

**DRAFT**

**PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA**

**ENERGY DIVISION**

**ID #10800  
RESOLUTION E-4443  
December 1, 2011**

**REDACTED**

**R E S O L U T I O N**

Resolution E-4443. Southern California Edison Company requests approval of Fixed Energy Price Agreements with three existing Qualifying Facilities.

**PROPOSED OUTCOME:** This resolution approves a request by Southern California Edison Company to enter into short-term Fixed Energy Price Agreements with three existing renewable energy Qualifying Facilities and to recover in rates all payments made under each such agreement.

**ESTIMATED COST:** \$58.68 million over the term of the contracts until June 2014.

By Advice Letter 2608-E Filed on July 29, 2011.

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**SUMMARY**

This resolution approves short-term Fixed Energy Price Agreements (FEPAs) between Southern California Edison Company (SCE) and three existing renewable energy Qualifying Facilities (QFs). Unlike the previous two fixed price agreements offered to QFs, for the FEPAs that are the subject of this resolution, SCE conducted a solicitation to identify the most competitive fixed price offers. Since QF energy payments are largely based on the price of natural gas, a QF fixed energy price agreement functions as a hedge against natural gas and provides an additional way for SCE to manage the price risk to SCE's customers. Three QFs offered competitive bids for Fixed Energy Price Agreements under SCE's Fixed Price Request for Offers (RFO). The winning projects will provide SCE with 1,079 GWh of renewable energy over the term of the Agreements (May 1, 2012 through June 30, 2014). SCE expects to spend \$58.68 million to purchase energy under the three Fixed Energy Price Agreements which is expected to represent a modest savings for ratepayers relative to what the QFs would have otherwise been paid. Furthermore, SCE estimates that the three

FEPAs combined hedge the equivalent of 8.8 million MMBtu of gas over the 26-month period of the Agreements.

## **BACKGROUND**

### *Overview of California QF Program*

The Public Utilities Regulatory Policy Act of 1978 established provisions whereby qualifying cogeneration and renewable generation facilities (Qualifying Facilities or QFs) are compensated for power delivered to energy utilities at a rate representing the utilities' avoided cost of generation, the price the utility would have paid to procure power but for the existence of the QF. In April of 2004, the Commission opened Rulemakings (R.) 04-04-003/R.04-04-025 to update the avoided cost of energy pricing, develop new long-term standard offer contracts and address various procurement policies associated with QFs.

In September of 2007, the Commission issued D.07-09-040 adopting an updated Short Run Avoided Cost (SRAC) energy price for QFs and setting capacity payment prices for firm and as-available generation. The SRAC, adopted as the Market Index Formula, was further developed and implemented upon Commission approval of Resolution E-4246 in July of 2009, effective in August 2009. For many QFs, however, the new SRAC established in D.07-09-040 does not apply due to prior Commission approval of fixed energy prices under various settlement agreements.

### *Renewable QF Contracting with SCE*

In June 2001, in the aftermath of the 2000-2001 energy crisis, the Commission approved D.01-06-015, which allowed QFs to enter into any one of three voluntary contract amendments. The three amendment options were either (a) supplemental payments for one year for QFs demonstrating immediate need for such funds in order to continue operations, (b) fixed energy prices for five-years at 5.37 cents per kilowatt-hour (kWh), or (c) incentive payments for energy produced above normal operating levels.

On or about June 19, 2001, SCE executed fixed-price, five-year agreements with 90 renewable QFs fixed based on the fixed-price amendment approved in D.01-06-015 (First Renewable Fixed Price Agreement or RFPA1). These agreements included an energy price of 5.37 cents per kWh and had contract terms of May 1, 2002 through April 30, 2007.

In May 2006, with approximately one year remaining on the First Renewable Fixed Price Agreements, SCE and QF representatives negotiated terms and reached an agreement in principle on a second five-year, fixed price agreement (Second Renewable Fixed Price Agreement or RFPA2). SCE offered the Second Renewable Fixed Price Agreement to all 90 QFs that received the RFPA1 plus one additional facility. Of the 91 QFs that were offered the RFPA2, 61 facilities accepted the agreement. These 61 QFs represented 90 percent (by 2005 generation) of SCE's non-gas fired QF portfolio.

This Second Renewable Fixed Price Agreement was approved by the Commission by Resolution E-4026 on October 19, 2006. The terms and conditions of this agreement were similar to the First Renewable Fixed Price Agreement. The contract term extended from May 1, 2007 to April 30, 2012. The energy price during the five-year period was set at 6.15 cents/kWh, with an escalation factor of one (1) percent per year. In addition, the QFs entering into the RFPA2 expressly agreed to convey all Environmental Attributes, Capacity Attributes and Resource Adequacy Benefits generated or produced during the RFPA2 term to SCE.

#### *Overview of the 2012 QF Fixed Energy Price Agreements (FEPA)*

In April of 2012, the Second Renewable Fixed Price Agreement between SCE and 61 QFs will expire. However, all of these facilities will remain under contract with SCE through the term of their original contracts, which expire between 2013 and 2026. Upon expiration the Second Renewable Fixed Price Agreement, the price paid to these facilities will revert to SRAC as periodically updated by the Commission, unless another agreement is reached.

Because SRAC fluctuates with the price of natural gas, it tends to be poorly aligned with the operations of renewable generators as their costs do not vary with natural gas prices. In 2010, SCE began to field questions from QFs about another QF fixed energy price program to replace the Second Renewable Fixed Price Agreements. In response to these questions, SCE contends that it analyzed gas and power market conditions, its procurement needs, and its risk profile and determined that the most appropriate course of action with regard to QF fixed price agreements was to integrate the interest in QF fixed price agreements with its other hedging activities.<sup>1</sup>

Since SRAC energy payments are largely based on the price of natural gas, a QF fixed energy price agreement functions as a hedge against natural gas.

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<sup>1</sup> Southern California Edison, Advice 2608-E, July 29, 2011, p.3.

Thus, the QF fixed energy price agreements are another way for SCE to manage the price risk to SCE's customers due to the volatility of the natural gas price component in the calculation of SRAC.

Given that SCE would be seeking fewer fixed energy price contracts for shorter time periods than five years, SCE determined that the most efficient method to determine the most competitive offers was to conduct a solicitation under which projects could bid a fixed energy price that meets that project's specific needs. SCE then formulated a plan for a Request for Offers (RFO) and presented this proposal to its Procurement Review Group (PRG) on April 27, 2011. After such consultation, SCE took steps to initiate the RFO.

### **NOTICE**

Notice of AL 2608-E was made by publication in the Commission's Daily Calendar. Southern California Edison Company states that a copy of the Advice Letter was mailed and distributed in accordance with Section 3.14 of General Order 96-B.

### **PROTESTS**

Advice Letter 2608-E was not protested.

### **DISCUSSION**

#### **SCE requests Commission approval of three fixed energy price agreements with three existing QFs.**

On July 29, 2011, SCE filed Advice Letter (AL) 2608-E which seeks approval of fixed energy price agreements (FEPAs) between SCE and three existing non-gas fired QFs. SCE executed these contracts with the winning bidders selected after issuing a QF Fixed Price Request for Offers from respondents seeking to change the energy price within their existing QF Power Purchase Agreements from SRAC-based energy payments to a fixed energy price by entering into fixed energy price agreements (FEPA) with SCE.

SCE specifically requests that the Commission find that the Fixed Energy Price Agreements and SCE's entry into the Fixed Energy Price Agreements are reasonable and prudent for all purposes, including, but not limited to, SCE's recovery in rates of all payments made under each such agreement, subject only to Commission review of the reasonableness of SCE's administration of the agreements.

In addition, SCE requests any other and further relief as the Commission finds just and reasonable.

**Energy Division evaluated the QF Fixed Energy Price Agreements on multiple grounds:**

- Consistency with D.06-12-009 and D.07-09-040 (authorizing QF contract extensions)
- Consistency with D.10-12-035 (QF/CHP Program Settlement)
- Reasonableness of the procurement process
- Cost reasonableness
- Consistency with the Emissions Performance Standard
- Consistency with D.02-08-071, which requires Procurement Review Group (PRG) participation

In considering these factors, we also consider the analysis and recommendations of the Independent Evaluator.

**Consistency with D.06-12-009 and D.07-09-040 (authorizing QF contract extensions)**

The filing of AL 2608-E is consistent with Commission procedures for the extension of QF contracts. Approval for QF contract changes was previously addressed in D.98-12-066, which authorized the advice letter process to be used for restructured QF contracts that are supported by the utility, the QF and DRA, and the application process to be used for controversial QF contract restructurings. More recently, D.04-12-048, which adopts the IOUs' long-term procurement plans, concludes that "contracts with duration five years or longer [shall] be submitted with an application to the Commission for preapproval."<sup>2</sup> D.06-12-009 clarifies that based on D.04-12-048, QF contract extensions for less than five years should be authorized through the advice letter process. Furthermore, D.07-09-040 states that "in recognition of the often lengthy process involved in negotiating contract terms... the QF may extend the non-price terms

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<sup>2</sup> D.04-12.048 at p.108.

and conditions of the expiring contract and continue service with the pricing set forth in this Decision until the final [QF Standard Offer] contract is available.”<sup>3</sup>

The Fixed Energy Price Agreements are consistent with D.06-12-009 and D.07-09-040 allowing modifications and amendments for QF contract extensions of less than five years duration.

### **Consistency with D.10-12-035 (QF/CHP Program Settlement)**

On December 16, 2010, the Commission adopted the QF/Combined Heat and Power (CHP) settlement with the issuance of D.10-12-035. The settlement resolves a number of longstanding issues regarding the contractual obligations and procurement options for facilities operating under legacy and new QF contracts. Among other things, it establishes methodologies and formulas for calculating SRAC to be used in Transition Power Purchase Agreements (PPAs), Legacy PPAs, other existing QF PPAs and Optional As-Available PPAs. Furthermore, the Settlement allows for bilaterally negotiated contracts with QFs to determine alternative energy and capacity payments mutually agreeable by relevant parties and subject to CPUC approval. Finally, it establishes specific CHP procurement targets and greenhouse gas (GHG) reduction targets for each named utility.

The QF/CHP Settlement is pending effectiveness which is expected before the end of 2011. The QF Fixed Energy Price Agreements which are the subject of this resolution are consistent with the not-yet-effective Settlement allowing for bilaterally negotiated contracts. Since the QFs executing FEPAs with SCE are not CHP resources, they do not count towards SCE’s megawatt and GHG reduction targets under the Settlement. Upon expiration of the FEPAs in 2014, the energy price paid to the QFs will revert to SRAC, as defined by the Settlement or updated by the CPUC, for any remaining term of the contracts.

The QF Fixed Energy Price Agreements are consistent with the bilateral contracting provision allowed in the QF/CHP Settlement, which is pending effectiveness, and do not count towards SCE’s megawatt or GHG reduction targets under the Settlement.

### **Reasonableness of the procurement process**

#### *Overview of the QF Fixed Price RFO*

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<sup>3</sup> D.07-09-040 at p.126.

Unlike the previous two fixed price agreements offered to QFs, for the Fixed Energy Price Agreements that are the subject of this resolution, SCE conducted a solicitation to identify the most competitive fixed price offers. The RFO process was conducted using a process similar to both SCE's all-source and natural gas RFOs.

Energy Division reviewed SCE's plan for the QF Fixed Price RFO, documents regarding the RFO available on SCE's website, the bids submitted by QFs and SCE's evaluation and selection of final winners. In addition, Energy Division considered SCE's development of hedging targets as part of the Fixed Price RFO.

SCE's QF Fixed Price RFO plan included: (i) fixed price agreements that have the same duration as sought in the Gas RFO (i.e. through June 2014); (ii) dividing hedging evenly between the Fixed Price RFO and Gas RFO; and (iii) applying the long-term gas hedging strategy to the Fixed Price RFO.

In order to determine the Gigawatt hour targets for the Fixed Price RFO, SCE first determined its total exposure to natural gas prices between 2012 and 2014 related to non-gas fired QFs. This included QF historical production data. Next, SCE allocated one-half of that total hedge target to the Fixed Price RFO and converted gas units (MMBtu) to GWh using heat rates established in the QF/CHP Settlement. To that end, SCE arrived at the QF GWh targets for the Fixed Price RFO as listed in Table 1 below.

TABLE 1. Fixed-Energy Price Agreement (FEPA) Targets and Contract Terms				
Product	Notional Quantity	Start Date	End Date	FEPA Term
FEPA	Up to 1,339 GWh	1-May-12	31-Dec-12	8 Months
FEPA	Up to 1,378 GWh	1-May-12	31-Dec-13	20 Months
FEPA	Up to 919 GWh	1-May-12	30-Jun-14	26 Months

In addition, SCE offered a fourth Product with a term from May 1, 2012 through the end of a QF project's existing contract if it expires before June 30, 2014.

*Discussion*

The assignment of half of the QF gas exposure to the Fixed Price RFO and the other half to the Gas RFO appears arbitrary and it is unclear why SCE did not assign the entire 100 percent of the gas exposure related to QFs to the QF RFO.

We expect that since this is a new type of RFO, conservative targets seemed more prudent to the utility than targets accounting for the entire portfolio.

The impact of assigning only half of gas hedging target to the QF Fixed Price RFO is that the targets underrepresent the SCE's non-gas QF portfolio. The procurement targets listed in Table 1 above represent around one-third of SCE's non-gas QF portfolio and less than half of renewable QFs currently paid under the Second Renewable Fixed Price Agreements.<sup>4</sup> As a result, if no additional fixed price agreement is negotiated with the renewable QFs that do not win a contract through the Fixed Price RFO, the prices paid to these facilities will revert to SRAC in April, 2012. Since SRAC is often an uneconomic option for renewable generators, it is unclear whether or how these generators will continue to operate.

Regardless of the assignment of targets, we agree with SCE's strategy that a fixed price indexed to SRAC lowers the utility's overall gas exposure, offering a hedge against natural gas and we expect future, similar RFOs. In that regard, we find that the QF Fixed Price RFO is an appropriate natural gas hedging strategy.

In regards to the fairness and transparency of the RFO process itself, SCE asserts that the QF Fixed Price RFO was robust. SCE posted the pro forma contract, RFO schedule, eligibility requirements, detailed RFO instructions and other relevant program information on its website at <http://www.sce.com/EnergyProcurement/renewables/qf-fixed-price-rfo.htm>. SCE promoted the program to all QF projects and held a web conference to answer questions from potential bidders. SCE also contract an Independent Evaluator to review to the RFO process. More on the findings of the Independent Evaluator are included below.

Sixty-five (65) projects submitted a notice of intent to participate in the RFO and, of those, 48 were ultimately qualified and 47 projects (from 15 owners) submitted binding final bids. SCE selected three winning bids for Fixed Energy Price Agreements representing 91 MW with a total expected energy deliveries of 1,079.7 GWh. This is equivalent to 32.3% of SCE's maximum of 3,347.5 GWh that could be procured through the Fixed Price RFO.

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<sup>4</sup> More details regarding the renewable energy generation in SCE's current QF portfolio and energy deliveries under the Second Renewable Fixed Price Agreements are available in Confidential Appendix A to this resolution.



While the number of Agreements finalized through the Fixed Price RFO is modest, it is worth noting that low gas prices may have made it difficult for QFs to submit bids below SCE’s levelized SRAC forecast.

Any final agreements resulting from the QF Fixed Price RFO are subject to PRG consultation and Commission approval. A more detailed review of the RFO process and negotiations on final Fixed Energy Price Agreements is included in Confidential Appendix A.

After reviewing documents related to the RFO, SCE’s advice letter filings including confidential workpapers, and the report of the Independent Evaluator, we find that the QF Fixed Price RFO and negotiations on final Fixed Energy Price Agreements were conducted in a fair and reasonable manner.

**Cost Reasonableness**

Upon receiving bids through the RFO, SCE evaluated bid prices up to a levelized price limit. This price limit was based on SCE’s internal forecast expected SRAC payments to QFs from May 1, 2012 through June 30, 2014. SCE sought bids that were at or below the projected SRAC energy payments and evaluated based on the projected savings to ratepayers.

Three QFs offered competitive bids for Fixed Energy Price Agreements under SCE’s valuation method. The winning projects will provide SCE with 1,079 GWh over the term of the Agreements (May 1, 2012 through June 30, 2014). SCE expects to spend \$58.68 million to purchase energy under the three Fixed Energy Price Agreements. SCE estimates that the three FEPAs combined hedge the equivalent of 8.8 million MMBtu of gas over the 26 month period of the Agreements, as illustrated in Table 2.

TABLE 2. Fixed Price QF Equivalent Gas Hedges				
	2012	2013	2014	Total
Accepted Bids (GWh)	332.87	499.01	247.86	1079.74
Gas Equivalent (Btu/kWh)	8225	8125	8125	n/a
Total Hedge (MMBtu)	2,737,850	4,054,489	2,013,863	8,806,202

As detailed in the FEPA contracts, the Seller elects the price for energy during the FEPA period in lieu of the prices resulting from application of the short run avoided cost methodology established by the CPUC. FEPA contract prices are adjusted by Time-of-Delivery (TOD) factors set forth in SCE’s Time-of-Use rate

schedule "TOU-8."<sup>5</sup> Throughout the term of the FEPA, capacity payments to the generator do not change from their current contract arrangement.<sup>6</sup> Following the end of the FEPA period, the price paid to the Seller for any remaining term of the contract shall be in accordance with SRAC.

While SCE does project expected savings to ratepayers resulting from this solicitation, after adjustments to reflect the time-of-day for the QF energy deliveries, the savings are relatively small. The potential risk to ratepayers is due to the inherently imperfect nature of gas forecasts. If the price of natural gas decreases significantly over the term of the Fixed Energy Price Agreements, the projected savings from the contracts may decrease and may, in fact, result in costs. However, after reviewing SCE's gas forecasts,<sup>7</sup> we believe that this is a low risk.

SCE provided Energy Division with workpapers related to the bid evaluation process and final selection of winners. Energy Division reviewed SCE's levelized price limit, including gas forecasts, QF bids for a Fixed Energy Price Agreement, SCE's determination of ratepayer savings and final selection of winning projects. A more detailed discussion of cost reasonableness is included in confidential Appendix A of this Resolution.

After reviewing cost related components, the Commission determines that the prices under the Fixed Energy Price Agreements will be likely to result in savings to ratepayers and are reasonable and prudent.

**Consistent with D.02-08-071, SCE's Procurement Review Group (PRG) was notified of the QF Fixed Price RFO.**

SCE's PRG consists of representatives from: the Division of Ratepayer Advocates (DRA), The Utility Reform Network (TURN), California Utility Employees, the Union of Concerned Scientists, the Natural Resources Defense Council, and the Commission's Energy and Legal Divisions.

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<sup>5</sup> Southern California Edison, Pro-forma Fixed Energy Price Agreement, Section 2.1. Available at: <http://www.sce.com/EnergyProcurement/renewables/qf-fixed-price-rfo.htm>.

<sup>6</sup> Id. Section 6.6.

<sup>7</sup> More details on SCE's gas forecast is included in Confidential Appendix A, Details of Fixed Energy Price Agreement Costs.

SCE discussed plans for the QF Fixed Price RFO with its PRG on April 27, 2011. Furthermore, SCE briefed its PRG on the results from the RFO on June 22, 2011.

With regard to the Fixed Energy Price Agreements, SCE has complied with the Commission's rules for involving the PRG.

### **Consistency with the Emissions Performance Standard**

California Pub. Util. Code §§ 8340 and 8341 require that the Commission consider emissions costs associated with new long-term (five years or greater) power contracts procured on behalf of California ratepayers. D.07-01-039 adopted an interim Emissions Performance Standard (EPS) that establishes an emission rate quota for obligated facilities to levels no greater than the greenhouse gas (GHG) emissions of a combined-cycle gas turbine power plant.

The EPS applies to all energy contracts that are at least five years in duration for baseload generation, which is defined as a facility with a capacity factor greater than 60 percent. In most cases, generating facilities using eligible renewable resources are deemed compliant with the EPS.<sup>8</sup>

The Fixed Energy Price Agreements are not subject to the EPS under D.07-01-039 as the Agreements are with renewable energy resources and are less than five years in duration.

### **Independent Evaluator Review**

SCE retained Independent Evaluator (IE) Seth G. Parker and Richard L. Levitan of Levitan & Associates, Inc. to oversee SCE's QF Fixed Price RFO and to evaluate overall merits for Commission approval of the Agreements. AL 2608-E included a public and confidential Independent Evaluator's report. In its report, the IE determined that:

- (i) SCE conducted a fair and transparent process as evidenced by the large number of bidders, one that can be characterized as competitive based on the QF turnout and competitive prices;

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<sup>8</sup> The EPS decision states that "Small power production facilities that use solar thermal electric, wind, geothermal or certain biomass technologies are pre-approved as compliant under this decision." D.07-01-039, Finding of Fact 83.

(ii) SCE's bid evaluations were fair and objective; and

(iii) SCE's selection process was free from anti-competitive behavior.<sup>9</sup>

LAI supports SCE's selection of winning bidders and therefore recommends CPUC approval of all recommended contracts. More details on the findings of the IE report are included in confidential Appendix A.

The Independent Evaluator concurs with SCE's decision to execute the three winning Fixed Energy Price Agreements and finds that these agreements merit Commission approval.

## **COMMENTS**

Public Utilities Code section 311(g)(1) provides that this resolution must be served on all parties and subject to at least 30 days public review and comment prior to a vote of the Commission. Section 311(g)(2) provides that this 30-day period may be reduced or waived upon the stipulation of all parties in the proceeding.

The 30-day comment period for the draft of this resolution was neither waived or reduced. Accordingly, this draft resolution was mailed to parties for comments, and will be placed on the Commission's agenda no earlier than 30 days from today."

## **FINDINGS AND CONCLUSIONS**

1. The Fixed Energy Price Agreements are consistent with D.06-12-009 and D.07-09-040 allowing modifications and amendments for QF contract extensions of less than five years duration.
2. The Fixed Energy Price Agreements are consistent with the bilateral contracting provision allowed in the QF/CHP Settlement, which is pending effectiveness, and do not count towards SCE's megawatt or GHG reduction targets under the Settlement.
3. The QF Fixed Price RFO represents a reasonable natural gas hedging strategy.

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<sup>9</sup> Independent Evaluation Report for Southern California Edison's Non-Gas QF Fixed Price Request for Offers (Public Version), July 27, 2011, p. 2.

4. The QF Fixed Price RFO and negotiations on final Fixed Energy Price Agreements were conducted in a fair and reasonable manner.
5. Three QFs offered competitive bids for Fixed Energy Price Agreements under SCE's valuation method.
6. Throughout the term of the FEPA, capacity payments to the generator do not change from their current contract arrangement.
7. The prices under the Fixed Energy Price Agreements will be likely to result in savings to ratepayers and are reasonable and prudent.
8. With regard to the Fixed Energy Price Agreements, SCE has complied with the Commission's rules for involving the PRG.
9. The Fixed Energy Price Agreements are not subject to the EPS under D.07-01-039 as the Agreements are with renewable energy resources and are less than five years in duration.
10. The Independent Evaluator concurs with SCE's decision to execute the three winning Fixed Energy Price Agreements and finds that these agreements merit Commission approval.

**THEREFORE IT IS ORDERED THAT:**

1. The request of Southern California Edison Company in Advice Letter 2608-E for the Commission to find that the Fixed Energy Price Agreements executed with three existed Qualifying Facilities and SCE's entry into the Fixed Energy Price Agreements are reasonable and prudent for all purposes, including, but not limited to, SCE's recovery in rates of all payments made under each such agreement is approved.

This Resolution is effective today.

I certify that the foregoing resolution was duly introduced, passed and adopted at a conference of the Public Utilities Commission of the State of California held on December 1, 2011; the following Commissioners voting favorably thereon:

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PAUL CLANON  
Executive Director

## Confidential Appendix A

### Analysis of QF Fixed Price RFO and Agreement

REDACTED