



Van Horn Consulting

*Energy, Economic, Regulatory
& Environmental Consultants*
Orinda, CA 94563

Public Report

Independent Evaluator Report For Southern California Edison's 2009 All-Source Request For Offers

Van Horn Consulting
Orinda, CA 94563
consulting@vhcenergy.com

Mike Katz
Ed Remedios
Andy Van Horn

January 25, 2010



Table of Contents

	<u>Page</u>
I. Introduction.....	1
II. Product Overview	2
III. Summary of Results and Conclusions.....	4
IV. Responses to Questions in the Short Form Template.....	4
A. Role of the Independent Evaluator (IE)	4
B. Fairness of SCE’s Bidding and Selection Process	5
C. Description of SCE’s Evaluation and Selection Process	7
D. Validation of SCE’s Evaluation Results	11
E. SCE’s Outreach.....	13
F. Project-specific Negotiations	13
G. Affiliate Offers and UOG Ownership Proposals (If Applicable)	14
H. VHC’s Recommendations	14
Addendum: Independent Evaluator’s Confidential Report	

List of Tables

Table 1. Products Requested in the 2009 RFO	3
---	---



I. INTRODUCTION

Van Horn Consulting (VHC) prepared this public report, as well as a confidential Addendum, in its role as the Independent Evaluator (IE) for Southern California Edison’s (SCE’s) 2009 All-Source Request for Offers (RFO) for supply resources, issued on July 7, 2009.¹ SCE issued this RFO, in order to support reliability within its service territory, supply energy to bundled customers and meet other portfolio needs, including system and local Resource Adequacy (RA). SCE also sought offers for daily financial call options to hedge the risk of a high energy price scenario in 2010. VHC has assessed the fairness of SCE’s RFO solicitation, evaluation methods, short list selections and the proposed contracts resulting from this RFO.

The IE review process resulted from a series of California Public Utilities Commission (CPUC or Commission) rulings and decisions affecting California’s Investor-owned Utilities (IOUs). The CPUC’s December 2004 decision on long-term resource procurement (D.04-12-048) stated that it would “require the use of an IE for resource procurement where there are affiliates, IOU-built or IOU-turnkey bidders” from that point forward (pp. 135f). The CPUC’s intent was to ensure that a utility did not favor itself or an affiliate. Decision 07-12-052, Conclusion of Law, item 24, states “IEs are valuable to the procurement process and we direct the IOUs to utilize IEs according to the parameters established in this decision and in D.04-12-048.” On page 140, the Decision also states: “Further, given that IOUs may not know with certainty whether or not it or its affiliate will bid on a particular solicitation, the Commission requires that an IE be utilized for all competitive RFOs² that seek products of more than three months in duration.³” Under the decisions cited above, the role of the IE is to assist the utility in RFO design and observe the utility’s procurement, evaluation and contract negotiation processes, in order to provide an opinion concerning “fairness.” In addition to the CPUC’s requirements, the Federal Energy Regulatory Commission (FERC) requires an IE to prevent a bias and to avoid preferences favoring the selection of affiliate offers over offers from other participants.⁴

In 2008, the CPUC ruled that: “parties are to use the attached templates for the purposes specified on the templates: The IEs are to use the IE templates, either the short form or the long form, when preparing their reports on the utilities’ RFOs, and the utilities are to use

¹ The confidential Addendum includes details of offers received and evaluation results, project-specific negotiations, discussion of affiliate offers, if any, and recommendations on specific areas of the RFO process. This information is confidential to protect current offerors and to avoid offerors in future RFOs from gaining knowledge of SCE’s specific methods of evaluation that could lead to manipulating the process. Review and access to the confidential portions are restricted, subject to PUC Sections 454.5(g), 583, D.06-06-066, and General Order (GO) 66-C.

² Competitive RFOs include those issued to satisfy service area needs and to provide specific supply-side resources not covered by the Commission’s Energy Efficiency (EE) and Demand Response (DR) programs.

³ This requirement creates uniformity between the contract length for which an IOU must consult its Procurement Review Group (PRG) and the IE process.

⁴ 108 FERC ¶61,081 (2004): “Opinion and Order ... Announcing New Guidelines for Evaluating Section 203 Affiliate Transactions.” VHC is not aware of any additional CPUC requirements for the IE review of Demand-Side Management programs acquired via an RFO process.



the contract approval template when submitting a request to the Commission for approval of a resource contract. These templates are to be used for the purposes specified until further notice.”⁵

The CPUC requires that “This short form template should be used for transactions that do not require submission of an application for CPUC approval, including those transactions that are documented in the IOU’s Quarterly Compliance Report (QCR) and/or are submitted to the Commission for approval via advice letter.” Consistent with the CPUC ruling, this report answers the CPUC’s Short Form template questions. VHC also provides additional comments and observations regarding SCE’s solicitation, evaluation and contracting process that may not be required by the IE Template questions, but that VHC believes are relevant to its assessment for this report.

This report does not contain confidential and/or privileged materials. However, the confidential Addendum provides confidential information, in which review and access are restricted, subject to PUC Sections 454.5(g), 583, D.06-06-066, and General Order (GO) 66-C.

II. PRODUCT OVERVIEW

SCE requested the following products in this RFO:

- Unit Contingent Dispatchable Toll, providing both capacity and energy, and referred to as an RA Toll,
- Unit Contingent Dispatchable Toll without Resource Adequacy Benefits, referred to as an Energy Only Toll,
- Unit Contingent Non-Dispatchable Qualifying Facilities Toll,
- Resource Adequacy Capacity (SCE to buy and SCE to sell), referred to as RA capacity only or RA Tags, and a
- Daily Financial Call Option with various strike heat rates.

The durations of the contracts requested range from 3 to 45 months.

⁵ “Administrative Law Judge’s Ruling Issuing Templates For Independent Evaluator Reports And Contract Approval Requests,” Rulemaking 06-02-013, dated May 8, 2008.



The following table shows a summary of the products requested in the RFO.

Table 1. Products Requested in the 2009 RFO

PRODUCT	DELIVERY POINT	MINIMUM QTY	PRICING		CONTRACT DELIVERY PERIOD					HEAT RATES (MMBtu/MWh)
			CAPACITY	ENERGY	DELIVERY PERIOD NOT TO EXCEED	EARLIEST START DATE	LATEST END DATE	DELIVERY PERIOD	DELIVERY PERIOD INTERVAL	
Dispatchable Unit Contingent T/dl	CASO	25 MW	Flat Price	N/A	45 Months	01/01/11	09/30/14	Year Round	N/A	N/A
Dispatchable Unit Contingent T/dl without RA Benefits	CASO	25 MW	Flat Price	N/A	45 Months	01/01/11	09/30/14	Year Round	N/A	N/A
Non-Dispatchable QF Tol	CASO	1 MW	As-Available Capacity Payment and Firm Capacity Payment	Indexed to Gas	45 Months	01/01/11	09/30/14	Year Round (One Year Minimum)	N/A	N/A
Resource Adequacy Capacity (SCE to sd)	CASO	10 MW	Flat Price	N/A	12 Months	01/01/10	12/31/10	Monthly Quarterly Year Round	N/A	N/A
Resource Adequacy Capacity (SCE to buy)	CASO	10 MW	Flat Price	N/A	45 Months	01/01/11	09/30/14	Aug. Only Q3 May - Oct Year Round	N/A	N/A
Daily Financial Call Option	SP15_EZGTH	25 MW	N/A	Heat Rate Strike	3 months	07/01/10	09/30/10	Q3	6x16, on-peak	20, 25, 30
Daily Financial Call Option	SP15_EZGTH	25 MW	N/A	Heat Rate Strike	45 Months	01/01/11	09/30/14	Q3 May - Oct Year Round	6x16, on-peak	9.0, 9.5, 10, 11

The key differences between the products requested in the 2009 RFO compared to the 2008 RFO are:

1. The 2008 RFO included both physical and financial call options, whereas the 2009 RFO only solicited financial call options.
2. Although both 2008 and 2009 had call options with heat rate strike prices, the specific heat rates differed between the two years.

On September 2, 2009, SCE notified its Procurement Review Group (PRG) that SCE would not pursue RA sales at this time. This occurred because changes in the California Energy Commission’s (CEC’s) load forecast, Demand-Side Management forecasts and transmission restrictions changed SCE’s expected surplus in RA capacity for 2010.



III. SUMMARY OF RESULTS AND CONCLUSIONS

SCE selected a combination of offers for tolls, RA capacity and financial call options to meet portions of its anticipated energy and capacity needs in 2010 through 2014. VHC believes that SCE used reasonable selection criteria to minimize costs and risks to customers. VHC found no intentional or unintentional biases to unfairly select particular product types or specific offers. There were no affiliate offers that were awarded contracts. The confidential Addendum provides more discussion of the specific offers selected and various confidential issues.

IV. RESPONSES TO QUESTIONS IN THE SHORT FORM TEMPLATE

VHC’s responses to the Commission’s Short Form Template Questions are provided below. Confidential comments, data and responses to some questions are provided in VHC’s separate confidential Addendum to this report.

A. Role of the Independent Evaluator (IE)

1. Describe in detail the role of the IE throughout the solicitation.

VHC began its role as an IE for SCE on March 3, 2009. VHC is one of the IEs that SCE has engaged to monitor and assess its various procurement solicitations that require an IE. As the IE for the 2009 All-Source RFO, VHC has performed two principal functions:

- Ensure that SCE carries out a fair and unbiased solicitation, offer evaluation, selection and contracting process, and
- Provide advice to improve processes, evaluation techniques and assumptions.

VHC’s primary focus has been to ensure the fair and non-discriminatory treatment of all offers and to avoid economic evaluation techniques and assumptions that could lead to unintended or unfair biases in the selection of resources (e.g., unintended preferences for certain types of technologies; the mix of peaking, dispatchable resources and baseload resources; financial versus physical products, and/or start-date and contract term preferences). VHC has generally not focused on the absolute valuation of offers, but rather has focused on the relative costs, benefits and adders, in order to ensure a proper ranking and selection of the offers for short-listing and negotiations and to pick the final offers for contracts.

VHC team members performed the following functions over the course of the solicitation and contract selection process:



- Met with key RFO team members and SCE executives to get a broad overview of the SCE RFO process,
- Reviewed extensive internal documentation of the evaluation methodology,
- Reviewed “lessons learned” presentations for the 2008 All-Source RFO,
- Reviewed the IE report for the 2008 All-Source RFO,
- Sent various memos to SCE highlighting areas for clarification and discussion,
- Checked and validated Net Present Value (NPV) \$/kW–month calculations for indicative offers and for VHC test offers for each product type,
- Reviewed and discussed key assumptions that could influence the ranking and selection of offers,
- Examined the methods and assumptions for calculating the costs and benefits of offers, including capacity values, forward natural gas prices, forward electric prices, ancillary services (AS) and adders for Greenhouse Gases (GHG), credit, collateral and debt equivalence (DE),
- Examined the set of constraints that are used in the selection of offers,
- Provided comments and suggestions regarding key assumptions and methodologies,
- Participated in All-Source planning and evaluation meetings,
- Participated in All-Source Bidders Conference Call
- Participated in SCE’s Risk Management Committee (RMC) meetings that discussed the 2009 RFO process and results,
- Participated in PRG meetings that discussed the 2009 RFO process and results,
- Participated in weekly process and evaluation meetings,
- Monitored and reviewed red-line changes to contracts,
- Participated in change-control meetings,
- Monitored all interactions with SCE affiliates that provided offers in this RFO,
- Reviewed the receipt and processing of indicative offers on July 29 and final offers on October 6 and 7,
- Participated in the offer selection meeting on October 7, 2009,
- Observed the notification calls to winning offerors, and
- Participated in the “Lessons Learned Meeting” on November 18, 2009.

B. Fairness of SCE’s Bidding and Selection Process

2. Please evaluate the fairness of the IOU’s bidding and selection process. (i.e., quantitative and qualitative methodology used to evaluate bids, consistency of evaluation methods with criteria specified in bid documents, etc.)

VHC examined SCE’s RFO process from the design of the RFO to the ultimate selection of contracts to ensure that SCE created and implemented a fair process for all offerors. VHC also monitored SCE’s offer evaluation and selection to assess that it was performed according to the criteria specified in the offer documents and internal guidelines. VHC



looked for instances where the offer evaluation or selection deviated from the criteria specified in the offer documents or from SCE’s internal guidelines. In addition, VHC looked for both intentional and unintentional biases and preferences that might unfairly influence the selection. Intentional bias might result in the unfair selection of SCE affiliate offers that would be in the interest of SCE shareholders

Unintentional biases might include unfair preferences for certain product types or technologies that result from the design of the RFO, the improper use of evaluation techniques or the choice of underlying assumptions. Differing treatments of offerors by contract negotiators could also result in unintentional bias. VHC participated in the bi-weekly meetings that discussed red-lined changes to pro-forma contracts for the various offers. Note that all terms and conditions do not have to be identical for each contract for a specific product type in order for the treatment of counterparties to be fair. However, fairness does mean that the process and rationale for changes to standard terms and conditions for proposed contracts have been vetted and are not arbitrary.

Fairness Assessment and Conclusions

VHC has concluded that SCE ran the evaluation and selection process without unfair preferences for one type of product over another product. VHC examined the results from the indicative offer assessments and found the relative results and trends to be reasonable and appropriate. For example, in the evaluation the tolls with progressively lower heat rates yielded progressively higher net energy values. VHC found the process to calculate the energy value from tolls versus call options to be consistent in both assumptions and approach. Furthermore, VHC had many discussions and other communications regarding calculations of the capacity value, energy benefits, AS benefits, discount rate, collateral requirements and the credit risk and GHG adders. VHC found that SCE’s broad set of assumptions and the 25 scenarios used to quantify the ranking and selection of offers were fair and reasonable.

Although no affiliate offers were selected in this RFO, VHC found no preferential treatment in favor of or against affiliate offers. There were no unique terms and conditions that would have provided preferential revenue enhancements or risk reductions for affiliate offers compared to other offers. The economic evaluation of the affiliate offers was consistent with that for other offers.

VHC found the final portfolio of offers selected by SCE to be reasonable and consistent with the evaluation criteria. The selection was based on weighing: 1) the NPV of different portfolio selections, 2) meeting portions of the future procurement needs at reasonable costs, and 3) assessing the price risks of meeting future needs in this RFO versus subsequent RFOs.



Additional VHC Fairness Assessment and Conclusions are:

- SCE uses an excellent methodology, models and metrics (lowest NPV cost) to find the least-cost combination of offers under multiple scenarios.
- The highly automated calculation processes and the attention of various groups to the processes for the review and evaluation of offers lower the probabilities of computational and data entry errors.
- Dual entries of data are used for toll offers to ensure accurate modeling of offers.
- Data from offer spreadsheets for daily financial call options and RA Tags are electronically transferred to evaluation models.
- There are no subjective or qualitative adders that were used to select offers.

Once the criteria and constraints applied in the evaluation process were determined, perhaps the primary area for subjective decisions in the selection process was the final determination of the number of offers to be selected for each product. The amount and type of offers selected are discussed in more detail in the confidential addendum.

C. Description of SCE’s Evaluation and Selection Process

3. Describe the IOU’s Least Cost Best Fit (LCBF) methodology (or provide the IOU’s own description). Evaluate the strengths and weaknesses of the IOU’s LCBF methodology. (This should include a thorough analysis of the RFO results.)

SCE has a two-phase evaluation process. The first phase screens indicative offers using a set of criteria including price to create a “short list” of offers to be evaluated in the second phase. The offers are ranked using a \$/kW-month (NPV) net benefits calculation. The net benefits are defined as the difference of monthly benefits and monthly costs. A key purpose of the first phase is to gather the indicative offer characteristics into the evaluation models to allow a fast assessment of the final offers, once the final offers are submitted. Note that SCE and counterparties agree to terms and conditions before the final offers are submitted. Offers are removed for not complying with the RFO rules and for being outliers with respect to NPV. All monthly costs and benefits are discounted on a monthly (rather than yearly) basis using a pre-determined discount rate. Projects with a positive NPV have greater benefits relative to costs.

The analysis applies 25 price scenarios in the selection of the short-list. These scenarios combine 25 electric and 5 natural gas price scenarios. The 25 scenarios are created by a technical assessment of price volatility in the gas and electric markets.

After terms and conditions are finalized refreshed, binding offer prices are received, the second phase evaluation selected the sets of offers that provide the



highest NPV of net benefits for various draws⁶ subject to the criteria and constraints applied. Results included the total NPV for each draw and the \$/kW-month (NPV) net benefits for individual offers. The net benefits are defined as the difference of monthly benefits and monthly costs.⁷ The final ranking involves analyses conducted over a two-day period using a series of models to find the least-cost set of offers. The portfolio optimization model (C-Plex) finds the least-cost set of offers for each draw. For the 2011 to 2014 period eleven draws were examined to capture a range of need increasing from the minimum amounts required to the maximum amounts allowed.

The second phase of the evaluation process also included a separate analysis of 14 draws to select the high heat rate strike options for the 3rd quarter of 2010. These contracts can be viewed as purchasing an insurance policy to account for low probability scenarios that might drive market prices up to the ISO price limit of \$2,500/MWh. A series of increasing purchase amounts are sorted by their economic attractiveness and are compared to the hedge value created.

The benefits and costs for the various products are calculated in the following manner:

Capacity Value

Each product that provides capacity that counts toward meeting SCE’s needed system and/or local capacity requirement receives a monthly capacity value. The capacity value varies by month with the highest values in the highest load months. Offers located in the LA Basin and Ventura areas receive higher capacity values, if needed, than other offers, since local generation provides both local and system reliability benefits.

Energy Value

The energy values for various products are calculated as described in this section. SCE calculates the energy values of tolls with dispatch capabilities by using the results from production simulation modeling under 25 scenarios. These probabilistic results provide an “expected” value for each offer.

Financial call options are evaluated against the price curves from the 25 scenarios. These are the same price curves that are used in the production simulation model for calculating the energy value of tolls.

The energy benefits of non-dispatchable tolls and QFs with fixed energy delivery

⁶ Each draw represents a least cost portfolio of offers. The first draw represents a least cost portfolio meeting the minimum procurement needs as specified by SCE for each product solicited and the last draw represents a least-cost portfolio meeting the maximum procurement needs as specified by SCE for each product solicited.

⁷ The calculations incorporate the estimated costs of Greenhouse Gas (GHG) emission allowances.



profiles are based on the replacement energy costs derived from an energy price curve.

The energy price curves are derived from forward electric and natural gas market prices for the first years and forecast prices for subsequent years. A price curve or shape based on hourly energy prices throughout the year is then applied to the forecast of yearly energy prices to create the forecast of hourly prices for each year.

AS Benefits

Dispatchable tolls receive AS benefits for spin, non-spin, regulation up (reg-up) and regulation down (reg-down). SCE uses production simulation models to calculate spin revenues. Non-spin revenues are calculated simply for units that can meet the 10 minute start-up requirements. SCE estimates the reg-up and reg-down revenues separately from the production simulation modeling.

GHG Benefits

CPUC Decision 07-12-052, December 20, 2007 mandates the inclusion of a GHG adder for comparing RFO offers.⁸

In its 2008 Market Price Referent (MPR) decision, D.08-10-026, on page 38, the Commission’s Findings of Fact regarding the MPR model state:

“In view of the rapid developments in GHG regulation, it is reasonable to set criteria for the modeling of GHG compliance costs to require that the model include at least:

- public availability;
- use of multiple scenarios and sources of information;
- use of realistic and public assessments of policy proposals and scenarios;
and
- use of the most current reliable information that conforms to the other three criteria.”

In July 2009, the CPUC’s Energy Division released its “Straw Proposal on LTPP Planning Standards” in Phase 1 of R.08-02-007, July 2009. In this report, the Energy Division recommended that “CO₂ costs should be assessed based on reasonable assumptions about the

⁸ CPUC Decision 07-12-052, p 152 states: “All resources within an RFO should be compared against one another on a consistent, LCBF basis using the GHG adder to increase the costs of fossil resources....” The Commission also indicated that the methodology and assumptions used in making GHG calculations for LTPP should comport with the direction given in AB 32 and SB 1368. (Ibid., p 232.)



future direction of GHG reduction policies, or based on actual policy, to the extent that such policies have been finalized.”⁹

SCE updated its annual GHG adder for this RFO by utilizing a more recent and representative GHG allowance price projection.

Contract Costs

The contract costs can include fixed, variable and start-up costs. Realized variable costs and start-up costs for tolls are estimated from production simulation modeling. SCE also converts the contract capacity costs into \$/kW-month (NPV), in order to compare offers.

Fuel Costs

Fuel costs for tolling agreements are the expected costs under the 25 scenarios from production simulation modeling.

Energy Revenues

Energy revenues for tolls are the expected revenues under the 25 scenarios from the production simulation modeling. Net energy revenues for financial call options are based on the expected (probabilistic) spread in heat rate strike prices versus the forecasted implied marginal heat rates (IMHR) obtained under the five natural gas price scenarios.

Locational Impacts

The methodology SCE used to calculate locational impacts in the evaluation of offers is discussed in the Confidential Addendum.

Collateral and Credit Risk Adders

Both SCE and counterparties may perceive that there would be credit risk associated with the offers and, thus, seek collateral as protection. SCE has been using Collateral and Credit Risk Adders for All-Source RFO valuation since January 2005. Since SCE will not post collateral for contracts procured in this RFO, no collateral adder is considered to account for SCE collateral posting.

SCE estimates the amount of collateral a counterparty should post from SCE’s expected exposure to loss (based on a Mark-to-Market simulation during the life of the contract), the variance of the exposure and the probability of the counterparty defaulting. If a counterparty

⁹ Simon Baker, Energy Division Straw Proposal for LTPP Planning Standards, prepared by the CPUC Energy Division in accord with the Phase 1 Scoping Memo in the 2008 Long-Term Procurement Plan Rulemaking (R.) 08-02-007, July 2009, p. 76.



does not post the full collateral, SCE includes a Credit Risk Adder based on the deficit in the amount of collateral in its comparative evaluation of offers.

Debt Equivalence (DE) Adder

Long-term contracts are viewed by debt rating agencies as a long-term financial or debt-like liability. The CPUC authorized “the investor-owned utilities (IOUs) to recognize the effects of DE when comparing power purchase agreements (PPA) against PPAs in their bid evaluations, but not when a utility-owned generation (UOG) project is being considered,” and allowed the use of a 20% risk factor.¹⁰

SCE used the CPUC’s authorized methodology for calculating DE adders and computed the adder based on the unavoidable costs of a contract (i.e., capacity payments for tolls and tags and premium payments for options).

D. Validation of SCE’s Evaluation Results

VHC used the following process to validate the calculations of costs and benefits for each product type and the ultimate selection of a portfolio of offers.

1. Reviewed calculations of \$/kW-month (NPV).

VHC examined each of the components of the cost and benefits calculation for each product type. VHC also examined key assumptions and calculation techniques for each cost and benefit component. Cost components include capacity payments, energy costs, and collateral, credit and DE adders. Benefit components include capacity value, energy and AS revenues. VHC’s detailed comments regarding some these components are found in the confidential section of the report.

2. Mock runs.

In preparation for its selection of offers, SCE conducted mock runs. VHC participated in the mock runs to test the models and assumptions. VHC requested that several test offers be run and examined the results. This allowed VHC to confirm that the NPV results were calculated correctly and that the general trends and differences in energy values for various products were reasonable.

3. Final review and selection of offers.

VHC participated in the final selection of offers on October 6, 2009. VHC examined the costs and benefits for the marginal offers that were

¹⁰ CPUC Decision 08-11-008.



accepted and rejected. The purpose of examining marginal offers was to ensure that the results of the optimization model were reasonable.

Key Strengths

- The modeling used 25 scenarios to allow the economic evaluation to capture the expected (or extrinsic) value of dispatchable tolls and call options. This is clearly superior to a single scenario assessment which would tend underestimate values of dispatchable tolls and call options.
- SCE’s C-Plex optimization finds the lowest NPV combination of offers for different draws taking constraints into account.
- VHC views the \$/kW-month (NPV) as a reasonable metric for reviewing offers that make the final selection, since it allows comparison of contracts with various durations and start dates. Furthermore, the calculations capture differences in values by month of the year.
- The modeling, analysis and review of contracts conducted by SCE are very sophisticated. The process works well because of the attention to detail, checks during the evaluation and the high degree of communication among SCE’s staff groups that participate in the RFO.

Weaknesses

VHC did not find any significant weaknesses in the evaluation methods. However, VHC did note the following refinements that may further improve SCE’s selection process in future RFOs.

- Locational value differences within SP15 currently only consider line losses as estimated by (Generation Meter Multipliers) GMMs. VHC understands that SCE will examine the California ISO’s Market Redesign and Technology Upgrade (MRTU) nodal pricing results to determine if and how values depend on interconnection points.
- The forecast of AS revenues for regulation up and regulation down for tolls is extremely difficult to estimate. VHC has suggested SCE conduct further comparisons of the AS revenues estimated from models with more recent settlement data from existing contracts and/or SCE-owned power plants.
- The Implied Marginal Heat Rate (IMHR), which directly affects the energy value of offers, is derived from technical assessments of the implied volatility of the forward natural gas and electric market prices. VHC believes the ranges used are reasonable for this RFO. However, VHC recommends a fundamental look at different stress case scenarios to see if such analysis might provide additional insights into the future volatility of the IMHR.



- SCE’s hourly production cost simulations use 25 scenarios based on 5 cases for the natural gas forecast and 25 cases for the power price forecast. Volatilities are estimated and correlations between power and gas prices are incorporated. To enhance the robustness of the scenario analysis, the uncertainty in load growth, could be also be treated as an additional uncertain variable that will affect the expected NPV of the different offers. By examining correlations the number of overall scenarios can probably be kept near to or at 25.

VHC’s Least-Cost Best-Fit Conclusions

VHC believes that the SCE evaluation methodologies comply with the Commission’s Least Cost Best Fit methodology requirements. Furthermore, VHC believes that SCE’s sophisticated methodologies lead to an appropriate selection of offers.

E. SCE’s Outreach

4. How did the IOU conduct outreach to bidders, and was the solicitation robust?

VHC believes that SCE’s outreach to publicize and notify prospective offerors into this RFO was reasonable and similar to the outreach efforts of other utilities in California for their RFOs. SCE has run this All-Source RFO for the past 8 years over the same general time frame with robust responses from offerors.

On July 7, 2009, SCE notified approximately 1,500 contacts (compiled from previous power supply solicitations, regulatory service lists, members of the media, etc.) that the RFO had been released. On the same day, SCE posted the solicitation on its company website, providing a means for interested parties to download the RFO and related materials. The SCE web site provides an effective way for prospective offerors to ask questions, and read posted responses. Several weeks later, on July 21, 2009, SCE held a bidders’ conference call to provide an overview of the 2009 All-Source solicitation. The conference call provided prospective offerors an overview of the solicitation and the opportunity to ask questions. VHC participated in this conference call.

VHC believes that the response from offerors was robust and notes that SCE received more offers this year than in its 2008 RFO.

F. Project-specific Negotiations

5. Describe project-specific negotiations. Highlight any areas of concern including unique terms and conditions.

SCE has a team of negotiators that finalize all contracts terms and conditions before the final, binding offer prices are submitted. During the negotiation process, SCE has bi-weekly



meetings at which contract negotiators discuss the changes to terms and conditions requested by counterparties. SCE allows some flexibility and variations in the pro-forma contract in certain areas, so long as the changes do not lead to significant increases in ratepayer risks. The confidential Addendum provides more discussion of the project-specific negotiations in this RFO.

G. Affiliate Offers and UOG Ownership Proposals (If Applicable)

6. If applicable, describe safeguards and methodologies employed by the IOU to compare affiliate bids or Utility-Owned Generation (UOG) ownership proposals. If a utility selected a bid from an affiliate or a bid that would result in utility asset ownerships, explain and analyze whether the IOU’s selection of such bid(s) was appropriate.

SCE and the IE employed a host of safeguards to ensure that there was no preferential treatment of affiliate offers. Mike Katz was on site to monitor the opening of both indicative and final offers. VHC also monitored all communications between SCE and any affiliates that submitted an offer.

In addition, VHC performed a detailed review of the underlying assumptions and the economic evaluation results for all affiliate offers, in order to ensure that preferential treatment was not given.

Finally, no affiliate offers were selected in this RFO.

H. VHC’s Recommendations

7. Do you agree with the IOU that the contract(s) merit Commission approval? Explain.

Yes, VHC agrees with SCE that the contracts selected in this RFO merit Commission approval. As discussed throughout this report, SCE ran a fair solicitation to find a set of contracts to meet its future needs. Based on our interactions with SCE and our review of its RFO processes, methods and results, VHC believes these contracts were selected without unfair biases or preferential treatment to the participants. Overall, SCE’s process follows Commission guidelines for making a least-cost best-fit selection. Therefore, the contracts merit Commission approval.