### BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of Southern California Edison Company (U 338-E) for Approval of its Palm Desert Demonstration Partnership Through the 2010-2012 Energy Efficiency Program Cycle.

Application 10-07-004 (Filed July 2, 2010)

# PROTEST

# OF THE DIVISION OF RATEPAYER ADVOCATES TO APPLICATION OF SOUTHERN CALIFORNIA EDISON COMPANY FOR APPROVAL OF ITS PALM DESERT DEMONSTRATION PARTNERSHIP FOR THE 2010-2012 ENERGY EFFICIENCY PROGRAM CYCLE

# I. INTRODUCTION

Pursuant to Rule 2.6 of the Commission's Rules of Practice and Procedure, the Division of Ratepayer Advocates (DRA) submits the following protest to the "Application of Southern California Edison Company for Approval of its Palm Desert Demonstration Partnership for the 2010-2012 Energy Efficiency Program Cycle" (Application). Southern California Edison Company's (SCE) Application requests approval to continue its Palm Desert Demonstration Partnership (Palm Desert Program) with the City of Palm Desert, Southern California Gas Company (SoCalGas), and the Energy Coalition through the Commission's 2010-2012 energy efficiency program cycle and to spend an additional \$7.9 million to achieve additional energy savings during the 2010-2012 Program Cycle.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Application, p. 1.

The Palm Desert Program operates in addition to existing energy efficiency programs in SCE and SoCalGas's service territories, so ratepayers should receive incremental benefits from the Palm Desert Program beyond those of existing energy efficiency programs. The Commission's Energy Division oversaw evaluation, measurement and verification (EM&V) studies designed to measure the impact of the Palm Desert Program, including "benefits from [the] program that are *above and beyond* those that would have otherwise been attained without the [Palm Desert P]rogram."<sup>2</sup> Yet the EM&V of the program "was significantly hampered" by the Palm Desert Program's absence of a clear logic model that linked program actions to intended outcomes, and "the absence of detailed quantitative and qualitative data to support the direct linking of program actions with outcomes."<sup>3</sup>

DRA therefore recommends that the Commission not authorize the extension of SCE's participation in the Palm Desert Program or the expenditure of additional ratepayer funds unless the Commission's Energy Division determines that the Application adequately responds to issues raised in recent EM&V studies of the Palm Desert Program. EM&V is a critical element to ensuring that ratepayer funds deliver reliable energy savings as cost-effectively as possible. Only by integrating the results of EM&V studies into ongoing program design will ratepayers receive the full benefit of their energy efficiency investments.

### II. DISCUSSION

### A. Background

The Commission initially approved the Palm Desert Program in 2006 with a budget of \$16.2 million,<sup>4</sup> even though the Palm Desert Program as proposed was

<sup>&</sup>lt;sup>2</sup> Palm Desert Partnership & Demonstration Program Implementation Assessment, Summit Blue Consulting et al, June 1, 2010 (Palm Desert Implementation Assessment), p. 5.

<sup>&</sup>lt;sup>3</sup> Palm Desert Implementation Assessment, p. 4.

<sup>&</sup>lt;sup>4</sup> D.09-09-047, p. 268. The \$16.2 million included \$14 million for SCE, as well as \$2.2 million additional funding for SoCalGas's participation in the Palm Desert Program that the Commission approved in Resolution G-3402 on July 12, 2007.

comprised largely of programs that were neither new nor innovative,<sup>5</sup> was less costeffective than other local government programs,<sup>6</sup> and had a budget nearly equal to the combined budgets of all other local government partnerships,<sup>7</sup> yet served only a fraction of the people served by other local government programs.<sup>8</sup> The Decision approving the program cautioned, however, that the Commission would "carefully consider the results of ex post EM&V when it considers funding requests for this program during the 2009-2011 program cycle."<sup>2</sup> SCE's Application acknowledges this requirement for continued funding of SCE participation in the Palm Desert Program: "[a]ny approval of such an extension in future cycles would be contingent on careful consideration of ex post evaluation, measurement and verification for this program during the first two years of implementation."<sup>10</sup>

Notwithstanding the requirement that continued ratepayer funding of the Palm Desert Program was contingent on consideration of ex post EM&V results, SCE and SoCalGas requested a total of \$23 million for the Palm Desert program for the current (2010-2012) program cycle, before completion of the EM&V of the Palm Desert Program's energy savings to date. The Commission in D.09-09-047 authorized continuation of the Palm Desert program through June 30, 2010 at a reduced funding level of \$650,000 per month to prevent disruption to potentially successful programs. The Commission directed SoCalGas and SCE to "reapply in a separate application for further funding of the Palm Desert program" and required that the application "provide

<sup>&</sup>lt;sup>5</sup> D.06-12-013, p. 11.

<sup>&</sup>lt;sup>6</sup> D.06-12-013, p. 17.

<sup>&</sup>lt;sup>7</sup> D.06-12-013, Finding of Fact 4, p. 25.

<sup>&</sup>lt;sup>8</sup> D.06-12-013, p. 16.

 $<sup>^{9}</sup>$  D.06-12-013, p. 16. Subsequently the Commission revised the energy efficiency program cycle from 2009-2010 to 2010-2012.

<sup>&</sup>lt;sup>10</sup> SCE's 2010-2012 Request for Approval of its Palm Desert Demonstration Partnership Testimony, N. Jenkins and G. Rodrigues, submitted July 2, 2010 (SCE Testimony), pp. 4:25-5:2.

detailed information documenting the pilot's performance to date and ... substantively address all pilot project criteria outlined in Section 4.3 of this decision."  $\frac{11}{10}$ 

Rather than filing an application for a new program before the Palm Desert Program's June 30, 2010 expiration date, SCE (and SoCalGas) filed a Petition for Modification of D.09-09-047 that requested continued funding for the Palm Desert Program beyond the June 30, 2010 deadline established in D.09-09-047. In D.10-06-039, the Commission authorized SCE to spend \$289,000 per month for the Palm Desert Program and directed SCE to file an Application no later than July 16, 2010 if it wished to continue its participation in the program.<sup>12</sup> D.10-06-039 provided that the interim funding authorized in that decision would end when the Commission issued a decision on a new application filed by SCE or December 31, 2010, whichever occurred first. The \$7.9 million that SCE seeks in the current Application is in addition to the \$3.47 million authorized in D.10-06-039, for a total budget of \$11.37 million.<sup>13</sup>

### B. SCE's A.10-07-004

# 1. Energy Savings

The Palm Desert Program has a goal of saving 30% of the overall energy used in Palm Desert, including electricity usage and demand and overall natural gas usage.<sup>14</sup> SCE's role in the Palm Desert program is to help achieve the 30% reduction in electricity use and demand. According to SCE, the efforts of the Partnership to date have achieved energy savings of over 92 MWh and over 26 MW "significantly contributing to the energy savings goals of both the CPUC and Palm Desert."<sup>15</sup> SCE also claims that it spent only 68% of its expected budget, yet achieved 23,618MWh or 87% of the aggressive

<sup>&</sup>lt;sup>11</sup> D.09-09-047, p. 271.

<sup>&</sup>lt;u>12</u> D.10-06-039.

<sup>&</sup>lt;sup>13</sup> SCE Testimony, p. 1:9-12.

<sup>&</sup>lt;sup>14</sup> SCE Testimony, 4:17-18.

<sup>&</sup>lt;sup>15</sup> SCE Testimony, p. 2:3-4.

two-year goal" as well as 73 % of the MW goal.<sup>16</sup> According to Chapter 8 of the "Government Partnerships Programs Direct Impact Evaluation Report" (Direct Impact Evaluation Report), 23,618kWh and 6,865 kW are the ex ante net savings estimates reflected in the E3 calculator and program tracking database for SCE for 2006-2008. Before approving an extension of SCE participation in the Palm Desert Program and additional funding for program activities, the Commission's Energy Division should clarify the amount of savings that can be attributed to SCE's participation in the Palm Desert Program, and why the claimed savings in the Application do not match those cited in the EM&V reports.

### 2. Other accomplishments

In addition to the alleged progress toward energy savings goals, SCE claims that the Partnership "developed innovative programs for future widespread replicability, most notabably AB 811 financing."<sup>17</sup> AB 811 may allow California cities and counties to make low-interest loans to property owners for energy saving upgrades.<sup>18</sup> According to SCE, the Partnership's "many ideation sessions regarding the need for an innovative financing approach in order to meet aggressive 30 percent goals drove the development of AB 811."<sup>19</sup> No further details are provided about the role that SCE played in the development and passage of the law. This type of activity is not described in Palm Desert Program Implementation Plan, nor do either of the EM&V reports evaluating

<sup>19</sup> SCE Testimony, p. 10:26-11:1.

<sup>&</sup>lt;sup>16</sup> SCE Testimony, p. 9:4-6.

<sup>&</sup>lt;sup>17</sup> SCE Testimony, p. 10:24-25.

<sup>&</sup>lt;sup>18</sup> Although the future of AB 811 lending programs is currently uncertain because of challenges under federal lending laws, such programs have wide support, including by two members of the Commission. For example, on July 13, 2010, President Michael Peevey and Commissioner Dian Grueneich wrote a letter to members of the California Congressional Delegation requesting their assistance to ensure that AB 811 funding, an "innovative local government tool that eliminates the upfront cost associated with energy efficiency, renewables, and water conservation retrofits" does not fail because of the recent actions of the Federal Housing Finance Agency.

Palm Desert's performance provide specific information regarding SCE's role in the program.

It is similarly unclear what specific role SCE has played in many of the other Palm Desert Program accomplishments, including "Widespread Benefits," "Better Product Mix," and "New Technologies."<sup>20</sup> Although many of Palm Desert's actions appear geared toward meeting its aggressive energy efficiency goals, the Palm Desert Implementation Assessment found that while SCE (and SoCalGas) staff supported the development of many Palm Desert policies, it is unclear "whether, or to what extent, program funding was used to implement policy."<sup>21</sup> Thus, SCE's assertions about its participation are unverified.

# C. Evaluation, Measurement and Verification of SCE's Palm Desert Program Results

The Commission's Energy Division oversaw two EM&V studies that examined the Palm Desert Program's accomplishments for both SCE and SoCalGas. Chapter 8 of the "Government Partnerships Programs Direct Impact Evaluation Report" (Direct Impact Evaluation Report) examined the energy savings from three programs that comprised a large portion of the Palm Desert Program energy savings, and were unique compared to other California energy efficiency programs. All three of the programs evaluated suffered from flawed data collection.

The Residential Early Retirement program tracking database presented problems because the units installed and corresponding unit energy savings did not add up.

"The units were indicated to be in tons, but the quantity field showed either a one or two for the number of systems installed. Total savings appeared to be quantity times two times unit savings. As a result of this confusion in the

<sup>&</sup>lt;sup>20</sup> SCE Testimony, pp. 10-12.

<sup>&</sup>lt;sup>21</sup> Palm Desert Implementation Assessment, p. 48.

database, a quantity/size verification rate would be difficult to calculate explicitly, so none is being reported."<sup>22</sup>

There were even more significant problems with the Residential and Commercial

Refrigerant Charge and Airflow Programs.

"In order to verify ex-ante savings, the evaluation team conducted an analysis of the program documentation and field data that involved four major steps:

- 1. **Documentation review**. Analyze program installation forms to determine if a significant change in refrigerant charge occurred. This gives an installation rate.
- 2. **Field installation verification**. Verify on-site that the unit is still in use and did not receive significant repair, including refrigerant charge, after the initial installation.
- 3. **On-site RCA test**. Verify on-site that the unit has the correct refrigerant charge.
- 4. **Calculate the realization rate**. Calculate the overall verification rate as the fraction of claimed tons passing all three of the above criteria." $\frac{23}{2}$

Only 10% of the residential installations and 4% of the commercial installations complied with the first three requirements and could be verified.<sup>24</sup>

If the Commission decides to authorize extension and continued funding of SCE's participation in the program, it should ensure that the following recommendations (as well as other lesson learned from the EM&V reports) are incorporated into the design of the program:

- Future program designs should consider researching the impact of elevated incentives in real time, during the program operating cycle;
- Clear explanation of the program logic that linked program actions to intended outcomes;

<sup>&</sup>lt;sup>22</sup> Palm Desert Implementation Assessment, p. 21.

<sup>&</sup>lt;sup>23</sup> Palm Desert Implementation Assessment, p. 16.

<sup>&</sup>lt;sup>24</sup> Palm Desert Implementation Assessment, pp. 16, 18.

- Collection and submission on a timely basis of quantitative data to support the direct linking of program actions with outcome;
- Documentation to define or track the design innovations featured by the Palm Desert Program Program;
- Documentation, or tracking of program activities that could establish the effectiveness, replicability, and scalability of program activities to other jurisdictions; and
- A planning document that clearly articulates the specific responsibilities and goals for each partner.

According to SCE, the Palm Desert Program has "addressed the Evaluation's concerns regarding reporting and has updated the EM&V logic model and data tracking to satisfy program evaluations going forward."<sup>25</sup> While it is encouraging that SCE recognizes the serious problems that have existed in the program's record keeping and data tracking to date, the Commission should not approve any further funding, or an extension of SCE's participation in the Palm Desert Program, unless it ensures that the these problems will be adequately addressed if the Palm Desert Program continues.

# **D. Procedural matters**

DRA agrees with SCE that the proceeding is appropriately characterized as rate setting. DRA does not believe that hearings are necessary, and does not intend to submit testimony on the Application.

# **III. CONCLUSION**

The EM&V studies of SCE's participation in the Palm Desert Program revealed shortcomings in the implementation of the program, especially the collection of data to track results of a pilot program that is not held to the same cost-effectiveness standards of other energy efficiency programs, but is expected to yield information that may be useful in other settings. The Palm Desert Program was funded at a higher level than other local government programs, so ratepayers should expect "a greater level of rigor would be

<sup>&</sup>lt;sup>25</sup> SCE Testimony, p. 10:15-17.

applied to 'demonstration' program design and monitoring of activities and expenditures. In contrast to this expectation, it appears that this program was not treated as a 'demonstration' or 'pilot' platform."<sup>26</sup> While there may be lessons learned from the Palm Desert Program that can be shared with other programs, the data tracking and collection practices of the Palm Desert Program to date should not be replicated.

Integrating EM&V studies into programs in order to improve results is important for ensuring that ratepayer-funded energy efficiency programs produce maximum results. DRA therefore recommends that the Commission not authorize extension of or additional funding of SCE's participation in the Palm Desert Program unless the Commission's Energy Division confirms that lessons learned from the Direct Impact Evaluation Report and the Palm Desert Implementation Assessment have been incorporated into any future SCE participation in the Palm Desert Program.

Respectfully submitted,

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August 3, 2010

<sup>&</sup>lt;sup>26</sup> Palm Desert Implementation Report, p. 48.

# **CERTIFICATE OF SERVICE**

I hereby certify that I have this day served a copy of each document "PROTEST OF THE DIVISION OF RATEPAYER ADVOCATES TO APPLICATION OF SOUTHERN CALIFORNIA EDISON COMPANY FOR APPROVAL OF ITS PALM DESERT DEMONSTRATION PARTNERSHIP FOR THE 2010-2012 ENERGY EFFICIENCY PROGRAM CYCLE" in A.10-07-004 and A.08-07-021 by using the following service:

[X] **E-Mail Service:** sending the entire document as an attachment to an e-mail message to all known parties of record to this proceeding who provided electronic mail addresses.

[] U.S. Mail Service: mailing by first-class mail with postage prepaid to all known parties of record who did not provide electronic mail addresses.

Executed on August 3, 2010, at San Francisco, California.

/s/ NELLY SARMIENTO

Nelly Sarmiento