SOUTHERN CALIFORNIA GAS COMPANY
BIOGAS CONDITIONING & UPGRADING TARIFF (A.12-04-024)
(DATA REQUEST DRA-A1204024-SCG-MK3-1)

QUESTION 1:

Please explain in detail and quantify all benefits that would accrue to SCG ratepayers as a result of this application. Attach all spreadsheets with formulas if applicable.

RESPONSE 1:

Please see application testimony:

- Chapter I, Section IIA "SoCalGas' Biogas Conditioning/Upgrading Services Tariff Provides Ratepayers with Environmental Benefits (Public Utilities Code § 740.8)," page 4
- Chapter II, Section VI "SoCalGas' Proposed Service Provides Customer Benefits", pages 16-17, and
- Supporting workpapers to the testimony, Workpapers 1, 3, 7, 8, and 9.

As outlined in the referenced testimony, the proposed service will provide qualitative and quantifiable environmental benefits to ratepayers.

Chapter I Policy_FinalFormatted

Chapter II Services _FinalFormatted04.2

QUESTION 2:

Please explain in detail and quantify all costs that would accrue to SCG ratepayers as a result of this application. Attach all spreadsheets with formulas if applicable.

RESPONSE 2:

No incremental costs will accrue to ratepayers as a result of this application. As stated in application testimony, Chapter II, page3 (see Chapter II testimony located in response 1), “SoCalGas is not proposing to charge any of the costs of this service to its general ratepayers.”

QUESTION 3:

What funds will SCG use to pay for the construction of the facilities and all other upfront costs?

RESPONSE 3:

As stated in Krystal Joscelyne's Chapter III testimony page 9 lines 2-5, "SoCalGas' General Rate Case (GRC) filing currently before the Commission, contains no requests for additional funding for the BCS Tariff activities…" Funding for the incremental BCS Tariff charges from third parties come from SoCalGas' shareholders.

QUESTION 4:

If the costs of providing the conditioning and upgrading service are greater than the tariff revenues from the service, what source of money will SCG use to make up for the shortfall?

RESPONSE 4:

Please see response to question 21.

QUESTION 5:

Please provide a list of all companies in SCG's territory that currently provide biogas conditioning and upgrading service.

RESPONSE 5:

Biogas conditioning and upgrading services involves a multitude of gas conditioning processes ranging from the removal of specific gas constituents to upgrading to pipeline quality for injection into a common carrier pipeline. Individual technology, as considered by SoCalGas for the proposed service, is described in Ron Goodman's testimony (Chapter II Section V.B, pages 14-15, and Section IX, pages 22-24). Information on specific companies who provide this technology and are located within SoCalGas' service territory may be found through the public domain.

QUESTION 6:

How will SCG ensure that the gas leaving the facility will be safe for injection into the natural gas pipeline system? Please include in your answer all regulatory authorities that would be involved.

RESPONSE 6:

All California investor-owned utilities have Commission approved gas quality and interconnection standards/specifications (Rule 30 and 39 respectively in the case of SoCalGas). These standards and specifications are to ensure the safe injection and/or transportation of customer-owned gas. Also, as stated in application testimony, Chapter II, page 16, lines 1-7, "Because SoCalGas does not contemplate ownership of the raw biogas entering the biogas conditioning/upgrading facility nor the upgraded biogas leaving the biogas conditioning/upgrading facility, the biogas producer will be responsible for entering into the appropriate Utility Access Agreement (Rule 39) for delivery and metering of the conditioned gas into SoCalGas' system, and for complying with the gas quality and interconnection requirements as set forth in Rule No. 30 - Transportation of Customer-Owned Gas and SoCalGas' Biomethane Guidance Document."

QUESTION 7:

Please provide all market analyses that SCG or its consultants have performed for the biogas conditioning and upgrading service projects.

RESPONSE 7:

Workpapers 7, 8 and 9 break down the total potential for biogas production for the three primary market sectors. Also, SoCalGas contracted with an outside dairy consultant (Seahold Consulting) to provide some analysis of the dairy sector in the Central Valley. The two reports will be sent separately due to file size and both are considered **confidential** and is being submitted under the confidentiality provisions of **General Order 66-C and section 583 of the Public Utilities Code** and provided only to the DRA.

QUESTION 8:

Please provide the results of any surveys SCG has performed regarding the biogas conditioning and upgrading services projects.

RESPONSE 8:

SoCalGas has not performed any surveys for the proposed biogas conditioning/upgrading service tariff projects.

QUESTION 9:

Please provide a list of all other investor-owned utilities that provide biogas conditioning and upgrading service projects in the United States.

RESPONSE 9:

SoCalGas is not aware specifically of other IOUs offering conditioning service in the US consistent with our intended service offering. It is likely this information can be found through the public domain.

QUESTION 10:

Please explain in detail and quantify all of the risks that are associated with this application. For each risk explain whether the risk is assumed by SCG shareholders, SCG ratepayers, or customers of the biogas service. For example:

a. Please explain in detail any liability risks associated with the construction of or operation of the biogas conditioning and upgrading services. Who takes on those risks (i.e., SCG shareholders, SCG ratepayers, customers of the biogas conditioning and upgrading service)?

b. Are there any risks associated with stranded assets that would occur during construction of the biogas conditioning and upgrading service facilities or after the facilities are built? For example, the customer cancels service prior to the specified termination date, or the customer defaults on the contract, or the customer sells the site? Who takes on those risks (i.e., SCG shareholders, SCG ratepayers, customers of the biogas conditioning and upgrading service)?

RESPONSE 10:

Once initial contact is made between the potential tariff customer and SoCalGas, a dialogue will transpire regarding customer requirements at a high level, and will usually involve SoCalGas providing a budgetary quote. This enables the customer to evaluate their service options in the future.

As described in Ron Goodman's testimony (Chapter II, Section II, p. 3-4), if the customer seeks additional support from SoCalGas and requires a firm bid relative to meeting their detailed requirements, SoCalGas would then collect a Feasibility Services Fee from the customer and conduct a feasibility analysis (Included as Appendix B in the Application) to determine the technical and economic feasibility of the design, equipment procurement, construction, and the operation and maintenance of gas conditioning equipment as necessary to treat the customer owned biogas for use as pipeline quality gas or to other specifications as defined by the customer. The Feasibility Services Fee would cover all intended SoCalGas costs relative to providing the customer with a firm bid, including administering the bid process. If at any time after the fee is collected, prior to the customer signing a Services Agreement with SoCalGas, the customer decides to not accept the terms of the Agreement, the customer would forfeit this fee. At this point, the collected funds have been intended to cover any booked time spent on the project and will be reconciled through SoCalGas' miscellaneous revenues account for later distribution back to ratepayers.

If at any time after the Services Agreement is signed by the customer, and the customer decides not to move forward with the project, SoCalGas would seek additional 'out of pocket' expenses if applicable, from the customer in the form of a letter of credit. The level of protection afforded by the letter of credit would be evaluated prior to the execution of a Services Agreement between the customer and SoCalGas.

If the EPC fails to meet the project requirements after the Services Agreement is executed, SoCalGas would seek liquidated damages from the EPC in order to remedy the problem such that the project scope and timeline would not be compromised. This form of protection would insulate SoCalGas, its shareholders, and ratepayers from any cost exposure. The liquidated damages level of protection from the EPC would be evaluated prior to an executed agreement between SoCalGas and the EPC.

A typical project will take 12-18 months to complete, once the Services Agreement is executed. If a pipeline interconnection is not required, this time may be reduced. Following the construction period, SoCalGas would contract with an Operation and Maintenance service provider (O&M), who would contract as a 3rd party vendor to SoCalGas for the purposes of maintaining the BCS plant for the term set forth in the Services Agreement.

As with any other tariff service, the infrastructure assets used in providing that service are ratebase assets and any customer specific charges are treated as miscellaneous revenues. If SoCalGas constructs and places into operation a biogas conditioning/upgrading facility on behalf of a customer, that specific customer will be charged the full cost of service including capital, O&M and all applicable overheads for the specific project. Those assets will be incorporated into ratebase and the associated customer revenues will become part of miscellaneous revenues in the next GRC proceeding. If a customer files for bankruptcy, cancels service, or is ultimately unable to pay for any reason for the infrastructure installed on its behalf, SoCalGas will first exhaust all commercial and legal remedies to collect the remaining balance due and the required costs to remove and redeploy the asset from the customer premises. If the asset cannot be redeployed it will be retired. SoCalGas shareholders bear the economic loss between GRC's until the remaining undepreciated capital invested is rolled-in to ratebase along with miscellaneous revenues forecasts associated with Biogas Conditioning/Upgrading Services Tariff for approval in the subsequent GRC.

QUESTION 11:

On Testimony Chapter II, page 2, lines 11-13, SCG specifies that it developed the Biogas Conditioning/Upgrading Services Tariff in response to customer inquiries and requests.

a. How many and on what dates did SCG receive customer inquiries or requests in regards to biogas conditioning/upgrading services?
b. Please send electronic copies of all customer inquiries and requests that SCG received in regards to biogas conditioning/upgrading services.

RESPONSE 11:

SoCalGas did not maintain specific records on customer inquiries prior to development of a formal biogas conditioning and upgrading service proposal. The statement was based on inquires and requests made from time to time by customers about the possibility of SoCalGas constructing and operating a biogas conditioning and upgrading plant on customer property.

In general, customers have inquired about current SoCalGas services, and services that will potentially be offered in the future in order to meet their evolving business requirements, particularly for managing organic waste. In response, SoCalGas has attended industry conferences, vendor meetings, and public forums in order to best understand customer needs and develop solutions in order to provide the continued high level of service our customers have come to expect from SoCalGas.

QUESTION 12:

In Chapter III, page 9, lines 2-5, the witness states that SCG's GRC filing, currently before the CPUC, contains no requests for additional funding for the Biogas Conditioning/Upgrading Services Tariff activities in the test year or any forecasted revenues from offering the service. Did SCG consider this proposal prior to the GRC (or any opportunity after allowing SCG to amend its GRC testimony)? If so, please indicate the rational for not including the request in the GRC.

RESPONSE 12:

On November 22, 2010, SCG filed Advice Letter No. 4172 seeking Commission approval to offer biogas services as a non-tariff product and service (NTP&S). It was SoCalGas' opinion that establishing this service as a NTP&S was the proper regulatory mechanism to offer our customers such services and as such did not contemplate including a proposal to offer this service in the GRC. Rule VII.E of the Commission's Affiliate Transaction Rules calls for a utility seeking to offer a new NTP&S to do so via an Advice letter Filing.

On August 9, 2011, Energy Division sent formal notification rejecting Advice Letter No. 4172. One of the recommendations in the formal notification includes the following:

> As the objectives served by these proposals may help address barriers to increase Bioenergy production, I would urge you to consider filing a formal application quickly so that the issues presented may receive full consideration and the Commission may consider providing relief from existing policies as appropriate and supported by an evidentiary record.

Based on Energy Division's recommendation that SCG file an application seeking Commission authority to offer biogas services, SCG did not consider it appropriate to attempt to include the proposed services in the GRC which was nearing the start of hearings. During the remainder of 2011 SCG was determining whether to offer the biogas services and which regulatory structure was best. That determination was not final until hearings had in fact begun in the GRC. Accordingly, SCG filed A.12-04-024 seeking Commission approval to establish a new tariff to offer biogas conditioning/upgrading services.

QUESTION 13:

In Chapter III, page 10, line 10, the witness states that the Biogas Conditioning/Upgrading Services Tariff charges consist of two components: (I) Ownership Charge; and (2) Operation &Maintenance (O & M) Charge. Will the tariff charges include the entire rate base revenue requirement necessary for the service life for all capital additions? Please show this analysis on a year by year basis for the service life of the capital additions. Attach all spreadsheets with formulas if applicable.

RESPONSE 13:

The tariff charges will include the entire ratebase revenue requirement necessary for the service life for all capital additions. As stated in application testimony located in Chapter III, section IV, page 10, line 10 through page 13 line 17, provides an example of how this will be accomplished. Additional detail is provided in the response to Question 18.

QUESTION 14:

In Chapter III, page 8, lines 12-13, and page 9, lines 1-2, the witness states that the accounting methods described above are designed to ensure that the service provided under the tariff for Biogas Conditioning/Upgrading Services customers are appropriately tracked on a fully loaded basis and that ratepayers are credited for any costs embedded in general rates, until such time as the miscellaneous revenues received for these services are incorporated into rates. For the example project described on Chapter III, page 10 please show, on a year by year basis, how the SCG ratepayers are credited for any costs embedded in general rates. Provide this analysis in an excel spreadsheet with all formulas intact.

RESPONSE 14:

As described in Chapter III, page 9, line 2-5 "SoCalGas" General Rate Case ("GRC") filing, currently before the Commission, contains no requests for additional funding for the BCS Tariff activities in the test year or any forecasted revenue from offering the service." The example project described on Chapter III, pages 9-13, is for illustrative purpose for the calculation of the biogas conditioning/upgrading services charges. To the extent that SoCalGas uses its existing resources to provide biogas conditioning/upgrading services, SoCalGas shall reimburse ratepayers by adjusting its fixed cost balancing accounts as described in the application testimony located in Chapter III, pages 12, lines 9-16, and page 13, lines 13-17. The balance in these fixed cost balancing accounts will be amortized in rates in connection with SoCalGas' annual regulatory account balance update filing for rates effective January 1 of the following year.

QUESTION 15:

In Chapter III, page 3, lines 6-8, the witness specifies that direct costs can be separated into six types of activities: Customer Outreach, Contract Development, Engineering and Cost Estimation, Procurement and Construction, Engineering Oversight, and Operation and Maintenance. Please specify what SCG estimates the staff of Full Time Equivalent (FTE) employees necessary to staff each of these six activities for the biogas conditioning and upgrading program.

RESPONSE 15:

Response 15 is considered **confidential** and is being submitted under the confidentiality provisions of **General Order 66-C and section 583 of the Public Utilities Code** and provided only to the DRA.

QUESTION 16:

In Chapter III, page 2, the witness specifies that all costs incurred in providing service under the Biogas Conditioning/Upgrading Services Tariff are properly tracked and ratepayers are credited for any embedded costs already included in general rates. On the following pages the witness specifies that many of the direct cost activities will be performed by utility staff and utility Account Managers. How much excess staff capacity is available from the embedded resources approved in the GRC to implement the Biogas Conditioning/Upgrading Services Tariff?

RESPONSE 16:

The utility groups that would be needed to implement Biogas Conditioning/Upgrading Services do not have any excess resources. However, to the extent that SoCalGas uses its existing resources to provide these services, SoCalGas shall reimburse ratepayers by adjusting its fixed cost balancing accounts as described in application testimony located in Chapter III, page 9, lines 11-18.

QUESTION 17:

In Chapter III, page 2, line 22 and page 3, line 1, the witness specifies that the majority of costs associated with the provision of service under the Biogas Conditioning and Upgrading Services Tariff will be incremental charges from third-party service providers. Does the funding for the incremental charges from third parties initially come from SCG's ratepayers or SCG's shareholders?

RESPONSE 17:

Funding for the incremental charges from third parties come from SoCalGas' shareholders.

QUESTION 18:

SGC claims to be able to accurately pre-calculate costs over the life of service of biogas facilities, and to use these calculations in setting tariff rates. Please provide an overview of the methodology used for this pre-calculation. In addition, please provide a year over year breakdown of costs and obligations for a sample biogas services project over the full life of the facility. Include a cost breakdown for all phases of the project including customer outreach, contract development, engineering and cost estimation, engineering oversight, procurement and construction, operations and servicing and/or all other appropriate project phases. Please estimate a timeframe for each phase. For each phase of the project, indicate costs and revenues, and indicate whether these costs and revenues accrue to ratepayers, tariff customers, or shareholders. Please specify the specific point in time at which ratepayers are made whole (i.e., tariff revenues credited >= ratepayer funded revenues in rates for the facility). Also include the estimated total service life of the project and typical contract duration for the tariff customers.

A sample table is included below, which breaks down the project into phases and clearly delineates responsibilities.

Year	Project Phase	Ratepayers	Tariff Customer	Shareholders
0	Customer Outreach			Incur Proj Costs of $XXX
	Contract Development		• Incur Proj. Feasibility *Pee* Of $X • Incur site evaluation and design fees of $Y	Incur Proj Costs of $YYY
	Engineering/ Cost Estimation	• Pay Revenue Require of $XXX		Receive Return on Investment of $XXX
	Engineering Oversight			Receive Return on Investment of $XXX

	Procurement and· Construction	• Pay Revenue Require of $XXX • Credited Tariff Revenues of $YYY		Receive Return on Investment of $XXX
1	Operations and Servicing	• Pay Revenue Require of $XXX • Credited Tariff Revenues of $YYY	Incur AnntJal Service Fee of $XXX	Receive Return on Investment of $XXX
2			Incur Annual Service Fee of $XXX	Receive Return on Investment of $XXX
....			Incur Annual Service Fee of $XXX	
Yr X	Tariff Contract ends			Receive Return on Investment of $XXX
....	Ratepayers made whole	Total Revenues paid = Tariff Revenues credited		Receive Return on Investment of $XXX
Yr45	Facility End of Life			Receive Return on Investment of $XXX
	Facility Removed			Receive Return on Investment of $XXX

RESPONSE 18:

Pre-calculation of capital costs involves definition of the project scope, specifications and layout followed by estimation of costs for engineering, equipment and site construction. These estimates are generally provided by outside engineering consultants or internal engineering staff. Operations and maintenance costs are estimated using historical cost information and analysis provided by qualified consulting engineers and/or internal resources. For both capital and O&M, SoCalGas will, as a general practice, seek supplier bids prior to finalization of contract price in order to ensure accurate cost estimation. As appropriate, a contingency will be added to cost estimates in order to reach a high level of confidence that revenues will cover or exceed project costs. Once the base capital and O&M costs have been developed, standard utility overheads are added according to the procedures described in detail in the testimony of Ms. Joscelyne.

Conclusions
Years 1-3: Embedded costs returned to ratepayer from revenue collected from customer via balancing account
Years 4-20: Net cost to ratepayer is $0
Years 1-20: Shareholder net revenue is equal to authorized ROE of 10.82%

General Assumptions
Contract Term of 15 years
Book Life of 15 years
Salvage Value Included
Cost Escalation Included
Overhead Loading Included
Federal Tax rate of 35.00%
State Tax rate of 8.84%
Year 4 is beginning of next GRC cycle
3rd Party Maintenance provided over the entire contract length
3rd Party Maintenance escalated yearly over the contract length

Cost Assumptions			
	Total	**O&M**	**Capital**
Total Fully Loaded Cost (Labor)			
Customer Outreach	546	-	546
Contract Development	58,192	-	58,192
Engineering and Cost Estimation	59,771	-	59,771
Engineering Oversight	166,197	-	166,197
Procurement and Construction	80,912	-	80,912
Operations and Servicing	928,125	928,125	-
Total Labor	$1,293,742	$928,125	$365,617
Total Fully Loaded Cost (Non-Labor)			
Customer Outreach	-	-	-
Contract Development	-	-	-
Engineering and Cost Estimation	10,508	-	10,508
Engineering Oversight	7,597,284	-	7,597,284
Procurement and Construction	-	-	-
Operations and Servicing	5,591,760	5,591,760	-
Total Non-Labor	$13,199,552	$5,591,760	$7,607,792

Please see attached workbook for year-by-year calculations.

Adobe Acrobat
PDFXML Document

DRA-01-18 BCS Table

QUESTION 19:

What was SCG's reasoning behind the choice of a 12 year term for biogas conditioning/upgrading contracts?

RESPONSE 19:

SoCalGas is unsure as to why DRA believes SoCalGas selected a 12 year agreement term. As stated in Chapter II, page 3, line 9, "SoCalGas will provide the biogas conditioning/upgrading service tariff under a long term (**10 to 15 year**) service agreement". The biogas conditioning/upgrading equipment can generally last 15 years without any significant rebuild costs. Contract term length is negotiated with the customer; however, despite the contract term length, the full capital cost will be recovered from the BCS customer.

QUESTION 20:

What is the service life in rates for facilities built under this tariff?

RESPONSE 20:

The book life of the biogas conditioning/upgrading equipment is currently 15 years.

QUESTION 21:

How will SCG respond if cost of service differs from pre-calculated estimates? If SCG collects more from tariff customers than the cost of service, who receives the excess funds? If SCG collects less from tariff customers than cost of service who makes up for the shortfall? Is there any instance in which ratepayers would be responsible for such a shortfall? Is there a mechanism in place to raise or lower tariff obligations to ensure that tariff collections match cost of service over the life of the contract? If so, please describe.

RESPONSE 21:

In the case where SoCalGas collects more from tariff customers than the cost of service, SoCalGas shareholders will receive the benefits in between general rate case cycles. In the next general rate case, the undepreciated capital investment will be rolled into ratebase along with the miscellaneous revenues forecast, for commission approval. A reduction to base margin was designed to keep rates neutral to this transaction; however, in this case ratepayers will now benefit from the excess tariff revenues. The opposite will be true in the case where SoCalGas collects less from tariff customers than the cost of service.

This cash flow structure creates a strong incentive for SoCalGas to be conservative in cost estimation and contingency calculations—uneconomic projects will jeopardize shareholder earnings. Therefore, while no formal mechanism exists to readjust tariff obligations when cost of service differs from pre-calculated estimates, it seems more likely that projects will be priced in a conservative manner and the net result will be ratepayer and shareholder benefits as tariff revenues are higher than pre-calculated estimates.

SoCalGas has the ability to unilaterally re-price the contract under three situations: 1) when there is a change in the quality or quantity of untreated biogas from the agreed upon specifications, 2) when the biogas producer fails to meet any of its responsibilities under the agreement, or 3) a suspension or change in the services as a result of a change in law or some latent site defect. The biogas producer can request a change in pricing, but only subject to SoCalGas' approval.

QUESTION 22:

In Testimony Chapter II, page 3, lines 1-5, the witness discusses a preliminary assessment of feasibility and cost.

a. Please elaborate on the details of all of the elements and tasks that are included in this assessment of feasibility.

b. Please provide a ballpark estimate of how much an assessment of feasibility will cost?

c. How and when will the assessment of feasibility be recovered by the potential tariff customer?

d. Please identify in the proposed Tariff or contract documents where the assessment of feasibility is located.

e. If a potential Tariff customer decides not to take on the biogas conditioning and upgrading tariff service after an assessment of feasibility is completed, from who (i.e., ratepayers, potential tariff customer, shareholders) and when are those abandoned costs recovered?

f. Please send all details, including costs and invoices for any biogas conditioning and upgrading service assessments of feasibility that SoCalGas has completed or is in process.

RESPONSE 22:

a. In order to provide the customer with a Feasibility Analysis, SoCalGas will provide the customer with a biogas questionnaire (see attachment). Once completed by the customer, SoCalGas will create bid packages which satisfy the customer requirements and gas quality specifications gathered from the questionnaire.

SCG BIOGAS QUESTIONNAIRE.pdf

b. The cost associated with performing the Feasibility Analysis is anticipated to be approximately $50,000. This includes all tasks associated with gathering customer

requirements, formulating the bid packages to be sent to prospective vendors and assessing the information prior to providing a firm bid to the customer.

c. Once the customer decides they are interested in having a Feasibility Analysis performed, they complete the biogas questionnaire, pay the Feasibility Services Fee to SoCalGas and wait 3-6 months for a response.

d. The Feasibility Analysis is not included in the tariff documents as each study is project specific and based on customer specific requirements. SoCalGas will conduct the Feasibility Analysis with the intent of determining the technical and economic feasibility of the design, equipment procurement, construction, operation and maintenance of gas conditioning/upgrading equipment as necessary to process the biogas and upgrade/condition it to the gas quality level(s) specified by the customer. The scope of work may include, but is not limited to, the following: comprehensive scope definition, define the project execution processes for technical execution, construction, operations & maintenance, and other business related aspects of the project, and preparation of the scope of work and pricing for the Services Agreement.

e. If the customer decides to not accept the terms of the tariff service after the Feasibility Services Fee has been collected then the customer would forfeit the Feasibility Services Fee to SoCalGas. The Feasibility Services Fee is intended to cover any booked time and expenditures associated with the project up until the contract has been signed. The Feasibility Services Fee and incurred expenses will be reconciled through SoCalGas' miscellaneous revenues account for distribution back to ratepayers for any embedded costs incurred.

f. To date, no funds have been collected, nor has any feasibility study been completed or provided to customers.

QUESTION 23:

Are any site evaluation and design activities performed prior to the execution of a tariff agreement?

a. Please elaborate on the details of all of the elements and tasks that are included in this site evaluation and design activities. Also explain the differences between an "assessment of feasibility" and "site evaluation and design activities."

b. Please provide a ballpark estimate of how much a site evaluation and design activities will cost?

c. How and when will the site evaluation and design activities be recovered by the potential tariff customer?

d. Please identify in the proposed Tariff or contract documents where the site evaluation and design activities is located. If there is an additional contract document that discusses this Tariff customer requirement, please send that document.

e. If a potential Tariff customer decides not to take on the biogas conditioning and upgrading tariff service after a site evaluation and design activities is completed, from who (i.e., ratepayers, potential tariff customer, shareholders) and when are those costs recovered?

f. If the potential Tariff customer is responsible for the site evaluation and design activities costs and refuses to pay, from who (i.e., ratepayers, potential tariff customer, shareholders) and when are those abandoned costs recovered?

g. Please send all relevant details, including costs and invoices for any biogas conditioning and upgrading service site evaluation and design activities that SoCalGas has completed or is in process.

RESPONSE 23:

Site evaluations and associated costs are considered in the Feasibility Analysis. In order to provide a more comprehensive scope of work, which includes plant design and construction, as well as a scope of work and cost structure during the maintenance period, SoCalGas would need to perform a site evaluation both during and after the Feasibility Analysis.

The site evaluation serves as two main functions; 1) Determines the logical site specifics used in formulating detailed requirements, that include but are not limited to the conditioning/upgrading plant location, design constraints, and permitting requirements, 2) Determines site readiness prior to the plant construction period commencing.

QUESTION 24:

Does the biogas tariff include a contingency similar to that included in the related gas compression tariff application?

a. Please elaborate on the details of the contingency (e.g., list all factors that the contingency is planned to cover).

b. Please elaborate on the methodology for calculating the contingency.

c. Please provide a ballpark estimate of how much the contingency might be for a typical biogas conditioning and upgrading service facility.

d. Please send all relevant details, including costs for any biogas conditioning and upgrading service contingency calculation that SoCalGas has completed or is in process.

RESPONSE 24:

a. Service providers bidding on project work typically add a contingency to their bids, commensurate with scope of services offered, to ensure full recovery of their costs and to compensate for unexpected design changes which are not customer driven, equipment and/or material prices changes and other unforeseen circumstances and/or events which could impact cost. In the event that SoCalGas contracts to a 3rd party providers for individual services (such as design, equipment, construction, and O&M) rather than turnkey, SoCalGas will add a contingency to the price estimate for similar reasons above in order to ensure full recovery of costs. Furthermore, SoCalGas may also choose to add a separate contingency on top of turnkey bids in order to ensure full recovery of costs related to project scope changes, unanticipated field change orders, compliance and regulatory issues, and/or other unexpected events or circumstances. A contingency may also be added to O&M estimates, to the extent that O&M service subjects SoCalGas to any cost risk.

b. To derive applicable contingencies, SoCalGas will perform a comprehensive risk assessment for each project that will take into account the unique requirements of each project. When feasible, risk mitigation tools (e.g. a credit risk mitigation tools is a letter of credit) will be employed leaving only residual risk exposures. SoCalGas will assess the potential impacts and probabilities from varying

sources of residual risk such as scope, complexity, and price exposure. Estimates for these probabilities and impacts will come from a team of internal experts using both historical observations and forward-looking indicators. Correlations between risks that may amplify or mitigate risks will also be considered in deriving the contingency. SoCalGas plans to be conservative in the estimation of such contingencies (e.g., err on the high side) in order to ensure full recovery of all costs.

c. As discussed above, contingency amounts will depend on the scope, complexity and overall risk profile of the project. It is reasonable to assume that contingency adders would potentially be around 5% to 15%.

d. Response 24(d) is considered **confidential** and is being submitted under the confidentiality provisions of **General Order 66-C and section 583 of the Public Utilities Code** and provided only to the DRA.

QUESTION 25:

Should the State legislature not act to begin certifying biogas facilities for RPS credits by the end of the legislative session, does SCG intend to move forward with service under this tariff application? What effect would this have on tariff pricing and/or cost recovery?

RESPONSE 25:

Customers have a variety of options for using their conditioned/upgraded biogas. As stated in application testimony, Chapter II, page 2, lines 13-16 (see Chapter II testimony located in Response 1), "The proposed service is designed to meet the current and future needs of biogas producers seeking to upgrade their biogas for beneficial uses such as pipeline injection, onsite power generation, or compressed natural gas vehicle refueling stations". Renewable natural gas that is injected into the utility pipeline network and nominated to an RPS certified generation facility and applied towards a power generator's RPS goals is only one of many potential options. As such, SoCalGas fully intends to move forward with service under this tariff application and there will be no effect on tariff pricing and/or cost recovery should the State legislature not act by the end of the legislative session.