

PUBLIC UTILITIES COMMISSION

SAN FRANCISCO, CA 94102-3298



March 19, 2008

Advice Letters 2137-E/E-A/E-B

Akbar Jazayeri  
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P O Box 800  
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Subject: Submission of Contracts for Procurement of Renewable  
Energy from SCE's 2006 Renewables Portfolio Standard  
Solicitation

Dear Mr. Jazayeri:

Advice Letters 2137-E/E-A/E-B are effective March 13, 2008.

Sincerely,

A handwritten signature in black ink, appearing to read "Sean H. Gallagher".

Sean H. Gallagher, Director  
Energy Division

**Public Version**

July 13, 2007

**ADVICE 2137-E  
(U 338-E)**

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA  
ENERGY DIVISION

**SUBJECT:** Submission of Contracts for Procurement of Renewable Energy From SCE's 2006 Renewables Portfolio Standard Solicitation

**PURPOSE**

Southern California Edison Company ("SCE") submits this Advice Letter in compliance with Cal. Pub. Util. Code § 399.11 et seq. (the "RPS Legislation") seeking approval of two renewables portfolio standard ("RPS") power purchase agreements ("PPA's") between (1) SCE and Caithness Dixie Valley, LLC (the "Dixie Valley Contract"), and (2) SCE and ORNI #18, LLC (the "ORNI Contract").

A table summarizing the PPAs is as follows:

Seller	Generation Type	Initial Size (MW)	Possible Expansion Size (MW)	Estimated Annual Energy Based on Initial Size (GWh)	Estimated Annual Energy Based On Expansion Size (GWh)	Initial On-Line Date	Term of Agreement (Years)
Caithness Dixie Valley, LLC	Geothermal	50 MW	N/A	394 GWh	N/A	July 5, 2018	20
ORNI #18 LLC	Geothermal	50 MW	100 MW	416 GWh	832 GWh	December 2009	20

SCE requests that the Commission issue a Resolution containing findings in the form requested in this Advice Letter no later than October 13, 2007.

This Advice Letter contains both Confidential and Public Appendices. Appendices B-D and F-J are "Confidential Protected Material," and, therefore, should be treated in accordance with the provisions of Pub. Util. Code § 583 and the Commission's General

Order 66-C. As required by the August 22, 2006 Administrative Law Judge Ruling clarifying interim procedures for complying with D.06-06-066, Appendix A provides a declaration stating the grounds for confidentiality.

This advice letter contains the following appendices:

Appendix A: Confidentiality Declaration

Confidential Appendix B: Summary of 2003-2006 RPS Solicitation Data

Confidential Appendix C: Confidential Contract Summary

Confidential Appendix D: Dixie Valley's and ORNI's Contributions to RPS Goals

Appendix E: SCE's RPS Bid Evaluation and Selection Process and Criteria

Confidential Appendix F: Project Viability Matrices

Confidential Appendix G: CEC-SEP Pricing Worksheets

Confidential Appendix H: Comparison of Standard Contract Terms to the Dixie Valley and ORNI Contract Terms

Confidential Appendix I: Power Purchase Agreement between SCE and Caithness Dixie Valley, LLC

Confidential Appendix J: Power Purchase Agreement between SCE and ORNI #18, LLC

## **I. INTRODUCTION AND BACKGROUND**

The RPS Legislation requires certain load serving entities ("LSEs"), including SCE, to increase their procurement from renewable resources by at least 1 percent of their annual retail electricity sales per year so that 20 percent of their annual electricity sales are procured from eligible renewable resources by no later than December 31, 2010. In Decision ("D.") 03-06-071, the California Public Utilities Commission (the "Commission" or "CPUC") provided its initial guidance for implementation of the RPS Legislation. In accordance with the RPS Legislation and D.03-06-071, SCE submitted its 2006 RPS procurement plan and bid solicitation materials for Commission approval. The Commission approved SCE's procurement plan and bid solicitation materials for 2006 in D.06-05-039.

On July 14, 2006, SCE released its 2006 RPS solicitation. Applying the evaluation criteria required by the RPS Legislation, as implemented by the Commission in D.04-07-029, SCE established a short list for the 2006 solicitation and subsequently entered into discussions with parties on the short list. SCE communicated with its Procurement Review Group ("PRG") throughout the evaluation, selection and

contracting process that ultimately led to the execution of six contracts from its 2006 solicitation. SCE now seeks approval of the Dixie Valley and ORNI Contracts.

#### **A. General Description Of Dixie Valley And ORNI**

The Dixie Valley geothermal facility is owned by the Caithness Corporation and is located in west central Nevada, about 100 miles east of Reno and 95 miles north of Fallon, in Churchill County. The facility is a dual-flash, single turbine geothermal power plant and has operated at its location since July 1988. The electricity from Dixie Valley is transmitted to Bishop, California. Currently, this existing facility delivers eligible renewable energy under an interim standard offer no. 4 ("ISO4") contract with SCE that is set to expire on July 4, 2018. Upon expiration of the ISO4 contract, the Dixie Valley Contract will begin for a term of twenty years. The Dixie Valley Contract provides for 50 MW of capacity of eligible renewable energy with an expected output of 394 GWh annually.

The ORNI project is a new 50 MW geothermal facility being developed by Ormat Nevada, Inc. The facility utilizes a geothermal binary power conversion technology where heat from the geothermal fluid is transferred to a working fluid. The geothermal fluid is then injected back into the reservoir and the working fluid is vaporized to be used in the facility's power turbine. The project is located in North Brawley, California in Imperial County. The ORNI Contract allows for a potential expansion to 100 MW at ORNI's discretion, with the potential to expand beyond 100 MW upon mutual agreement of SCE and ORNI. Initially, the facility will have an expected output of 416 GWh per year with the potential to expand to 832 GWh. The ORNI Contract term is for 20 years and is expected to come on-line in December 2009.

#### **B. Contributions To IPT And APT**

As stated above, the RPS Legislation and the Commission decisions implementing the RPS legislation require SCE to increase its procurement from renewable resources by at least 1 percent of its annual retail electricity sales per year so that 20 percent of its annual electricity sales are procured from renewable resources by 2010. The 1 percent increase per year has been defined as the incremental procurement target ("IPT") and the yearly required total has been defined as the annual procurement target ("APT").<sup>1</sup> By definition, the obligation to increase renewable procurement by 1 percent per year (*i.e.* the IPT) is eliminated in 2010. For 2010 and beyond, SCE is required to procure 20 percent of its energy from renewable resources. In other words, beyond 2009, SCE does not have an IPT obligation and its APT obligation remains at 20 percent.

The Dixie Valley Contract does not begin until 2018. Therefore, the renewable output from the agreement is expected to contribute 394 GWh annually to SCE's APT. The ORNI Contract does not begin until late 2009. Therefore, depending on whether ORNI expands its facility to 100 MW, the renewable output from the agreement is expected to contribute either 416 or 832 GWh annually to SCE's APT.

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<sup>1</sup> See D.06-10-050.

In addition, a table summarizing Dixie Valley's and ORNI's contributions to RPS goals can be found in Appendix D.

### **C. Supplemental Energy Payments**

Both Dixie Valley and ORNI prices are below the market price referent ("MPR") and will not require supplemental energy payments ("SEPs").

## **II. PRG PARTICIPATION AND FEEDBACK**

### **A. PRG Participation**

SCE's PRG was formed on or around September 10, 2002. Current participants include representatives from the Commission's Energy Division, the Division of Ratepayer Advocates, The Utility Reform Network, the Natural Resources Defense Council, the Consumers' Union, California Utility Employees, and the California Department of Water Resources. SCE consulted with its PRG during each step of the renewable procurement process. Among other things, SCE informed the PRG of the initial results of its request for proposals ("RFP"); explained the evaluation process; and updated the PRG periodically concerning the status of contract formation.

On December 19, 2006, SCE advised the PRG of its proposed short-list of bids. On March 13, 2007, SCE updated the PRG as to the status of negotiations with bidders into SCE's 2006 RPS solicitation. On April 11, 2007, SCE briefed the PRG concerning the successful conclusion of discussions with Dixie Valley. On June 27, 2007, SCE briefed the PRG concerning the successful conclusion of discussions with ORNI.

### **B. PRG Participation**

SCE does not keep recorded minutes, notes, or comments from PRG meetings. The PRG members have requested that SCE not broadly characterize PRG responses and comments.

## **III. CONSISTENCY WITH COMMISSION DECISION**

### **A. SCE's 2006 RPS Procurement Plan**

#### **1. The Dixie Valley and ORNI Contracts were executed through SCE's 2006 RPS procurement plan**

The Commission conditionally approved SCE's 2006 RPS procurement plan, including its bid solicitation materials in D.06-05-039. In addition, the Commission ordered SCE to make certain changes to its 2006 Plan and 2006 RFP and to file those amended documents with the Director of the Energy Division, and serve such documents on the service list, by June 9, 2006. On June 9, 2006, SCE filed and served its amended 2006 RFP protocol setting forth the procedure and criteria pursuant to which SCE will conduct its 2006 RPS solicitation.

By a letter dated June 14, 2006, the Director of the Energy Division temporarily suspended SCE's 2006 RPS solicitation and authorized SCE to further amend its 2006 Plan and 2006 RFP, and to submit those further amended documents to the Energy Division by July 10, 2006.

On July 10, 2006, SCE filed an amended 2006 RPS procurement plan and amended 2006 RFP protocol. In the amended 2006 Plan, SCE made the necessary changes that were required and/or suggested by D.06-05-039.

## **2. Summary of SCE's 2006 RPS procurement plan's assessment of portfolio needs and requested bid characteristics**

SCE's 2006 RPS procurement plan indicated that SCE intended to procure the balance of renewable energy needed to reach 20 percent renewables by 2010 based on a "High Procurement Needs Scenario." SCE also indicated in its RFP protocol it has a need for both near-term and long-term renewable energy.

SCE's 2006 RFP solicited proposals to supply electric energy, environmental attributes, capacity attributes and resource adequacy benefits from eligible renewable energy resources sufficient to permit SCE to execute PPAs in substantially the form of its *pro forma* agreement. SCE considered all proposals that propose to supply electric energy to SCE from either an existing generating facility, or a generating facility to be developed, and that employs an eligible renewable resource, or multiple eligible renewable resources, as the sole means of supplying electric energy. SCE also considered any new or repowered facilities that operate on co-fired fuels or a mix of fuels that include fossil fuel hybrid.

SCE's locational preferences included: (1) California; or (2) Outside of California if the first point of interconnection is to the Western Electricity Coordinating Council ("WECC") transmission system and there is a transmission pathway capable of delivering the renewable energy to a location within California. SCE requested proposals based upon standard term lengths of 10, 15 or 20 years with a minimum capacity of 1 MW.

SCE indicated a preference to take delivery of the electric energy at SP-15. However, SCE considered proposals based upon any designated delivery point within California.

## **3. The Dixie Valley and ORNI Contracts conform to SCE's portfolio needs**

The Dixie Valley Contract falls within the criteria identified in SCE's 2006 RFP and is expected to contribute significantly toward achievement of SCE's RPS procurement goals. More specifically, the Dixie Valley Contract satisfies SCE's long-term need for eligible renewable energy from an existing facility with a capacity of 50 MW over a 20 year term. Moreover, Dixie Valley satisfies both SCE's locational preference for a facility located outside of California and SCE's delivery requirements.

The ORNI Contract falls within the criteria identified in SCE's 2006 RFP as well and is also expected to contribute significantly toward achievement of SCE's RPS

procurement goals. More specifically, the ORNI Contract satisfies SCE's near-term need for eligible renewable energy from a new facility with a capacity of 50 MW, with the potential to expand to 100 MW, over a 20 year term. Moreover, ORNI satisfies both SCE's locational preference and delivery requirements.

## **B. SCE's 2006 RPS Solicitation**

### **1. SCE's 2006 RPS solicitation is consistent with SCE's CPUC-approved 2006 RPS procurement plan and RFP bidding protocol**

The Dixie Valley and ORNI Contracts were solicited, negotiated and executed in a manner consistent with SCE's 2006 RFP protocol, which was approved by the Commission in D.06-05-039 as part of SCE's 2006 procurement plan. SCE's RFP package included a procurement protocol, which set forth the terms and conditions of the RFP, including the requirement that the proposed facility be an eligible renewable resource and other eligibility requirements for participants, requirements for proposals, selection procedures, approval procedures, the RFP schedule and other terms and conditions of the RFP.

As part of the bid submission, bidders were required to provide comments on SCE's *pro forma* agreement. Prospective bidders also executed non-disclosure agreements and a letter stating that the bidder agrees to be bound by the terms and conditions of the protocol.

The RFP did not establish a limit on the amount of renewable energy sought by SCE. SCE was looking for resources that would provide maximum benefit to SCE's customers and count towards the RPS program. As provided by Commission decisions and statute, SCE solicited proposals for PPAs with 10, 15, and 20-year terms. The protocol requested that proposals provide complete, accurate, and timely information concerning the participating supplier, the generating facility from which the participant proposed to provide electric energy to SCE and information pertaining to the commercial terms and the pricing details of the proposal.

The protocol encouraged existing, new, expanded, and repowered renewable resources to participate in the RFP. SCE stated in the protocol that it would evaluate proposals based on criteria intended to achieve the lowest customer cost for those renewable resources that best fit with SCE's customers' current portfolio and projected needs.

### **2. Developer outreach**

On the release date of the RPS solicitation, SCE placed its RFP package on its website and issued an email announcement to approximately 700 industry participants, independent power companies, trade associations, law firms, energy consultants and regulatory agencies. In addition, SCE held a bidder's conference on August 10, 2006 at the Pacific Palms Conference Resort in Industry, California. Approximately 40 individuals attended the conference. SCE also issued updates to its RFP package on

August 11, 2006, August 18, 2006 and September 6, 2006 and provided an email announcement of the updates each time to approximately 700 industry participants, independent power companies, trade associations, law firms, energy consultants and regulatory agencies.

**3. Provide a demonstration that the solicitation was robust**

Specific information regarding SCE's 2006 RPS solicitation can be found in Appendices B & C.

**4. Dixie Valley's and ORNI's offer conformed to SCE's RPS bidding protocol**

Dixie Valley's and ORNI's bid conformed to SCE's protocol; that is, they offered power from eligible renewable energy resources, they submitted the standard forms, they agreed to be bound by the protocol, and they signed a non-disclosure agreement. Dixie Valley's and ORNI's bids were evaluated and scored in the manner prescribed in the protocol and were placed on SCE's short list. Eventually, negotiations with Dixie Valley and ORNI lead to the execution of an agreement.

**C. LCBF Methodology And Evaluation**

**1. SCE's LCBF methodology for the 2006 RPS solicitation**

SCE evaluates and ranks proposals based on least-cost/best-fit principles ("LCBF") that comply with criteria set forth by the Commission in D.03-06-071 and D.04-07-029 ("LCBF Decisions"). The LCBF analysis evaluates both quantitative and qualitative aspects of each proposal to evaluate its absolute value to SCE's customers and relative value in comparison to other proposals. The LCBF as set forth by the LCBF Decision was used to evaluate the bids SCE received in its 2006 RPS solicitation. SCE applied these criteria to the proposals received in its 2006 RPS solicitation, including Dixie Valley and ORNI, in order to establish a "short list" of proposals from bidders with whom SCE will engage in contract discussions.

While assumptions and methodologies have evolved slightly over time, the basic components of SCE's evaluation and selection criteria and process for RPS contracts were established in the Commission's LCBF decisions. The three main steps that are undertaken by SCE are an initial data-gathering period, followed by a quantitative assessment of proposals, ending with adjustments to selection based on qualitative attributes of proposals.

Prior to receiving proposals, SCE finalizes major assumptions and methodologies that drive valuation, including power and gas prices forecasts, existing and forecast resource portfolio, and firm capacity value forecast. Other assumptions, such as the Transmission Ranking Cost Report ("TRCR"), are filed with the Commission for approval prior to the release of the solicitation materials. In addition, SCE gathers the current input assumptions that are developed by external parties, such as the Effective

Load Carry Capability and integration costs of various technologies developed by the CEC.

Once proposals are received, SCE begins an initial review for completeness, conformance, and viability. The review includes a screen for reasonableness of proposal parameters, such as generation profiles and capacity factors. SCE works directly with bidders to resolve any issues and ensure data is ready for evaluation.

After this initial review, SCE performs the quantitative assessment of each proposal individually. The result of the quantitative analysis is a relative ranking of proposals that helps define the preliminary short list. Qualitative attributes of each proposal are considered, if needed, to further screen the short list and arrive at a final short list of proposals.

After this analysis, SCE consults with its PRG regarding its final short list and specific evaluation criteria. Whether a proposal selected in this process results in an executed contract depends on how contract discussions proceed. Periodically, SCE updates the PRG regarding the contracting progress and also reviews the contracts with the PRG prior to execution. Subsequently, SCE executes the contracts and submits them to the Commission for approval.

A complete discussion of SCE's RPS Bid Evaluation and Selection Process and Criteria is provided in Appendix E.

**2. Description of how the Dixie Valley and ORNI Contracts compare with other bids received in SCE's RPS solicitation with regard to each LCBF factor**

SCE's LCBF quantitative evaluation of bids incorporates energy and capacity benefits with energy payments, transmission costs, and debt equivalence to create individual benefit-to-cost ("BC") ratios. It is this BC ratio that is used to rank and compare each project. Comparing the individual components of the BC ratio of one bid to another is not a useful means of evaluating projects.

The combination of high benefits and relatively low costs resulted in a BC ratio that ranked high enough to justify Dixie Valley's and ORNI's inclusion on SCE's short-list. Modifications to the pricing and other terms used for evaluation during negotiations resulted in a final BC ratio that was acceptable to SCE and favorable as compared to the bids SCE received in the 2006 solicitation. Therefore, the Dixie Valley and ORNI Contracts provide significant value for SCE's customers relative to other proposals received and represent contracts that provide for the delivery of relatively attractive renewable power pursuant to terms and conditions that meet all of the requirements of the RPS Legislation and the Commission's decision implementing the RPS legislation.

**3. Portfolio Fit -- Demonstrate best fit -- evaluation of the Dixie Valley and ORNI Contracts' costs and benefits in the context of SCE's portfolio needs**

SCE's primary portfolio needs in the long-term are for resource adequacy-eligible capacity, low-cost energy, and RPS-eligible energy. Due to the peaky nature of SCE's demand profile, on-peak energy is valued much more highly than off-peak energy. The Dixie Valley and ORNI projects both provide 50 MW of total capacity, respectively, which will largely be counted for resource adequacy purposes.<sup>2</sup> The Dixie Valley and ORNI projects also provide about 394 and 420 (with a potential expansion to 832) GWh of RPS-eligible energy, respectively, which is mostly distributed evenly over the year.

Remarketing costs are captured in the production cost simulations required in analyzing the energy benefits of the project. While the remarketing cost component of the results cannot be removed and evaluated on an individual basis, one can make some assumptions about the impact of the project on potential remarketing costs. Generally, a must-take, geothermal project, such as Dixie Valley and ORNI, will generate at the full capacity of the contract around-the-clock. While there would not be any cost to remarket the energy in peak periods, there could be some remarketing cost to selling excess energy that this project may contribute to in off-peak periods, particularly in the winter.

#### **4. Transmission Adder -- Consistency with CPUC decisions addressing RPS transmission ranking cost methodology and IOU Transmission Ranking Cost Report**

Transmission costs were estimated for those generating facilities that do not have an existing interconnection to the electric system or a completed System Impact Study, consistent with the TRCR requirements specified by D.04-06-013 and D.05-07-040. The ranking was applied accordingly and in compliance with Commission decisions.

The transmission adder applied to the Dixie Valley Contract was zero, because it is an existing facility currently providing SCE with renewable energy through an ISO4. The transmission adder applied to the ORNI Contract, for SCE's evaluation of ORNI's original bid, was a levelized amount of \$8.69/MWh of generation delivered.

#### **5. Consistent Application of TODs -- Demonstrate that TODs were consistently used throughout the procurement process**

Prior to releasing the RPS solicitation, SCE ensures the time of delivery ("TOD") allocation factors contained within the *pro forma* agreement are used in the LCBF analysis.

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<sup>2</sup> Note that ORNI will be considered an import under the resource adequacy rules, and, therefore, will require the allocation of import counting rights in order to be counted toward SCE's resource adequacy requirements.

## **6. Qualitative factors**

Qualitative factors are used as tie-breakers when the quantitative portion of the LCBF analysis for two projects is equal. There were no such ties with the Dixie Valley or ORNI Contracts, thus no need to consider these qualitative factors.

## **7. Impact on debt equivalence**

Specific information regarding the impact on debt equivalence of the Dixie Valley and ORNI Contracts can be found in Appendix C.

## **D. Standard Terms And Conditions**

The Dixie Valley and ORNI Contracts contain modifications to certain standard contract terms that were identified in D.04-06-014. In that decision, the Commission established certain standard terms and conditions to be used by the IOUs when contracting for RPS-eligible resources. The Appendix to the decision, which sets forth the standard language, states in parentheses that the terms “May Not be Modified” or “May be Modified.” The decision also states, however, that the purpose of the standard terms was to develop “a ‘year one’ contract to enable the RPS solicitation to move forward, and [the Commission] expect[s] that the contract language will become more refined as the parties and the Commission gain further experience.”<sup>3</sup> Therefore, the decision contemplated that the IOUs would be able to modify the standard terms after 2004 as needed. In this context, SCE proposed and had approved in D.06-05-039 certain modifications to the “standard” terms in its 2006 RPS procurement plan and bid solicitation materials. SCE’s bid solicitation materials included SCE’s 2006 RPS *pro forma* agreement, which is very similar to the Dixie Valley and ORNI Contracts.

Also, these modifications to the standard terms were commercially necessary or substantively immaterial to the terms contained in D.04-06-014. A comparison of the non-modifiable standard terms from D.04-06-014, along with justifications for the modifications, to the Dixie Valley and ORNI Contract terms can be found in Appendix H. Furthermore, the Dixie Valley and ORNI Contracts contain modifications to the non-modifiable standard terms that have been previously approved by the Commission in the approval of seven other RPS contracts from SCE’s 2005 RPS solicitation. Again, Appendix H includes a more complete discussion of these approved terms.

With respect to the standard terms that “May be Modified,” SCE modified most if not all of these terms. Many of these changes were made to bring more clarity to the PPAs as a whole and reflect experience gained through previous RPS solicitations. For example, D.04-06-014 has “modifiable” generic performance standard/requirements.<sup>4</sup> The Dixie Valley and ORNI Contracts include a detailed performance standard that both parties have found commercially reasonable and reflects SCE’s experience in entering numerous RPS contracts with counterparties that the “standard” term lacks.

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<sup>3</sup> The decision was issued in 2004 and was applicable to the IOUs’ 2004 RPS solicitation. Therefore, within the context of the decision, “year one” refers to 2004.

<sup>4</sup> See D.04-06-014 at Appendix A, A-10.

Furthermore, some of the standard terms do not work in the context of the Dixie Valley and ORNI Contracts. The “modifiable” product definitions for “as-available” and “unit firm” products are remnants of the Edison Electric Institute agreement that do not make sense in the agreement.<sup>5</sup> SCE has also made other changes to the standard terms, many of them non-substantive, so that the definitions and other provisions of the Dixie Valley and ORNI Contracts work together. Thus, simply dropping all of the standard terms and conditions into the Dixie Valley and ORNI Contracts would result in inconsistent definitions and use of terms and would render some provisions nonsensical.

Accordingly, all of the changes to the “modifiable” standard terms were mutually agreed to by SCE, Dixie Valley and ORNI, and were made to better reflect current RPS contracting experience and bring more clarity to the agreement.

### **E. Project Viability**

The viability of the Dixie Valley Contract is very high for several reasons including: (i) it is based upon an existing developed and operating project; (ii) the existing project is currently supplying renewable power to SCE; (iii) Caithness, the project sponsor, has a number of other sponsored projects currently under contract with SCE and other parties throughout the United States and has been a reliable developer, owner and operator to SCE for many years; (iv) it is a geothermal facility based on a mature technology with a high quality source of geothermal energy; (v) there is no development risk; (vi) there are no interconnection issues; and (vii) it has obtained RPS-eligibility certification from the CEC.

A project viability matrix for Dixie Valley is provided in Appendix F.

The viability of the ORNI project is high for several reasons. First, ORNI’s parent corporation, Ormat Technologies of Israel, is an experience developer of geothermal energy that has been providing SCE renewable geothermal energy under various QF contracts since 1984. As stated earlier, ORNI uses a binary power conversion technology that is employed by most geothermal developers with fuel sources with relatively low heat. ORNI has been primarily responsible for the development of this technology and has successfully developed, financed, constructed and operated projects based on this technology over the past thirty years in connection with several different projects.

Second, the quality of the geothermal source for the ORNI Contract will be able to provide the necessary heat for the output required under the contract. The fuel source for the ORNI Contract has been known since the early 1980’s. In the past, the relative coolness and depth of the reservoir prevented the development of the site as a renewable project. However, through advancements in power technology that will be employed by ORNI, the fuel source now allows for the economic development of the site.

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<sup>5</sup> See D.04-06-014 at Appendix A, A-14.

Third, ORNI has nearly completed site control of the location it intends to develop. Specifically, ORNI has approximately 90% of the leases needed in order to complete the development of the project with negotiations for the remainder of the leases near completion.

Fourth, financing of the project is secure in that ORNI intends to self-finance the development and construction phases of the project.

Fifth, SCE does not anticipate that construction of the facility and its equipment will be an impediment to the completion of the project. ORNI's parent company is fully integrated and has already reserved space on its fabrication lines for the large equipment needed for ORNI.

Finally, SCE does not anticipate that transmission will be an impediment to the completion of the project. ORNI is located within the Imperial Irrigation District ("IID"). ORNI is intending to file an interconnection agreement with IID. While the interconnection process is in the early stages, ORNI has indicated that meeting the on-line date should not be a problem. Additional information regarding transmission can be found in Appendix C.

A project viability matrix for ORNI is provided in Appendix F.

## **F. Contingencies And Milestones**

### **1. PTCs/ITCs**

Specific information regarding production tax credits ("PTCs") and investment tax credits ("ITCs") for the Dixie Valley and ORNI Contracts can be found in Appendix C.

### **2. Termination rights impacting the schedule for CPUC approval**

Specific information regarding termination rights that may impact the schedule for CPUC approval of the Dixie Valley and ORNI Contracts can be found in Appendix C.

## **G. Regulatory Process**

### **1. Earmarking**

According to D.06-05-039 and the December 6, 2006 extension granted by the Executive Director of the Commission, SCE is permitted to earmark contracts from its 2006 RPS solicitation to 2006 if the agreement is executed before June 30, 2007. The ORNI Contract was executed on June 29, 2007. Therefore, SCE reserves the right to earmark generation from the ORNI Contract from 2009 into its 2006 RPS compliance year.

SCE does not expect to earmark the output from the Dixie Valley Contract.

## **2. RPS-eligibility certification from the CEC**

The Dixie Valley facility has received RPS-eligibility certification from the CEC. To date, ORNI has not received RPS-eligibility certification from the CEC. However, neither SCE nor ORNI foresees obtaining CEC certification as an issue.

### **REQUEST FOR COMMISSION APPROVAL**

The term of the Dixie Valley and ORNI Contracts are conditioned on the occurrence of "Final CPUC Approval," as it is defined in the PPAs. In order to satisfy that condition with respect to the PPAs, SCE requests that the Commission issue a resolution no later than October 13, 2007, including:

1. Approval of the Dixie Valley and ORNI Contracts in their entirety;
2. Approval of the modification of certain terms and condition in the Dixie Valley and ORNI Contracts that are provided for in D.04-06-014;
3. A finding that any electric energy sold or dedicated to SCE pursuant to the Dixie Valley and ORNI Contracts constitute procurement by SCE from an eligible renewable resource ("ERR") for the purpose of determining SCE's compliance with any obligation that it may have to procure from ERRs pursuant to the RPS Legislation or other applicable law concerning the procurement of electric energy from renewable energy resources;
4. A finding that all procurement under the Dixie Valley and ORNI Contracts count, in full and without condition, towards any annual procurement target established by the RPS Legislation or the Commission which is applicable to SCE;
5. A finding that all procurement under the Dixie Valley and ORNI Contracts count, in full and without condition, towards any incremental procurement target established by the RPS Legislation or the Commission which is applicable to SCE;
6. A finding that all procurement under the Dixie Valley and ORNI Contracts count, in full and without condition, towards the requirement in the RPS Legislation that SCE procure 20% (or such other percentage as may be established by law) of its retail sales from ERRs by 2010 (or such other date as may be established by law);
7. A finding that the Dixie Valley and ORNI Contracts, and SCE's entry into these PPAs, is reasonable and prudent for all purposes, including, but not limited to, recovery in rates of payments made pursuant to the PPAs, subject only to further review with respect to the reasonableness of SCE's administration of the PPAs; and
8. Any other and further relief as the Commission finds just and reasonable.

## **TIER DESIGNATION**

Pursuant to D.07-01-024, Rule 5.3(5), this advice letter is submitted with a Tier 3 designation.

## **EFFECTIVE DATE**

This advice filing will become effective on October 13, 2007.

## **NOTICE**

Anyone wishing to protest this advice filing may do so by letter via U.S. Mail, facsimile, or electronically, any of which must be received by the Energy Division and SCE no later than 20 days after the date of this advice filing. Protests should be mailed to:

Akbar Jazayeri  
Vice President, Revenue and Tariffs  
Southern California Edison Company  
2244 Walnut Grove Avenue, Quad 3D  
Rosemead, California 91770  
Facsimile: (626) 302-4829  
E-mail: [AdviceTariffManager@sce.com](mailto:AdviceTariffManager@sce.com)

Bruce Foster  
Senior Vice President of Regulatory Operations  
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601 Van Ness Avenue, Suite 2040  
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With a copy to:

William V. Walsh  
Attorney  
Southern California Edison Company  
2244 Walnut Grove Avenue, 3<sup>rd</sup> Floor  
Rosemead, CA 91770  
Facsimile: (626) 302-3540  
E-mail: [William.V.Walsh@sce.com](mailto:William.V.Walsh@sce.com)

There are no restrictions on who may file a protest, but the protest shall set forth specifically the grounds upon which it is based and shall be submitted expeditiously.

In accordance with Section 4, of General Order No. 96-B, SCE is furnishing copies of this advice filing to the interested parties shown on the attached R.06-05-027, R.06-02-012 and SCE's GO 96-B Service List. Address change requests to the GO 96-B Service List should be directed to [AdviceTariffManager@sce.com](mailto:AdviceTariffManager@sce.com) or at (626) 302-4039. For changes to any other Service List, please contact the Commission's Process Office at (415) 703-2021 or at [ProcessOffice@cpuc.ca.gov](mailto:ProcessOffice@cpuc.ca.gov).

Further, in accordance with Public Utilities Code Section 491, notice to the public is hereby given by filing and keeping the advice filing open for public inspection at SCE's corporate headquarters. To view other SCE advice letters filed with the Commission, log on to SCE's web site at <http://www.sce.com/AboutSCE/Regulatory/adviceletters/> and choose Regulatory Info Center/Advice Letters.

All questions concerning this advice filing should be directed to James Woodruff at (626) 302-1924 (E-mail: [james.woodruff@sce.com](mailto:james.woodruff@sce.com)).

**Southern California Edison Company**

Akbar Jazayeri

AJ:mm  
Enclosures

# CALIFORNIA PUBLIC UTILITIES COMMISSION

## ADVICE LETTER FILING SUMMARY ENERGY UTILITY

MUST BE COMPLETED BY UTILITY (Attach additional pages as needed)

Company name/CPUC Utility No.: Southern California Edison Company (U 338-E)

Utility type:

ELC       GAS  
 PLC       HEAT       WATER

Contact Person: James Yee

Phone #: (626) 302-2509

E-mail: [James.Yee@sce.com](mailto:James.Yee@sce.com)

E-mail Disposition Notice to: [AdviceTariffManager@sce.com](mailto:AdviceTariffManager@sce.com)

EXPLANATION OF UTILITY TYPE

ELC = Electric      GAS = Gas  
PLC = Pipeline      HEAT = Heat      WATER = Water

(Date Filed/ Received Stamp by CPUC)

Advice Letter (AL) #: 2137-E      Tier Designation: 3

Subject of AL: Submission of Contracts for Procurement of Renewable Energy From SCE's Renewable Portfolio Standard Solicitation

Keywords (choose from CPUC listing): Contracts

AL filing type:  Monthly  Quarterly  Annual  One-Time  Other

If AL filed in compliance with a Commission order, indicate relevant Decision/Resolution #:

Does AL replace a withdrawn or rejected AL? If so, identify the prior AL: \_\_\_\_\_

Summarize differences between the AL and the prior withdrawn or rejected AL<sup>1</sup>:

Confidential treatment requested?  Yes      If yes, please see the attached declaration for specific information.

Confidential information will be made available to those who execute a nondisclosure agreement.

Name and contact information to request nondisclosure agreement /access to confidential information:

William Walsh  
Southern California Edison Company  
2244 Walnut Grove Avenue, 3<sup>rd</sup> Floor  
Rosemead, CA 91770  
E-mail: [William.V.Walsh@sce.com](mailto:William.V.Walsh@sce.com) or (626) 302-4531

Resolution Required?  Yes

Requested effective date: 10/13/07      No. of tariff sheets: None

Estimated system annual revenue effect: (%): \_\_\_\_\_

When rates are affected by AL, include attachment in AL showing average rate effects on customer classes (residential, small commercial, large C/I, agricultural, lighting).

Tariff schedules affected: \_\_\_\_\_

Service affected and changes proposed<sup>1</sup>: \_\_\_\_\_

Pending advice letters that revise the same tariff sheets: \_\_\_\_\_

<sup>1</sup> Discuss in AL if more space is needed.

**Protests and all other correspondence regarding this AL are due no later than 20 days after the date of this filing, unless otherwise authorized by the Commission, and shall be sent to:**

CPUC, Energy Division  
Attention: Tariff Unit  
505 Van Ness Ave.,  
San Francisco, CA 94102  
[inj@cpuc.ca.gov](mailto:inj@cpuc.ca.gov) and [mas@cpuc.ca.gov](mailto:mas@cpuc.ca.gov)

Akbar Jazayeri  
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Bruce Foster  
Senior Vice President of Regulatory Operations  
c/o Karyn Gansecki  
Southern California Edison Company  
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**Appendix A**  
**Confidentiality Declaration**

**DECLARATION OF MIKE MARELLI REGARDING THE CONFIDENTIALITY  
OF DATA PROVIDED IN CONFIDENTIAL APPENDICES IN SUPPORT OF  
ADVICE LETTER SEEKING APPROVAL OF POWER PURCHASE AGREEMENTS  
BETWEEN SCE AND CAITHNESS DIXIE VALLEY LLC AND SCE AND ORNI #18 LLC**

I, Mike Marelli, declare and state:

1. I am a Manger in the Renewable and Alternative Power Department at Southern California Edison (“SCE”). As such, I had responsibility for supervising the preparation of the confidential appendices to the advice letter attached hereto (the “Protected Materials”). I make this declaration in accordance with the Administrative Law Judge’s Ruling Clarifying Interim Procedures for Complying with Decision 06-06-066, issued on August 22, 2006 in Rulemaking 05-06-040. I have personal knowledge of the facts and representations herein and, if called upon to testify, could and would do so, except for those facts expressly stated to be based upon information and belief, and as to those matters, I believe them to be true.

2. I have reviewed the Protected Materials. Listed below are the data in the Protected Materials for which SCE is seeking confidential protection and the categories on the Matrix of Allowed Confidential Treatment Investor Owned Utility (“IOU”) Data (the “Matrix”) to which these data correspond. Also set forth is an explanation of why the data cannot be aggregated, redacted, summarized, masked or otherwise protected in a way that allows partial disclosure:

<b>Data</b>	<b>Page</b>	<b>Matrix Category</b>	<b>Reason why data cannot be aggregated, etc.</b>
Summary of 2003-2006 RPS Solicitation Data	Appendix B	VII. G. RPS Contracts  VII. H. Score Sheets, analyses, evaluations of proposed RPS projects  VIII. A. Bid Information	Detailed information is required for the advice letter.

		VIII. B. Specific quantitative analysis involved in the scoring and evaluation of participating bids.	
Confidential Contract Summary for Dixie Valley and ORNI	Appendix C	VII. G. RPS Contracts  VII. H. Score sheets, analyses, evaluations of proposed RPS projects  VIII. A. Bid Information  VIII. B. Specific quantitative analysis involved in the scoring and evaluation of participating bids.	Detailed information is required for the advice letter.
Dixie Valley's and ORNI's Contributions to RPS Goals	Appendix D	VII. G. RPS Contracts  V. C. LSE Total Energy Forecast – Bundled Customer	Detailed information is required for the advice letter.
Project Viability Matrices for Dixie Valley and ORNI	Appendix F	VII. G. RPS Contracts	Detailed information is required for the advice letter.
CEC-SEP Pricing Worksheets for Dixie Valley and ORNI	Appendix G	VII. G. RPS Contracts  VII. H. Score sheets, analyses, evaluations of proposed RPS projects	Detailed information is required for the advice letter.
Comparison of Standard Contract Terms to the Dixie Valley and ORNI Contract Terms	Appendix H	VII. G. RPS Contracts	Detailed information is required for the advice letter.
The Dixie Valley Contract	Appendix I	VII. G. RPS Contracts	Detailed information is required for the advice letter.

The ORNI Contract	Appendix J	VII. G. RPS Contracts	Detailed information is required for the advice letter.
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3. SCE is complying with the limitations on confidentiality specified in the Matrix that pertain to the data listed in the table above.

4. I am informed and believe and thereon allege that the data in the table above cannot be aggregated, redacted, summarized, masked or otherwise protected in a manner that would allow partial disclosure of the data while still protecting confidential information.

5. I am informed and believe and thereon allege that the data in the table in paragraph 2 above has never been made publicly available.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed on July 12, 2007, at Rosemead, California.

/s/ Mike Marelli  
Mike Marelli

**Appendix B**

**Summary of 2003-2006 RPS Solicitation Data**

**Confidential Protected Materials – Public Disclosure Prohibited**

**Appendix C**

**Confidential Contract Summary**

**Confidential Protected Materials – Public Disclosure Prohibited**

**Appendix D**

**Dixie Valley's and ORNI's Contributions to RPS Goals**

**Confidential Protected Materials – Public Disclosure Prohibited**

## **Appendix E**

### **SCE's RPS Bid Evaluation and Selection Process and Criteria**

## **SCE's Written Description of RPS Bid Evaluation and Selection Process and Criteria ("LCBF Written Report")**

### **I. Introduction**

#### **A. Note relevant language in statute and CPUC decisions approving LCBF process and requiring LCBF Reports**

Under the direction of the California Public Utilities Commission (the "Commission"), SCE conducts annual solicitations for the purpose of procuring power from eligible renewable resources to meet California's Renewables Portfolio Standard ("RPS"). SCE evaluates and ranks proposals based on least-cost/best-fit principles ("LCBF") that comply with criteria set forth by the Commission in D.03-06-071 and D.04-07-029 ("LCBF Decisions"). *See also* Pub. Util. Code Section 399.14(a)(2)(B).

#### **B. Goals of bid evaluation and selection criteria and processes**

The LCBF analysis evaluates both quantitative and qualitative aspects of each proposal to estimate its value to SCE's customers and relative value in comparison to other proposals.

### **II. Bid Evaluation and Selection Criteria**

While assumptions and methodologies have evolved slightly over time, the basic components of SCE's evaluation and selection criteria and process for RPS contracts were established in the Commission's LCBF Decisions. The three main steps that are undertaken by SCE are an initial data gathering period, followed by a quantitative assessment of proposals, ending with adjustments to selection based on qualitative attributes of proposals.

Prior to receiving proposals, SCE finalizes major assumptions and methodologies that drive valuation, including power and gas prices forecasts, existing and forecast resource portfolio, and firm capacity value forecast. Other assumptions, such as the Transmission Ranking Cost Report ("TRCR"), are filed with the Commission for approval prior to the release of the solicitation materials. In addition, SCE gathers the current input assumptions that are developed by external parties, such as the integration costs set by the California Energy Commission ("CEC").

Once proposals are received, SCE begins an initial review for completeness, conformance, and viability. The review includes a screen for reasonableness of proposal parameters, such as generation profiles and capacity factors. SCE works directly with bidders to resolve any issues and ensure data is ready for evaluation.

After this initial review, SCE performs the quantitative assessment of each proposal individually. The result of the quantitative analysis is a relative ranking of proposals that helps define the preliminary short list. Qualitative attributes of each proposal are then considered to further screen the short list and determine tie-breakers, if needed, to arrive at a final short list of proposals.

After this analysis, SCE consults with its Procurement Review Group (“PRG”) regarding its final short list and specific evaluation criteria. Whether a proposal selected in this process results in an executed contract depends on how negotiations proceed. Periodically, SCE updates the PRG regarding the progress of negotiations and also reviews contracts with the PRG prior to execution. Subsequently, SCE executes contracts and submits them to the Commission for approval via advice letter filing.

## **A. Description of Criteria**

### **1. List and discuss the quantitative and qualitative criteria used to evaluate and select bids. This section should include a full discussion of the following:**

#### Quantitative Assessment

SCE evaluates the quantifiable attributes of each proposal individually and subsequently ranks them based on their benefit-to-cost ratio. The benefit-to-cost ratio used in the LCBF evaluation is different than a typical benefit-to-cost ratio, which would usually represent net benefits or value divided by the project cost. In the context of LCBF evaluation, the benefit-to-cost ratio measures total benefits divided by total costs because there is no readily cognizable “project cost” for these proposals. Benefits are comprised of separate capacity and energy components, while costs include the contract price, integration costs, transmission cost, and debt equivalence. SCE discounts the annual benefit and cost streams to a common base year prior to calculating the benefit-to-cost ratio for each proposal.

$$\mathbf{B - C Ratio = \frac{Capacity\ Benefit + Energy\ Benefit}{Payments + Integration\ Cost + Transmission\ Cost + Debt\ Equivalence}}$$

In developing its relative ranking of proposals, SCE’s evaluation methodology incorporates information provided by sellers and assumptions prescribed and set by the CPUC and CEC, with its internal methodologies and forecasts of market conditions. The objective of the quantitative assessment and relative ranking is to develop a preliminary short list that is further refined based on the non-quantifiable attributes discussed below. Each of the elements for the RPS benefit-to-cost ratio is described briefly below.

#### Capacity Benefit

Each proposal is assigned capacity benefits based on SCE’s forecast of capacity value and a technology-specific effective load carrying capability (“ELCC”). SCE’s capacity value forecast consists of a market view for the first two years and a combustion turbine (“CT”) proxy thereafter. The market view of capacity is derived from current broker quotes for SP15 power using a Black’s option model. The CT proxy is based on the

annual deferral value of a General Electric 7FA simple-cycle combustion turbine. ELCC values are established by the CEC's Renewable Generation Integration Cost Analysis ("RGICA"). Annual capacity benefits are the product of SCE's firm capacity value forecast, the total proposed capacity of the project, and the ELCC. For partial years, the capacity value is distributed throughout the year according to SCE's relative loss-of-load probability factors.

### Energy Benefit

SCE measures the energy benefits of a proposal by evaluating its effect on the total production cost of SCE's forecasted resource portfolio to serve its bundled customer load. The evaluation of energy benefits is performed with a portfolio and system that is consistent with SCE's most recently approved Long-Term Procurement Plan ("LTPP"), with some updates to account for the latest gas price and load forecasts and the results of recent procurement activities.

SCE uses Global Energy Decisions' ProSym model to compare the total production costs of SCE's base resource portfolio ("project out") with the total production costs when each proposal is individually added to the base portfolio ("project in"). ProSym performs an hourly, least-cost dispatch with SCE's known resource portfolio and generic generation (Because SCE's complete resource portfolio in the future is uncertain, generic generation is added to the portfolio to ensure that RPS and resource adequacy requirements are satisfied and customer load can be met) to meet customer demand. Each proposal is added to the resource portfolio as a no-cost, must-take hourly generation profile that is provided by the seller. The difference in total production costs between the "project in" and "project out" cases is the energy benefit for each proposal.

SCE's resource portfolio is dispatched against an SP15 power price forecast. For proposals of out-of-area resources, additional congestion charges may be added to the cost of delivering the energy depending on the power price forecast of the originating area relative to SP15 power prices. SCE's power and gas price forecasts are both based on a near-term market view and a longer-term fundamental view of prices.

The simulation model, and hence the energy benefit calculation, captures additional quantitative effects that SCE has been asked to consider by the CPUC, including dispatchability and curtailability. The benefits of these characteristics are rolled into the energy benefit and are not addressed separately.

### Debt Equivalence

Debt equivalence, the term used by credit rating agencies to describe the fixed financial obligation resulting from long-term purchased power contracts, can have significant effects on credit quality and cost of borrowing. The CPUC has recognized this cost and ordered it to be used in evaluation of proposals in RPS solicitations. Consistent with D.04-12-048, SCE utilizes a modified Standard & Poor's methodology that employs a 20% risk factor. In cases in which contracts only include energy payments, as with RPS contracts, SCE will use credit agency guidance to determine the percentage of payments that are equivalent to capacity payments and calculate debt equivalence accordingly.

### **a. Market valuation (i.e. price)**

The primary costs associated with each proposal are the payments that SCE pays to sellers for the expected renewable energy deliveries under the terms of the contracts. Proposals include an all-in price for delivered renewable energy, which is adjusted in each time-of-delivery period by energy payment allocation factors (“TOD factors”). SCE develops and submits its TOD factors for each solicitation to the CPUC for approval prior to the issuance of the RFP. The total payments are then determined using the generation profile provided in the proposal and adjusted for electric energy loss factors (to calculate the scheduled amount of electric energy).

#### **- include treatment of integration costs**

Integration costs are the additional system costs required to provide load following and regulation as a result of integrating various resources. As per D.04-07-029 and clarified in D.07-02-011, the integration cost adder for all proposals is zero.

#### **- include treatment of dispatchability/curtailability benefits**

Dispatchability and curtailability are both attributes that are incorporated into the production simulations used to evaluate the energy benefits. Any proposal received with such characteristics would be modeled as such and the energy benefits would capture the qualitative benefit. SCE has not received any proposals with dispatchability or curtailability attributes in any of its RPS solicitations to date.

### **b. Portfolio fit**

SCE’s LCBF quantitative evaluation process inherently captures the impact of portfolio fit. For example, as different proposals are added to the overall portfolio, the resultant residual net short or net long is impacted. Projects that more often increase SCE’s net long positions are assigned less value than those projects that are more often filling net short positions. As such, a project that provides more energy when it is most needed and less energy in periods of low need will receive the greatest energy benefit.

### **c. Credit and collateral requirements**

SCE requests that bidders provide pricing for a number of defined collateral levels. For the purposes of the LCBF ranking process, a common collateral point is chosen by SCE by which to evaluate all of the projects. While other considerations are incorporated when determining which collateral point is eventually chosen for individual projects, SCE uses the common point to determine the pricing that is used for ranking purposes.

### **d. Transmission Cost Adders**

System transmission upgrades costs are estimated using SCE's TRCR for resources that do not have an existing interconnection to the electric system or a completed Facilities Study. TRCRs are published prior to the release of the solicitation and are based only on responses to a request for prospective/potential bids. Transmission cost adders for new generation are assigned by cluster, or regions, and are based on standard off-the-shelf unit cost guides. Proposals received in the actual solicitation that do not fit into the clusters defined by the TRCR will have adders developed using the same methodology as was used in the original TRCR.

- **Discuss how much detailed transmission cost information the IOU requires for each project**

Other than the assumptions provided in a bidder's proposal, SCE does not require additional transmission information, unless the bidder has completed a feasibility study. If a feasibility study has been completed then the bidder must provide the results.

- **Discuss whether cost adders are always imputed for projects in transmission-constrained areas, or whether and how costs for alternative commercial transactions (ie. swapping, remarketing) are substituted.**

SCE uses the best available information it can find when determining the cost of potential upgrades for projects in transmission-constrained areas. For those projects whose transmission upgrade costs cannot be determined from SCE's TRCR, the TRCRs of PG&E or SDG&E are used as appropriate. SCE applies the required upgrade costs to get the project delivered to the nearest defined market (e.g., NP15, SP26, *etc.*). For projects with an assumed delivery point outside SP26, SCE applies a power swapping methodology, where the power is assumed to be sold into the local market with replacement power purchased in SP26.

#### Qualitative Assessment (including **Project Viability**)

In addition to the identified benefits and costs that are quantified in the evaluation, SCE assesses non-quantifiable characteristics of each proposal. These qualitative attributes are used to consider the inclusion of additional sellers on the short list due to: (a) the strength of particular seller's proposal; or (b) the relative weakness of the high ranked proposals.

The attributes that SCE considers include, but are not limited to: (a) extent of Seller's mark-up of SCE's pro forma agreement; (b) project viability; (c) status of project development efforts; (d) timing and progress towards gaining access to transmission; (e) technology viability; (f) technology and economic viability; and (g) seller's capability to perform all of its financial and other obligations under the pro forma agreement.

Where there are weaknesses in some of these factors, SCE utilizes additional contract requirements to manage these issues during the development of the project.

In addition, SCE assesses additional non-quantifiable characteristics of each proposal that are used to determine tie-breakers.

The attributes that SCE considers include, but are not limited to: (a) environmental impacts of seller’s proposed project on California’s water quality and use; (b) resource diversity; (c) benefits to minority and low income communities; (d) local reliability; and (e) environmental stewardship.

Pursuant to D.04-07-029, the presence of demonstrated qualitative attributes may justify moving a proposal onto SCE’s final short list of proposals if (a) the initial proposal rank is within reasonable valuation proximity to those selected for the short list and (b) SCE receives support from its PRG to elevate the proposal based on qualitative factors.

**f. Impact of quantitative and qualitative factors on the LCBF ranking process**

SCE evaluates the quantifiable attributes of each proposal individually and subsequently ranks them based on their benefit-to-cost ratio. The benefit-to-cost ratio used in the LCBF evaluation is different than a typical benefit-to-cost ratio, which would usually represent net benefits or value divided by the project cost. In the context of LCBF evaluation, the benefit-to-cost ratio measures total benefits divided by total costs because there is no readily cognizable “project cost” for these proposals. Benefits are comprised of separate capacity and energy components, while costs include the contract price, integration costs, transmission cost, and debt equivalence. SCE discounts the annual benefit and cost streams to a common base year prior to calculating the benefit-to-cost ratio for each proposal.

$$\text{B - C Ratio} = \frac{\text{Capacity Benefit} + \text{Energy Benefit}}{\text{Payments} + \text{Integration Cost} + \text{Transmission Cost} + \text{Debt Equivalence}}$$

SCE also assesses non-quantifiable characteristics of each proposal. Qualitative attributes of each proposal are considered to further screen the short list and determine tie-breakers to arrive at a final short list of proposals.

**B. Criteria Weightings**

**1. If a weighting system is used, please describe how each LCBF component is assigned a quantitative or qualitative weighting compared to other components. Discuss the rationale for the weightings.**

SCE does not apply a weighting system in its LCBF evaluation.

**2. If a weighting system is not used, please describe how the LCBF evaluation criteria are used to rank bids.**

SCE’s LCBF quantitative evaluation of the bids incorporates energy and capacity benefits with energy payments, transmission & integration costs, and debt equivalence to create

individual benefit-to-cost ratios. It is this benefit-to-cost ratio that is used to rank and compare each project. Qualitative attributes of each proposal are then considered to further screen the short list and determine tie-breakers to arrive at a final short list of proposals.

**3. Discuss how the IOU LCBF methodology evaluates project commercial operation date relative to transmission upgrades required for the project.**

SCE starts its evaluation with the assumption that the proposed online date for the project is correct and that any transmission upgrades will be complete in accordance with the schedule. For those projects which SCE has concerns over the viability of the timeframe, a range of online dates (and transmission facilities availability) are evaluated to determine the sensitivity of the results to the timing. If the project ranking does not change in a manner that would change its original selection status over a range that SCE deems reasonable, then the original assessment is used. For projects whose selection is dependent on the timing of the project and the availability of upgraded transmission facilities, further analysis of the timing of the projects is required. SCE has not experienced the latter situation in any of its solicitations to date.

**4. Discuss how the LCBF methodology takes into account bids that may be more expensive, but have a high likelihood of resulting in viable projects.**

SCE's LCBF methodology incorporates project viability in a qualitative assessment after the preliminary ranking of bids has been completed and in determining the size of the shortlist. Bids that are more expensive tend to be lower on the quantitative ranking of projects, and, therefore, often fall near the projects cut-point. SCE errs on the side of inclusiveness in the selection of its final shortlist. For projects with a high likelihood of resulting in viable projects that lie just below, the cut-point may be adjusted or the projects may be included in the final shortlist.

**C. Evaluation of utility-owned, turnkey, buyouts, and utility-affiliate projects**

**1. Describe how utility-owned projects are evaluated against PPAs**

SCE views utility-owned cost-of-service generation as a good option for customers to have. SCE does not intend to evaluate utility-owned projects against PPAs, as utility-owned generation and contracted-for generation are fundamentally different products. As such, any attempt to do a numerical comparison of them is unworkable. This topic is discussed in detail in the Supplemental Testimony to SCE's 2006 Long-term Procurement Plan (Section I.B, pgs 2-5). Moreover, approval of a utility-owned project would not be submitted through the solicitation process, but through a formal application.

**2. Describe how turnkey projects are evaluated against PPAs**

Turnkey projects are similar to utility-owned projects. Refer to response above.

### **3. Describe how buyout projects are evaluated against PPAs**

Project buyout options are essentially a hybrid of utility-owned projects and PPAs. Refer to response above.

### **4. Describe how utility-affiliate projects are evaluated against non-affiliate projects**

Utility-affiliate projects are evaluated in the same manner as non-affiliate projects. In addition, evaluation of utility affiliate projects would be subject to review by the independent evaluator, the PRG, and the Commission through the application approval process.

## **III. Bid Evaluation and Selection Process**

### **A. What is the process by which bids are received and evaluated, selected or rejected for shortlist inclusion, and further evaluated once on the shortlist?**

See above.

### **B. What is the typical amount of time required for each part of the process?**

It takes approximately eight weeks for SCE to complete the LCBF evaluation process, which includes quality control of bidders' information, transmission assessment, quantitative assessment, qualitative assessment, management review, and PRG meetings. Many of these events overlap and may require additional time for clarification from sellers.

### **C. How is the size of the shortlist determined?**

The size of SCE's shortlist is determined largely by an assessment of the attractiveness of RPS-eligible energy bids and a desire for a robust, inclusive set of developer proposals. The shortlist is expanded well beyond the point that is needed for SCE to meet its RPS goals, as there is an expectation that some projects that are selected will not join the shortlist and that negotiations will not be successful with some sellers that are initially on the shortlist.

### **D. Are rejected bidders told why they were rejected? If so, what is the process?**

Yes. Bidders are informed verbally over the phone and in writing by letter.

### **E. Describe involvement of the Independent Evaluator**

The independent evaluator monitors SCE's RPS solicitations, provides an independent evaluation of SCE's process and the proposals it may receive, and helps the Commission and SCE's PRG participants by providing them with information and assessments to ensure that the solicitation was conducted fairly and that the best resources were acquired. The independent evaluator also provides an assessment of SCE's RPS solicitation from the initial phase of the solicitation (i.e., the publicizing of the issuance of the RFP) through the development of a short list of proposals/bidders with whom SCE has commenced negotiations.

### **F. Describe involvement of the Procurement Review Group**

SCE consults with its PRG during each step of the renewable procurement process. Among other things, SCE provides solicitation materials and pro forma contracts to the PRG for review and comment before commencing the RFP; informs the PRG of the initial results of the RFP; explains the evaluation process; and updates the PRG periodically concerning the status of contract formation.

**G. Discuss whether and how feedback on the solicitation process is requested from bidders (both successful and unsuccessful) after the solicitation is complete**

In 2006, SCE held a conference that solicited feedback regarding SCE's RFP and contracting process from both successful and unsuccessful bidders.

**Appendix F**

**Project Viability Matrices**

**Confidential Protected Materials – Public Disclosure Prohibited**

**Appendix G**

**CEC-SEP Pricing Worksheets**

**Confidential Protected Materials – Public Disclosure Prohibited**

**Appendix H**

**Comparison of Standard Contract Terms to the Dixie Valley and ORNI Contract Terms**

**Confidential Protected Materials – Public Disclosure Prohibited**

**Appendix I**

**Power Purchase Agreement between SCE and Caithness Dixie Valley, LLC**

**Confidential Protected Materials – Public Disclosure Prohibited**

**Appendix J**

**Power Purchase Agreement between SCE and ORNI #18, LLC**

**Confidential Protected Materials – Public Disclosure Prohibited**