology maturity
2	Gasification is a mature technology first published in 1912 and has been in
3	commercial operation for over 80 years.
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11	c. Developer experience
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15	Therefore, as stated throughout my testimony, the relatively small
16	project that is the subject of the Proposed Agreement is being utilized as a proof of
17	concept. Additionally, the project serves as a test of the developer's abilities to manage the
18	design, construction, operation and maintenance of such a facility. SDG&E intends to
19	promote the development of new renewable energy technologies by providing developers
20	with the opportunity to prove their ability to bring projects online.
	gr gan

d. Permitting

		Permi	it and Lease Table		
Name of Permit	Public or		Description of Permit or	Timeframe for	Current
or lease required	Private?	Agency	Lease	approval	Status
			Approval for the area for the		Approved
Special Use Permit	Public	City of Vista, CA	intended use of the facility		12/19/2006

e.	Fuel status – quality of fuel source
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f.	Dependency on PTC/ITC and federal renewal of PTC legislation

The developer does not require and does not intend to seek PTCs or ITCs.

1	g. Site Control
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5	h. Financing
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9	i. Construction
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13	j. Transmission - dependency on network and gen-tie upgrades and their
14	impact on project COD
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	The proposed project is not dependent on network or gen-tie upgrades. The
16	proposed project is a standard Rule 21 interconnection into the existing underground 12KV
17	lines on the project site. SDG&E will modify existing facilities in order to support the
18	project, the cost of which will be born by the developer pursuant to Rule 21.
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22	k. Performance criteria - likelihood of timely performance
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9	XII. CONTRIBUTION TO IOU RPS PROCUREMENT TARGETS
10	As stated, the project's expected deliveries are 11,826 MWHs per year, which in
11	2008 represents approximately of SDG&E's IPT. In 2009, these deliveries represent
12	approximately of SDG&E's IPT. However, as an enabling project for two follow-
13	on, larger projects, the successful operation of this project could enable a significant
14	contribution toward SDG&E's 2010 20% RPS goal and the objectives of Executive
15	Order S-06-06.
16	
17	
18	These projects have a potential capacity of and, if Envirepel's
19	technology is proven, could potentially be large contributors towards SDG&E's 20%
20	mandate in 2010 and Executive Order S-06-06.
21	The table on the following page shows the proposed project's contribution towards
22	SDG&E's RPS goals in relation to SDG&E's current progress towards such goals.

Project's Contribution to RPS Goals

Project	Project	Gross	Term				2010
and Technology	Location	Capacity (MW)	(Years)	COD	\$/MWh	MWH	% of 2010 Retail Sales ¹
Envirepel, Vista Biomass	Vista, CA	2.2MW	Approx. 22 months	The later of (1) the date that deliveries begin (which can be no later than 3/1/2008); or (2) the date that the CPUC approves the project.		0	0 – see note 1
Current Progress Toward Goal	Goal						5.6% / 13.4%
% on a delivered basis							See note 2
% including other signed contracts	contracts						5.6% / 13.4% See note 2
IOU's Status if Proposed Contract Approved (%)	Contract Approve	(%) p					5.6% / 13.4% See note 2

Note 1: As stated throughout this document, the Envirepel Vista biomass plant is a 'proof of concept' and will enable future, larger, follow-on projects from this same developer given successful completion and operation.

Additionally, although the term of the Proposed Agreement ends on 12/31/2009,

(delivered/ executed and approved PPAs, (some of which represent projects that are yet to be constructed) and the expansion of an approved project for which SDG&E total includes all Note 2: In its August 1, 2007 RPS compliance report submitted to the Commission, SDG&E reported total RPS procurement of actuals) equating to the previous year's total retail sales. This same report shows a projection of the same in 2010. This SDG&E has options to extend the agreement for up to five one-year terms. is finalizing contract documents.

XIII. REGULATORY PROCESS

a. Contractual Obligations that Will Impact the Schedule for CPUC Approval

The delivery term stated in the First Amendment to the Proposed Agreement begins on the later of (1) the first date that Output is delivered to the Delivery Point from the Facility (which shall be no later than March 1, 2008); and (2) the date upon which the Commission issues a final, non-appealable order providing Approval of the Agreement. The delivery term ends on December 31, 2009. The purpose of this delivery term language is to allow SDG&E to begin taking deliveries from the project as soon as the energy is ready to be delivered. As discussed in Section V above, SDG&E requests that the Commission approve the Proposed Agreement retroactively if the project is able to come online before the Commission is able to provide approval. As stated, SDG&E has executed agreements with Envirepel to purchase energy from two larger facilities. Both of these agreements are contingent upon the success of the Vista project. SDG&E urges the Commission to approve this application in an expeditious manner so that the success of the Vista project and subsequent Envirepel projects is not delayed.

b. Earmarking

c. RPS Eligibility

Envirepel has not yet received RPS certification for the facility, but has applied and been in contact with CEC representatives. Envirepel expects to have the certification in hand prior to October 1, 2007. Once Envirepel has received this certification, SDG&E will

1	file an amendment to its application in order to apprise the Commission of this
2	development.
3	XIV. CONCLUSION
4	SDG&E submits that approval of the Proposed Agreement is in the public interest,
5	for the reasons set forth above. Accordingly, SDG&E respectfully requests that the
6	Commission grant expedited approval of the Proposed Agreement at the earliest possible
7	date, but in no event later than February 1, 2007.
8	This concludes my testimony.
9	XV. EXHIBITS
10	Exhibit A (Confidential): Alternative II Shortlist Candidates Ranking
11	Exhibit B (Confidential): Portfolio Scenarios Analysis
12	Exhibit C (Confidential): Contract Terms Comparison Matrix
13	Exhibit D: RFO Document
14	Exhibit E (Confidential): Proposed Agreement

EXHIBIT A

CONFIDENTIAL

EXHIBIT B

CONFIDENTIAL

EXHIBIT C

CONFIDENTIAL

EXHIBIT D



SAN DIEGO GAS AND ELECTRIC COMPANY

ELECTRIC AND GAS PROCUREMENT DEPARTMENT 8315 CENTURY PARK COURT, CP21D SAN DIEGO, CA 92123

REQUEST FOR OFFERS

ALL SOURCE 2007 - 2009

DEMAND RESPONSE, RENEWABLES AND
PEAK CAPACITY

ISSUED 05/24/2006

OFFERS DUE 07/07/2006

RFO WEBSITE

http://www.sdge.com/allsource3rfo



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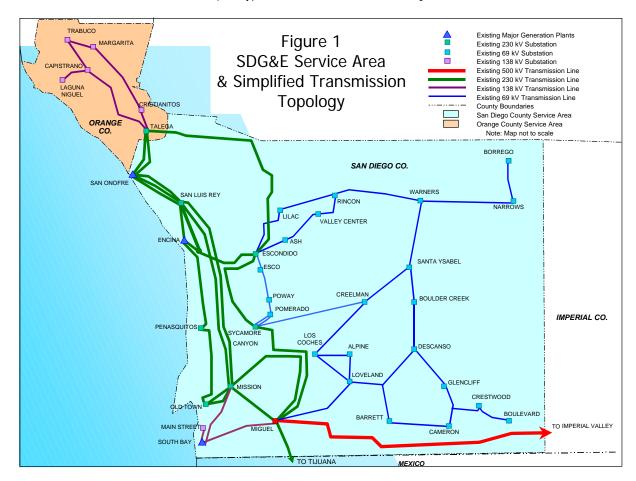
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1.0 INTRODUCTION TO SDG&E: BACKGROUND

San Diego Gas & Electric (SDG&E) provides electric service to approximately 1.3 million customers in San Diego County and the southern portion of Orange County. SDG&E also provides natural gas service to approximately 775,000 gas customers. The electric customer base comprises 89% residential and 11% commercial and industrial customers.

SDG&E's electric transmission network is comprised of 130 substations with 884 miles of 69-kV, 265 miles of 138-kV, 349 miles of 230-kV, and 215 miles of 500-kV transmission lines. Local ("on system") generating resources are the Encina plant (connected into SDG&E's grid at 138 kV and 230 kV), the South Bay plant (connected at 69 kV and 138 kV), the Palomar Energy Center (connected at 230 kV), and a number of combustion turbine facilities located around the service area (connected at 69 kV). Imported resources are received via the Miguel Substation as the delivery point for power flow on the Southwest Power Link, which is SDG&E's 500-kV transmission line that runs from Arizona to San Diego along the U.S./Mexico border, and via the SONGS 230-kV switchyard.

Figure 1 shows a simplified diagram of existing SDG&E service area and the electric transmission topology in San Diego County and the southern portion of Orange County. Planned or approved transmission facilities for the future (if any) are not shown on this map.



2.0 SCOPE OF REQUEST

SDG&E is seeking resources via this Request for Offers (RFO) to expand its generation portfolio and to replace the California Department Water Resources (CDWR) Williams D contract recently allocated to Southern California Edison by the California Public Utilities Commission (CPUC) on December 15, 2005 in the decision D.05-12-021. SDG&E is issuing this RFO to solicit offers from all eligible resources. By responding, Respondents are bound by the terms of this RFO. SDG&E is seeking offers for capacity and energy products for 2007, 2008 and 2009, for at least 500 MW of capacity, associated energy and Resource Adequacy (RA) capacity. SDG&E is seeking demand response, renewable resources and peak capacity.

SDG&E anticipates issuing a subsequent RFO after the filing of its long-term resource plan with the CPUC to address resource needs for 2010 and beyond.

Any contracts resulting from this RFO may contain obligations on the Respondent for compliance with the Resource Adequacy (RA) requirements that are being implemented by both the CPUC and CAISO. SDG&E may use the qualifying RA capacity from any contract resulting from this RFO in its required RA showings for the term of the contract. If any Respondent wishes to unbundle the RA capacity from its offer, they may submit two offers, showing the RA-bundled and RA-unbundled pricing. The Respondent's obligations for RA in the current CAISO market and the pending Market Redesign Technical Upgrade (MRTU) market are explained at the end of this Section 2.0. SDG&E reserves the right to resell RA capacity under contract through this RFO.

Respondents may propose products covering one, two, or three years of the 2007 - 2009 period. If system-wide or local resource adequacy is offered, the Respondent must incorporate the language provided in applicable Model Documents located in Section 15.0 into their supply agreement with SDG&E, which under various regulatory structures obligates the resource in the CAISO Day-Ahead and Real-Time markets in a manner similar to the Federal Energy Regulatory Commission (FERC) Must-Offer Obligation (MOO).

Non-conforming offers may be considered although conforming offers will be given first consideration.

Additional resource criteria are described in Section 9.0 Evaluation Criteria. Resources may be proposed on the basis of any of the alternatives described below.

- I. Demand Response
- II. Renewable Capacity and Energy
- III. Daily Fixed Strike Call Option
- IV. Tolling Agreement for Energy & Capacity

PAGE 5 OF 25 ISSUED 05/24/2006 Demand response, Renewables & Peak Capacity

ALTERNATIVE I. DEMAND RESPONSE

Respondents shall propose a 1, 2 or 3-year product for the delivery of measurable Demand Response. The offer must provide, in sufficient detail, the Demand Response product, the process for delivering Demand Response and the manner in which it will meet the following minimum guidelines:

Offers must comply with the policy guidance of the Energy Action Plan (I and II) and be in alignment with the state's Demand Response Vision for the Future. Offers must also meet the California Public Utilities Commission (CPUC) definition of Demand Response. As such, generation resources located on the customer side of the meter, such as back-up generation, will not qualify as a Demand Response product in this offer. To further clarify, the Demand Response product must be by means of reducing an end-use customer's demand and/or energy usage. SDG&E is seeking offers that meet RA requirements for Demand Response as set forth by the CPUC in D. 05-10-042, and will give preference to said offers incorporating Resource Adequacy in its evaluation of these responses. Agreements may be submitted to the CPUC for approval.

Offers must provide at least 1 MW of measurable Demand Response, of which the entire load reduction is located within the SDG&E service territory. SDG&E prefers that the proposed Demand Response product be available May 1, 2007 through October 31, 2009. If the Demand Response product is not available for all the months during the three-year period, Respondent should explain in detail when the product would be available and the circumstances surrounding its availability. The Demand Response product shall not include Demand Response committed on existing programs. Offers for a Direct Load Control program targeted toward residential customers and business customers with demands <100kW will not be considered.

Any Demand Response products should meet the following minimum criteria:

- 1) Available during all of the months from May 1 through October 31.
- 2) Available on weekdays for a minimum of two hours per day and up to five hours per day.
- 3) Confirmation for the need for Demand Response will be given no earlier than 9:00 AM on the day the product is needed. The delivery period will be no sooner than noon or later than 6:00 PM on the day the product is needed.
- 4) Detail any limitations of the product, for example: the minimum or maximum number of hours per year the product is available.
- 5) Explain how the Demand Response product will be measured to ensure the load reduction amount committed is achieved and how the baseline will be established to exclude free ridership³.
- 6) Specify a fixed price in the form of a capacity price (\$/MW/year) for actual delivered Demand Response. Repondents may also offer an energy price (\$/MWh), but must specify the number of hours (e.g., daily, monthly, seasonally, and/or annually) the product is available.
- 7) Explain target customers for participation in the Demand Response product by customer class and whether the customers will be bundled SDG&E customers, Direct Access customers or both. The proposed energy price for Demand Response from Direct Access customers should include an "ex-post price credit", where the proposed energy price is reduced by the hourly ex-post price, but never below zero.

¹ California Demand Response: A Vision for the Future. D. 03-06-032, Appendix A.

² D. 05-01-056 (mimeo at pp. 47-49) discusses the use of generation as demand response. More recently, D. 06-03-024 states that demand response "applies to rate design, incentives and technology to induce changes in customer demand." (mimeo at p. 3).

³ "Free ridership" refers to load reduction that would have occurred even without the benefit of the proposed demand response product. This reference is derived from a definition in the energy efficiency proceeding (R. 01-08-028): Appendix B of Attachment 3 in D. 05-04-051 – Common Energy Efficiency Terms and Definitions.

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Please note: Section 15.0, Model Documents and Other Attachments, does not include a sample Demand Response Agreement. This Agreement has been intentionally omitted.

ALTERNATIVE II. RENEWABLE CAPACITY & ENERGY

Respondents shall propose a 1, 2 or 3-year power purchase agreement for capacity and/or energy from an eligible renewable resource that meets the criteria described herein. All offers are subject to CPUC approval and should provide a minimum of 1 MW. Renewable resources must deliver to any point in the CAISO's control area and must provide deliveries in 2007, 2008 and/or 2009. Under the current CPUC rules, these resources are not eligible for Supplemental Energy Payments. Respondents must be prepared to sign an agreement in substantially the form of the EEI Master Power Purchase and Sales Agreement, as amended (PPA). See Section 15.0 Model Documents and Other Attachments.

ALTERNATIVE III. DAILY FIXED STRIKE CALL OPTION

Respondents shall offer a call option on capacity with rights for a day-ahead call on the energy during peak hours at a fixed strike for the months of July, August and September in 2007, 2008 and/or 2009. The fixed strike may be in the form of a fixed electric price, or a fixed heat rate tied to a gas index. SDG&E's preference is for a call option with a low capacity payment and a high heat rate strike or equivalent fixed energy price. A heat rate strike lower than 9,000 BTU/kW-hr will be considered a nonconforming offer. The daily call option must be in blocks of 25 MW or greater. Respondents may offer 1) a resource-specific call option (Unit Firm) or 2) a firm energy call option with liquidated damages (Firm LD), as described below.

• (1) Resource-Specific Call Option (Unit Firm)

Respondent may propose a call option on all or part of the capacity of a physical resource within California. The daily call option should provide SDG&E with the option, subject to unit availability, to exercise its right to receive energy during on-peak hours at a specified strike with a minimum take of 1 hour and a maximum take of 16 hours in a continuous block during any of the specified months. The peak period for the call option shall be from 06:00 to 22:00 (Pacific Prevailing Time) for 7 days a week. In the case that SDG&E does not exercise its rights to call on day-ahead energy from the resource, the Respondent will have an RA obligation to offer the call option capacity to the CAISO as described at the end of this section. Respondent will be required to demonstrate that facility has or can perform at the offered availability.

• (2) Firm LD Call Option

Respondent may propose a Firm LD call option with delivery at SP15 or as an import delivered at a CAISO interchange point. The daily call option should provide SDG&E with the option to exercise its right to receive energy during 16 on-peak hours at a specified strike. The peak period shall be from 06:00 to 22:00 (Pacific Prevailing Time) Monday through Saturday with the exception of Sundays and NERC holidays. The Firm LD call option will not have an offer obligation to the CAISO if SDG&E does not call the energy.

See Section 15.0 Model Documents and Other Attachments for a sample EEI Confirmation and required offer information.

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ALTERNATIVE IV. TOLLING AGREEMENT FOR ENERGY & CAPACITY

Respondents shall offer annual tolling capacity from eligible generation sources within the CAISO grid in 2007, 2008 and/or 2009. This tolling agreement should provide SDG&E with the right during the term of the agreement to schedule daily energy and/or ancillary services in the CAISO day-ahead or hour-ahead market and to participate in the CAISO real time market. Fuel will be provided by SDG&E. SDG&E's preference is a tolling agreement with a resource(s) with a heat rate greater than 9,000 BTU/kW-hr and proposed resource(s) with a lower heat rate will be considered a non-conforming offer. These services should provide SDG&E with the daily right to convert natural gas to electricity according to the predefined physical and operating characteristics of the Respondent's generating facility. Purchase quantities should be in blocks of 25 MW or greater up to the full capacity of the specified resource(s) with a minimum one-year duration. Respondent will be required to demonstrate that facility has or can perform at offered levels. If SDG&E does not schedule energy in the day-ahead market, the Respondent will still have a RA obligation under the tolling agreement to offer the tolling agreement capacity to the CAISO as described at the end of this section. See Section 15.0 Model Documents and Other Attachments for a sample Tolling Agreement and required offer information.

RESOURCE ADEQUACY REQUIREMENTS

Any resource selling RA capacity must meet all CPUC and CAISO RA requirements in place at the time of contract execution. Guidelines for determining eligible RA resources and the standards that would permit a resource to be counted as RA capacity, that is, as Qualifying Capacity, are discussed in the June 15, 2004 CPUC Workshop Report on Resource Adequacy Issues, especially Section 5 and Appendix C (http://www.cpuc.ca.gov/Published/Report/37456.htm, D.04-10-035 and D.05-10-042). A CPUC decision on Local RA requirements is expected late-June 2006 in R.05-12-013. That decision is expected to clarify LSE obligations under local RA, which may inform decision criteria for SDG&E. Although these guidelines will undergo further review and augmentation, SDG&E expects that, at a minimum and for the timeframe spanning this RFO, generation resources meeting the following characteristics will be countable as RA capacity:

- (1) Resources must be in the CAISO Control Area or be connected to the CAISO Controlled Grid;
- (2) Call option contracts for firm delivery with liquidated damages without a specific resource(s) supporting the contract will not qualify for RA;
- (3) Respondent must control the generating unit through ownership or contract;
- (4) SDG&E is given the exclusive right to count the unit's capacity, or portion thereof, toward SDG&E's RA and/or Local RA requirement (unless the Seller is offering an unbundled product);
- (5) No portion of RA capacity offered to SDG&E has been committed by Respondent to any third party unless through a Condition 1 Reliability Must Run (RMR) contract between the Respondent and CAISO (where seller retains the rights to "count" the RMR capacity towards RA);
- (6) Respondent must notify CAISO that SDG&E has contracted for all or a portion of Respondent's RA capacity for the Contract Term in the format designated by CAISO
- (7) Unless the generating units providing RA capacity are out-of-service due to forced outage, planned maintenance or an event of force majeure, the Respondent must agree to offer any RA capacity under contract to SDG&E to the CAISO as follows when SDG&E has not scheduled any energy from RA capacity in the day-ahead market:
 - (a) If the CAISO has not implemented its MRTU, Respondent shall self-schedule SDG&E RA capacity in the CAISO day-ahead market or offer SDG&E RA capacity to the CAISO subject to the same obligations to the CAISO and timelines that exist under the FERC MOO process.
 - (b) If the CAISO has implemented MRTU, Respondent shall submit a bid for SDG&E RA capacity into the day-ahead market.

 $\begin{array}{c} {\rm PAGE~8~of~25} \\ {\rm Issued~05/24/2006} \\ {\rm Demand~response,~Renewables~\&~Peak~Capacity} \end{array}$

Depending on the physical location of the Respondent's resource, it may qualify to meet a system only or a local and a system RA requirement for SDG&E. SDG&E will give preference to resources that meet SDG&E's local RA needs. SDG&E will retain the system or local and system RA attributes (where applicable) for any resource placed under contract through this RFO (unless the Seller has specifically unbundled the RA attribute) and reserves the right to resell RA capacity during the contracted period.

SDG&E is willing to consider offers for capacity and energy that exclude RA capacity (system-wide or local, where applicable). If Respondent is making two offers, one with and one without RA capacity, please submit two separate sets of offer forms. Because RA reporting requirements are not firmly established and the range of RA capacity products that might qualify is still under development, SDG&E expects to rely on elements of the program that are currently in place to determine whether offers for RA capacity are acceptable. Pursuant to the RFO Schedule outlined in Section 4.0, a CPUC decision on Local Area Requirements is expected in June 2006. See Section 15.0, Model Documents and Other Attachments, for applicable documents Model Confirm for Daily Fixed Strike Call Option or the Tolling Agreement for Capacity and Energy.

3.0 RFO WEBSITE AND COMMUNICATION

The RFO and all subsequent revisions are available for download from the RFO Website. The website address is: http://www.sdge.com/allsource3rfo. Potential Respondents are responsible for checking the RFO Website for subsequent updates, notices and postings.

The RFO Website contains a "Restricted Area". This restricted area, which may only be accessed with a user ID and password, contains RFO attachments, a Question and Answer forum and other information. RESPONDENTS MUST HAVE ACCESS TO THE RESTRICTED AREA TO SUBMIT RFO-RELATED QUESTIONS AND UPLOAD ELECTRONIC OFFERS. E-mail registration requests to mailto:allsource3rfo@semprautilities.com. The following information is required of prospective Respondents in order to register and obtain a user ID and password, and is not binding:

- 1) Name of Company
- 2) Company Address
- 3) Company Representative:
 - a) Name
 - b) Phone number
 - c) E-mail address
- 4) Alternative Representative:
 - a) Name
 - b) Phone Number
 - c) E-mail address
- 5) Type of Offer:
 - a) Alternative I: Demand Response
 - b) Alternative II: Renewable Capacity & Energy
 - c) Alternative III: Daily Fixed Strike Call Option
 - d) Alternative IV: Tolling Agreement for Energy & Capacity
- 6) Intention of Bidding: Do you intend to submit a bid?
 - a) Yes: _____ b) No: ____
- 7) Technical Information:
 - a) Alternative I: Demand Response
 - i. Project Location(city, state)
 - ii. Product Description
 - iii. Annual Capacity (MW)
 - iv. Delivery Term (1-3 yrs)
 - v. Delivery Start Date
 - b) Alternative II: Renewable Capacity & Energy
 - i. Project Location (city, state)
 - ii. Delivery Point into CAISO grid (if project located outside of California)

- iii. Point of Interconnection with CAISO grid (if project located within California)
- iv. Proposed designated Delivery Point to SDG&E (if project located outside of SDG&E service area)
- v. Technology Type (bio-mass, solar, wind, etc.)
- vi. Product Type (As-Available, Unit Firm)
- vii. Total Plant size (nameplate capacity MW)
- viii. Capacity Factor:
- ix. Annual Expected MWh
- x. Delivery Start Date (mm/dd/yyyy)
- xi. Curtailability Option (describe if any)

c) Alternative III: Daily Fixed Strike Call Option

- i. Project Location (city, state)
- ii. Unit Firm or Firm LD
- iii. Delivery/Interconnection Point
- iv. Total Plant Size (nameplate capacity MW)
- v. Number of units
- vi. Nameplate Capacity for each unit (MW)
- vii. Delivery Start Date (mm/dd/yyyy)

d) Alternative IV: Tolling Agreement for Energy & Capacity

- i. Project Location (city, state)
- ii. Delivery/Interconnection Point
- iii. Total Plant Size (nameplate capacity MW)
- iv. Number of units
- v. Nameplate Capacity for each unit (MW)
- vi. Delivery Start Date (mm/dd/yyyy)

Instructions on access and use of the RFO Website will be sent to the prospective Respondent's e-mail address.

All questions or other communications regarding this RFO must be submitted via the Restricted Area of the RFO Website by June 23, 2006, the deadline specified in **Section 4.0 RFO Schedule**. SDG&E will not accept questions or comments in any other form, except those provided to SDG&E via its RFO website as indicated below. Upon receipt of questions made available to SDG&E via its RFO website, both questions and answers will be posted to the website as soon as possible but no later than June 30, 2006. *This will be the sole forum for providing questions or comments to SDG&E since no Pre-Bid Conference is schedule for this RFO*.

RFO Website:

http://www.sdge.com/allsource3rfo

DEMAND RESPONSE, RENEWABLES & PEAK CAPACITY

4.0 RFO SCHEDULE

The following schedule and deadlines apply to this RFO. SDG&E reserves the right to revise this schedule at anytime and at SDG&E's sole discretion. Respondents are responsible for accessing the RFO Website for updated schedules and possible amendments to the RFO or the solicitation process. The two critical path dates (see #3 & #8 below) driving the schedule of this RFO may result in material changes which may impact the overall schedule/ timing for a decision. All Respondents should regularly monitor the Website for up-to-date information:

SCHEDULE FOR 2007 – 2009 RFO FOR DEMAND RESPONSE, RENEWABLES & PEAK CAPACITY

NO	MILESTONE EVENT	DATE
1.	RFO Issued	05/24/2006
2.	Question submittal cut-off date: 5:00 p.m. (local prevailing time) ⁴	06/23/2006
3.	Expected CPUC decision on Local Area Requirements	06/29/2006
4.	SDG&E completes responses to all questions received	06/30/2006
5.	CLOSING DATE:	07/07/2006
	Offers must be uploaded to and received by the RFO Website by 5:00 p.m. (local prevailing time)	
	SDG&E must receive from Respondent two original signed offers (hard-	By COB
6.	copies) and two CD-Roms with identical information	07/10/2006
7.	SDG&E meets with PRG and provides preliminary short list	08/14/2006
8.	SDG&E determines FINAL SHORT LIST & notifies all Respondents	Week of
		09/04/2006
9.	Negotiations Complete	11/13/2006
10.	Final PRG Review	Week of
		11/20/2006
11.	Execute Contracts & File with CPUC for Approval (if necessary)	12/31/2006

⁴ Note: A Pre-Bid Conference has been omitted intentionally and will not be scheduled for this RFO.

ALL SOURCE 2007 – 2009

5.0 RFO RESPONSE INSTRUCTIONS

All offers submitted pursuant to this RFO must contain, at a minimum, the following items as listed below. The failure to provide the listed information may disqualify the offer from further consideration.

- 1) The information requested on the Offer Response Form;
- 2) The Credit Application;
- 3) The list of Confidential and Proprietary terms in accordance with Section 11.0 Confidentiality; and,
- 4) Redline comments (if any) to the documents listed in Section 15.0 Model Documents and Other Attachments.

Respondents may download all Offer Response Forms, the Credit Application and model PPA from the RFO Website.

All offers must be electronically uploaded to and received by the Restricted Area of the RFO website by 5:00 PM. local prevailing time, on 07/07/2006. SDG&E prefers that the Credit Application, any narratives and redline comments to the model PPA be in Word format.

No later than 07/10/2006, SDG&E shall have received from Respondent two (2) CD-ROMs in addition to two (2) hardcopy printouts of the original offer signed by the Respondent's authorized officer. The original signed offer must be IDENTICAL to the electronic offer submittal and the CD-ROM version; and collectively all must be sent to the address shown below:

San Diego Gas & Electric Company Electric and Gas Procurement Department Attn: ALL SOURCE3 RFO Response 8315 Century Park Court, CP21D San Diego, CA 92123-1593

All offer materials submitted shall be subject to the confidentiality provisions of Section 11.0 Confidentiality of this RFO.

The following basic information is necessary for SDG&E to adequately evaluate all offers:

- 1) Name of company, address, and company representative (name, phone number and email address)
- 2) Product type (e.g., Alternative I, II, III, or IV)
- 3) Technology type
- 4) Delivery term
- 5) Project location

- 6) Interconnection points for electric & gas.
- 7) Energy delivery points
- 8) Contract capacity
- 9) Pricing
- 10) Operational characteristics including but not limited to maintenance and forced outage rate, minimum run times, dispatching limits and ramp rates, start-up and shut-down lead times and costs.
- 11) Corporate profile
- 12) A list summarizing parts, sections and elements of the offer that are confidential or proprietary.
- 13) Completed Offer Response Form

SDG&E will review and may utilize all information, if any, submitted by a Respondent that is not specifically requested as a part of the Offer Response Forms or Credit Application. During all stages of the RFO process, SDG&E reserves the right to request additional information from individual Respondents or to request all Respondents to submit supplemental materials in fulfillment of the content requirements of this RFO or to meet additional information needs. SDG&E also reserves the unilateral right to waive any technical or format requirements contained in the RFO.

ALL OFFERS SUBMITTED IN RESPONSE TO THIS SOLICITATION SHALL BE VALID AND BINDING UPON THE RESPONDENT UNTIL CONTRACT EXECUTION OR UNTIL REMOVAL FROM THE SHORTLIST.

SDG&E WILL NOT REIMBURSE RESPONDENTS FOR THEIR EXPENSES UNDER ANY CIRCUMSTANCES, REGARDLESS OF WHETHER THE RFO PROCESS PROCEEDS TO A SUCCESSFUL CONCLUSION OR IS ABANDONED BY SDG&E AT ITS SOLE DISCRETION.

6.0 ALL SOURCE 2007 - 2009 ADDITIONAL FEATURES

All offers will be subject to the following:

PRE-BID CONFERENCE

There will not be a pre-bid conference scheduled for this RFO, and thus, it has been intentionally omitted from this RFO's schedule. All questions or other communications regarding this RFO must be submitted via the Restricted Area of the RFO Website by June 23, 2006, the deadline specified in **Section 4.0 RFO Schedule**. SDG&E will not accept questions or comments in any other form, except those provided to SDG&E via its RFO Website as indicated below. This will be the sole forum for providing questions or comments to SDG&E since no pre-bid conference is scheduled. All questions and answers will be posted to the website as they are received.

PROCUREMENT REVIEW GROUP

In D.02-08-071 (p. 24), the CPUC established the Procurement Review Group (PRG), whose members, subject to an appropriate non-disclosure agreement, would have the right to consult with and review the details of each utility's procurement plan, overall procurement strategy, contracts, and related matters. Since that time, the PRG process has been endorsed and continued in a variety of subsequent decisions, as it performs a valuable consultative role in the IOUs' procurement activities, including relating to evaluation of RFOs and their results.⁵

Thus, from RFO language development to offer evaluation to contract negotiation, SDG&E will brief the PRG on a periodic basis during the entire process.

Respondents are hereby notified that revealing offer information to the PRG is required during PRG briefings in accordance with Section 11.0 Confidentiality. Respondents must clearly identify, as part of the offer, what type of information it considers to be confidential.

INDEPENDENT EVALUATOR

In D.04-12-048, the Commission ordered, in certain instances, the use of Independent Evaluators (IE) in All Source solicitations. SDG&E has decided to make use of an IE in this solicitation. In consultations with our PRG, we have selected and begun working with the IE. All offer material produced in this solicitation will be available, under confidentiality provisions, to the IE.

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⁵ See, e.g., D.02-10-062, D.03-12-062, and D.04-12-048.

CALIFORNIA CLIMATE ACTION REGISTRY

In D06-02-032, the CPUC directed SDG&E to include a provision in any power purchase agreement for non-renewable energy that requires the supplier to register and report its GHG emissions with the California Climate Action Registry (CCAR). More information about the CCAR is available at <u>California Climate Action Registry</u>.

Pursuant to D.06-02-032, SDG&E will be required to include a provision in any power purchase agreement for non-renewable energy that will require the supplier to register and report its GHG emissions with the CCAR. Specific registration requirements and reporting protocols with the CCAR will be established, and a method for assigning emissions values to supplies that are unregistered with the CCAR will also be developed. Although the process has not been determined at the time this RFO is issued, Respondents should be aware that they will be required to meet such requirements to register, and report their GHG emissions with CCAR if and when this requirement becomes effective.

SDG&E will comply, and Respondents submitting offers into SDG&E's RFO should also expect to comply, with these requirements as and when they are determined and implemented by the CPUC. The CPUC has scheduled a pre-hearing conference in this proceeding for May 10, 2006. For more information, see: http://www.cpuc.ca.gov/proceedings/R0604009.htm

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For Respondents focusing on Renewables Products, the following information provides further background:

CALIFORNIA RPS PROGRAM

California's Renewable Portfolio Standard (RPS) Program was established when the Governor of California signed into law Senate Bill 1078 on September 20, 2002. The law requires IOUs to comply with two requirements: (1) annually increase their procurement of renewable resources by 1% of its retail sales and (2) procure renewable energy in the amount of 20% of its retail sales by 2017. In response, the CPUC issued D.03-06-071 on June 19, 2003. The decision established various RPS Program parameters by which IOUs and Respondents must abide. The CPUC-issued D.04-06-014 on June 9, 2004, a follow-up decision that established additional RPS Program criteria.

A full text of the renewables statutes and CPUC decisions can be downloaded from the Internet via the following URLs. Respondents are encouraged to review all RPS-related, CPUC-issued directives available on the same Internet websites and are responsible for understanding and abiding by all RPS provisions:

Senate Bill 1078: http://www.energy.ca.gov/portfolio/documents/index.html

CPUC D.03-06-071: http://www.cpuc.ca.gov/PUBLISHED/FINAL_DECISION/27360.htm
CPUC D.04-06-014: http://www.cpuc.ca.gov/PUBLISHED/FINAL_DECISION/37401.htm

RPS ELIGIBILITY CRITERIA

Respondents successfully signing agreements with SDG&E must warrant that the resources being offered in response to this solicitation are certifiable as an "eligible renewable resource" by the California Energy Commission (CEC). Eligibility criteria are set forth by the CEC in its Renewable Portfolio Standard Eligibility Guidebook. The CEC guidebook can be downloaded from the following internet website: http://www.energy.ca.gov/2006publications/CEC-300-2006-007/CEC-300-2006-007-D.PDF. Respondents are encouraged to review all RPS-related, CEC issued directives available on the same Internet website and are responsible for understanding and abiding by all RPS provisions. All requirements set forth within this guidebook and all RPS-related documents shall be incorporated herein by reference.

Respondents are encouraged, although not required, to apply for pre-certification from the CEC in advance of submitting an offer. Should Respondent's offer(s) be selected for short-listing, pre-certification will be required prior to execution of contract. Pre-certification forms are available from the above-entitled guidebook. An excerpt of the eligibility requirements is provided at the end of this section.

7.0 SCHEDULING

In addition to the minimum characteristics described above and in Section 2.0 Scope of Request, additional requirements expected from Respondents successfully entering into an agreement with SDG&E include, but are not limited to the following:

- 1) Respondents shall serve as their own scheduling coordinator or make arrangements for a third party scheduling coordinator at Respondent's cost. Respondent or their third party scheduling coordinator shall be responsible for all CAISO charges attributable to the Respondent or Respondent's scheduling coordinator including but not limited to imbalance costs, fees and penalties.
- 2) Resource operations will be scheduled in accordance with the CAISO Tariff Schedules and Bids Protocols (Original Sheet No. 536 et seq.), and Dispatch Protocol (Original Sheet 453 et seq.), as from time to time modified. CAISO compliant real-time metering of the generation will be required.

8.0 FIN46 REQUIREMENTS

New Securities and Exchange Commission rules for reporting power purchase agreements may require SDG&E to collect and possibly consolidate financial information for the facility whose output is being purchased under long-term contractual arrangements. General guidelines include:

- a) determination of allocation of risk and benefits
- b) proportion of total project output being purchased by SDG&E
- c) proportion of expected project life being committed to SDG&E
- d) pricing provisions of contract, that is, does the contract contain fixed long-term prices or does pricing vary over the term of the agreement based on market conditions or other factors

For any Agreements that meet the applicability criteria, SDG&E is obligated to obtain information from successful Respondents to determine whether or not consolidation is required. If SDG&E determines that consolidation is required, SDG&E shall require the following during every calendar quarter for the term of an Agreement:

- a) Complete financial statements and notes to financial statements, and financial schedules underlying the financial statements, all within 15 days of the end of each quarter.
- b) Access to records and personnel, so that SDG&E's independent auditor can conduct financial audits (in accordance with generally accepted auditing standards) and internal control audits (in accordance with Section 404 of the Sarbanes-Oxley Act of 2002).

9.0 EVALUATION CRITERIA

Offers that meet RFO requirements will be evaluated on the basis of a least cost/best fit (LCBF) analysis. SDG&E will utilize the information provided on the Offer Response Forms to evaluate all offers. During the development of a preliminary shortlist, offers will be compared without reference to the Respondent's identity or distinguishing characteristics; any such characteristics that are necessary to the evaluation will be converted to anonymous scores before any comparison is done. Respondents are responsible for the accuracy of all figures and calculations. Errors discovered during negotiations may impact Respondents' standing on the short-list.

OFFER EVALUATION FOR ALL ALTERNATIVES

While the primary need is for capacity and local RA, secondary benefits such as associated energy and ancillary services shall be evaluated to develop the total benefit/cost.

The LCBF process will generally include the following steps:

- 1. Separate the offerss by product type for prescreening purposes only.
- 2. For Alternative I, rank the offers by net benefit per megawatt over the three-year period. A predetermined benchmark will be used to determine price level for the short list of offers. SDG&E will accept, for further consideration, offers that are under the pricing benchmark.
- 3. For Alternative II, evaluate each offer against other renewable offers by price per megawatt-hour over the three-year period. A predetermined benchmark will be used to determine the price level for the short list of offers. SDG&E will accept, for further consideration, offers that are under the pricing benchmark.
- 4. For Alternative III and Alternative IV, evaluate offers, within these two product types, and rank them by the net benefit per megawatt over the three-year period. For offers less than three years, SDG&E will fill in the missing years. If the quantity of offers received is more than double the need for each product type, SDG&E will stack the offers in order of increasing price, then accept for further consideration, the lowest price offers up to SDG&E's desired quantity for each product type.
- 5. For all offers which SDG&E has accepted for further consideration (shortlist candidates), a cross-check across product types will be performed. This process will be used to create a single short-list of offers. SDG&E will evaluate all shortlist candidates using SDG&E's production cost model to determine expected operation and total portfolio cost over the three-year period. Benefits/costs will also be calculated for local RA capacity, ancillary services, congestion costs, import limitations, greenhouse gas adder.
- 6. Final selection will be from those minimum-cost offers that collectively meet the desired procurement quantity over three years.
- 7. The evaluation process and results will be presented to SDG&E's Independent Evaluator and PRG for its review and input.

10.0 RESERVATION OF RIGHTS

SDG&E makes no guarantee that a contract award shall result from this RFO. SDG&E reserves the right at any time, at its sole discretion, to abandon this RFO process, to change the basis for evaluation of offers, to terminate further participation in this process by any party, to accept any offer or to enter into any definitive agreement, to evaluate the qualifications of any Respondent or the terms and conditions of any offer, or to reject any or all offers, all without notice and without assigning any reasons and without liability of Sempra Energy, SDG&E, or any of their subsidiaries, affiliates, or representatives to any Respondent. SDG&E shall have no obligation to consider any offer.

11.0 CONFIDENTIALITY

Except with the prior written consent of SDG&E, Respondents may not disclose (other than by attendance alone at any meeting to which more than one Respondent is invited by SDG&E) to any other Respondent or potential Respondent their participation in this RFO, and Respondents may not disclose, collaborate on, or discuss with any other Respondent, strategies or the substance of offers, including without limitation the price or any other terms or conditions of any indicative or final offer.

SDG&E will use the higher of the same standard of care it uses with respect to its own proprietary or confidential information or a reasonable standard of care to prevent disclosure or unauthorized use of Respondent's confidential and proprietary information that is labeled as "proprietary and confidential" on the offer page in which the proprietary information appears (confidential information). Respondent shall also summarize the elements of the offer(s) it deems confidential. The summary must clearly identify whether or not price, project name, location, size, term of delivery and/or technology type (either collectively or individually) are to be considered confidential information. Confidential information may be made available on a "need to know" basis to SDG&E's directors, officers, employees, an independent third-party evaluator required by the CPUC, agents and advisors (representatives) for the purpose of evaluating Respondent's offer, but such representatives shall be required to observe the same care with respect to disclosure as SDG&E.

Notwithstanding the foregoing, SDG&E may disclose any of the confidential information to comply with any law, rule, or regulation or any order, decree, subpoena or ruling or other similar process of any court, securities exchange, control area operator, governmental agency or governmental or regulatory authority at any time even in the absence of a protective order, confidentiality agreement or non-disclosure agreement, as the case may be, without notification to the respondent and without liability or any responsibility of SDG&E to the Respondent.

It is expressly contemplated that materials submitted by a Respondent in connection with this RFO will be provided to the CPUC, its staff, and the PRG. SDG&E will seek confidential treatment pursuant to public utilities code section 583 and general order 66-c of the CPUC, with respect to any Respondent confidential information submitted by SDG&E to the CPUC for the purposes of obtaining regulatory approval. SDG&E will also seek confidentiality and/or non-disclosure agreements with the PRG. SDG&E cannot, however, ensure that the CPUC will afford confidential treatment to a Respondent's confidential information or that confidentiality agreements or orders will be obtained from and/or honored by the PRG or CPUC.

SDG&E, its representatives, Sempra Energy, and any of their subsidiaries disclaim any and all liability to a Respondent for damages of any kind resulting from disclosure of any of Respondent's information.

12.0 CREDIT TERMS AND CONDITIONS

SDG&E has the unilateral right to evaluate and determine the credit-worthiness of the Respondent relative to this RFO. The Respondent is required to complete, execute and submit the RFO Credit Application as part of its offer. The application requests financial and other relevant information needed to demonstrate creditworthiness. Respondents may download the application from the RFO Website.

All credit support arrangements (e.g., parent guaranty, letter of credit, cash deposit) must be negotiated prior to execution of an agreement. A Model Guaranty and a Model Letter of Credit may be downloaded from the RFO Website.

For questions regarding credit terms, please submit them electronically via the RFO website. Any questions involving proprietary or confidential information are discouraged since all questions and answers will be posted to the RFO website. SDG&E will address individual credit issues with short listed Respondents.

13.0 CPUC APPROVAL

SDG&E may submit, at its sole discretion, the signed contracts to the CPUC for approval. All signed contracts to be submitted to the CPUC for approval will contain a CPUC approval condition precedent for effectiveness of the contract.

14.0 OFFER RESPONSE FORMS AND DOCUMENTS

Attached to this RFO and available for download from the RFO Website are the following documents. Respondents must submit all relevant documents in response to this RFO.

- 1) Offer Response Form Respondents shall pay careful attention to the response forms. The forms are in Word and/or Excel format and each Excel file contains multiple sheets where Respondents shall provide detailed operating variables. Please be aware that some of the cell ranges in the detailed operating sheets are input cells and some are calculated cells. SDG&E will use your input data to calculate the performance criteria for determining whether or not your project fits within its resource portfolio. Please utilize the standard worksheets as much as possible to describe your project. However, if you choose to change the standard format or use a different format, please use a Word and/or Excel spreadsheet and explain your changes or assumptions on the sheet(s). All responses must clearly indicate whether or not RA capacity is being offered. Also, some sheets may contain more than a single page. Respondents shall be responsible for submitting all appropriate sheets required for their offer(s). The forms available for download are:
 - a) Alternative I Demand Response Offer Form
 - b) Alternative II Renewable Capacity & Energy Offer Form
 - c) Alternative III Daily Fixed Strike Call Option Offer Form
 - d) Alternative IV Tolling Agreement for Energy & Capacity
- 2) Credit Application

RFO Website:

http://www.sdge.com/allsource3rfo

15.0 MODEL DOCUMENTS AND OTHER ATTACHMENTS

Attached to this RFO and available for download from the RFO Website are the following documents. Respondents shall review all documents in advance of submitting offers and submit any redline changes or comments with the offers.

- 1) ALTERNATIVE II: Model Renewable EEI Power Purchase and Sales Agreement For Renewables Only
 - a) EEI Master Agreement
 - b) Form EEI Cover
 - c) Form Confirmation (As-Available Non-Intermittent)
 - d) Form Confirmation (As-Available Intermittent)
 - e) Form Confirmation (Unit Firm)
 - f) Additional EEI Exhibits
- 2) ALTERNATIVE III: Model Confirm for Daily Fixed Strike Call Option
 - a) EEI Master Agreement
 - b) EEI Cover
 - c) Unit Firm
 - d) Firm LD
- 3) ALTERNATIVE IV: Model Tolling Agreement for Energy & Capacity
- 4) Model Guaranty
- 5) Model Letter of Credit

RFO Website:

http://www.sdge.com/allsource3rfo

EXHIBIT E

CONFIDENTIAL