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PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

I.D. # 11050

ENERGY DIVISION **RESOLUTION E-4474**

March 8, 2012

<u>R E S O L U T I O N</u>

Resolution E-4474. Southern California Edison (SCE)

PROPOSED OUTCOME: This Resolution approves the cancellation of seven SCE energy efficiency programs and the shifting of the remaining funds from those programs ($17.9 million) to SCE's Public Schools Program. This Resolution also approves $25.9 million in additional fund shifting between SCE's energy efficiency programs and various program modifications. This Resolution denies fund shifting from the Statewide Marketing, Education and Outreach Program.

ESTIMATED COST: None

By Advice Letter 2627-E (U 338-E). Filed on September 12, 2011.

<u>SUMMARY</u>

This Resolution addresses Southern California Edison (SCE) Advice Letter 2627-E seeking approval of "Cancellation For Specific 2010-2012 Energy Efficiency Programs and Fund shifting Approval Required For Portfolio Rebalancing", filed on September 12, 2011. This Resolution approves: (1) the termination of seven SCE energy efficiency programs and shifts remaining funds from those programs ($17.9 million) to SCE's Public Schools Program; (2) $25.9 million in additional fund shifting between SCE's energy efficiency programs, and (3) various program modifications. This Resolution denies a SCE's proposal to shift funds from the Statewide Marketing, Education and Outreach Program to the California Statewide Residential Energy Efficiency Program (Advanced Consumer Lighting sub-program). SCE filed the advice letter pursuant to two

Commission decisions, and to restore the cost-effectiveness ratio of its energy efficiency portfolio from 1.21 to 1.5.

BACKGROUND

On September 12, 2011 SCE filed Advice Letter 2627-E seeking approval of energy efficiency program modifications and fund shifting. SCE's filing was prompted by two Commission decisions: (1) D.09-09-047,[1] which requires Commission approval, through an advice filing when the amount of fund shifting is greater than 15% among statewide, third party, governmental and other program categories in either direction (based on each category funding level) per annum,[2] and (2) D.11-07-030, which required the utilities to change their ex-ante energy savings assumptions for key energy efficiency measures and directed the IOUs to rebalance their portfolios, if necessary, within 60 days to reflect the adopted mid-cycle changes.[3] D.11-07-030 reduced ex ante savings assumptions for several measures, lighting measures in particular. SCE Advice Letter 2627-E states that D.11-07-030 reduced the cost-effectiveness of their portfolio by approximately 23% and energy savings by an estimated 12%. The impact of these changes, according to SCE, is that the cost-effectiveness of SCE's energy efficiency portfolio dropped from 1.56 to 1.21 Total Resource Cost (TRC) benefit-cost ratio. SCE's proposals to shift funds between certain programs, if approved, will raise the portfolio's cost-effectiveness to 1.5 according to SCE. Below is a brief summary of SCE Advice Letter 2627-E which requests approval of program cancellations, fund shifts to restore portfolio cost effectiveness, and program modifications.

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[1] http://docs.cpuc.ca.gov/PUBLISHED/GRAPHICS/107829.PDF

[2] Pursuant to D.09-09-047 (OP #54), the fund shifting rules were officially added to the Commission's Energy Efficiency Policy Manual via Assigned Commissioner's Ruling on December 22, 2011: http://docs.cpuc.ca.gov/efile/RULINGS/156187.pdf

[3] http://docs.cpuc.ca.gov/word_pdf/FINAL_DECISION/139858.pdf

A) SCE Requests Cancellation of Seven Programs

1. *Efficient Affordable Housing* – The remaining funds in this program are $994,000, with a 1,757 kW goal. SCE proposes to cancel this program because Southern California Gas (SCG), a partner in this program, decided to discontinue implementation of its component of the program. SCG's action effectively removed all gas measures from the measure mix. SCE states that its Multifamily Energy Efficiency Program will satisfactorily address demand for energy efficiency solutions in this sector.
2. *Automated Energy Review for Schools* - The remaining funds in this program are $1.3 million, with a 501 kW goal. SCE proposes to cancel this program because it does not offer the integrated system based approach utilized by the Savings by Design program, which is preferable and applies to the schools sector.
3. *Private College Campus Housing* - The remaining funds in this program are $1 million, with a 792 kW goal. SCE proposes to cancel this program because the updates from DEER 2005 to 2008 significantly reduced energy savings, net-to-gross ratios, and Expected Useful Life (EUL) assumptions. According to SCE, this program is no longer cost-effective.
4. *Livestock Industry Resource Advantage Program* - The remaining funds in this program are $2.9 million, with a 2,177 kW goal. SCE proposes to cancel this program because the measure mix was changed substantially at bidder negotiations. The program went from a mix of non-lighting measures, to a measure mix focused on mostly lighting. SCE states that the existing statewide Agriculture Energy Efficiency program will satisfactorily address demand for energy efficiency solutions in this sector.
5. *Data Centers Optimization Program* - The remaining funds in this program are $2.4 million, with a 425 kW goal. SCE proposes to cancel this program because its Data Center Energy Efficiency Program will address this market, while providing a more price competitive model.
6. *Solid Waste Program* - The remaining funds in this program are $1.3 million, with a 1,279 kW goal. SCE proposes to cancel this program because the bidder modified the measure mix from non-lighting measures to lighting measures which now represent 80% of the measure mix. SCE states that its Industrial Energy Efficiency Program will address this market.

7. *Sustainable Portfolios* - The remaining funds in this program are $7.7M, with a 10,175 kW goal. SCE proposes to cancel this program because the bidder decided to accept a contract with Energy Division to support its Evaluation, Measurement and Verification (EM&V) activities, which presented a conflict of interest.

B) SCE Requests the Reallocation of Cancelled Program Funds

SCE requests to shift the remaining funds ($17.9 million) from all of the aforementioned cancelled programs to the Public Schools Program. SCE explained that there has been unexpected customer demand for this program and they have been successfully enrolling schools and completing installations. SCE will provide a future request with the Commission to seek authority to implement a Solar Schools project through the CSI program to provide "one-stop" resources, tools, and expertise.

C) SCE Requests Additional Program Fund shifts

SCE requested approval of three specific fund shifts between the statewide energy efficiency programs.

First, SCE seeks to transfer $3.2 million from the statewide Marketing, Education and Outreach (ME&O) and the local Integrated Marketing & Outreach Program to the Advanced Consumer Lighting sub-program, which is a part of the statewide Residential Energy Efficiency Program. SCE explained its proposed fund shift will increase advanced lighting technologies and next generation lighting, while delivering cost-effective energy saving. With regards to ME&O, SCE proposes to deliver more cost-effective outreach while maintaining the same level of program activity. SCE estimates this fund shift will result in an increase of energy savings by 81 million kWh and a demand reduction of 11 MW.

Second, SCE requests to shift $14.8 million from the Industrial Calculated Incentives sub-program to the Commercial Deemed Incentives sub-program. SCE estimates a strong level of potential in the commercial sector for deemed measures. The reduction to the Industrial Calculated Incentives sub-program is based on a reduced performance in the industrial sector, due in part to higher capital costs in industrial projects and the economy. SCE estimates this fund shift will result in increased energy savings of 85 million kWh and a demand reduction of 23 MW.

Third, SCE seeks to shift $11.1 million from their statewide New Construction (California Advanced Homes and Savings by Design) Program to the Residential & Commercial HVAC sub-program (Upstream HVAC Incentive). The Upstream HVAC Incentive sub-program has seen very high participation and has spent 99% of its budget. Further, SCE anticipates an increase in demand for the remainder of the program cycle. SCE requests these funds from the New Construction Program, as this market has shown a decrease in participation and forecasted installations and projects are low. SCE proposes this fund shift will result in an estimated increase of energy savings of 31 million kWh and a demand reduction of 15 MW.

D) SCE Requests Various Program Modifications

Residential Programs
SCE requests to expand the Residential Home Energy Efficiency Survey subprogram to include a behavioral based strategy. SCE asks that this approval extend through the 2013-2014 funding cycle.

SCE also requests to offer incentives at varied levels outside of the designated levels in the program implementation plan for the Ambient LED Lighting Trial within the Advanced Consumer Lighting Program. Energy Efficiency Policy rules require approval for changes that are greater or less than 50% of the original incentive levels. As part of this trial, SCE also proposes the addition of three new LED measures: (1) LED Screw-in-A-Lamps; (2) LED Screw-in-Directional Lamps; and (3) LED Recessed Down Light Kit.[4] SCE will submit work papers for these new measures to get approval from Energy Division.

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[4] SCE AL 2627-E, p 7.

Lastly, SCE seeks approval to create a two-tiered structure for refrigerator rebates through the Home Energy Efficiency Rebate sub-program. Tier 1 refrigerators would be eligible for a $75 rebate, and Tier 2 refrigerators would be eligible for a $35 rebate.

Nonresidential/Crosscutting Programs
SCE seeks permission to fund a "trial" within the Technology Resource Innovation Outreach (TRIO) subprogram, which is part of the statewide Emerging Technologies Program. SCE asks that this "trial" be considered an adjunct to the TRIO sub-program, rather than a stand-alone pilot, and be excluded from pilot requirements.

Within the statewide Industrial & Agriculture Energy Efficiency Programs (Non-res Audits/Retro-commissioning), SCE plans to pursue a new strategy to include a water loss audit coupled with incentives for applied intervention strategies to pave the way to address embedded energy from water. This would result in a new customized measure in the Retro-commissioning sub-program.

Lastly, SCE seeks approval for their decision to pursue higher efficiency packaged air conditioners that incorporate thermal energy storage to further promote Integrated Demand Side Management (IDSM) solutions. This measure would be added to the Residential & Commercial HVAC sub-program (Upstream HVAC Equipment Incentive), and the work paper will be submitted to Energy Division for approval at a later date.

NOTICE

Notice of AL 2627-E (U 338-E) was made by publication in the Commission's Daily Calendar. SCE states that a copy of the Advice Letter was mailed and distributed in accordance with Section 3.14 of General Order 96-B.

PROTESTS

SCE AL 2627-E was timely protested by The Utility Reform Network (TURN) on October 3, 2011.[5] SCE responded to TURN's protest on October 11, 2011.

TURN's protest advised the Commission to reject the advice letter until supplemental analyses are provided to support the requested fund shifts for specific programs and measures.[6] TURN is also concerned with certain programs being misaligned with Commission goals and objectives.

SCE responded that its existing portfolio is implemented in compliance with D.09-09-047, and is currently meeting established Commission goals by producing cost-effective energy savings and demand reduction at targeted levels.[7] Additionally, SCE references two Commission decisions to further explain their position. SCE points to D.09-09-047, Ordering Paragraph #43, which requires the IOUs to file an Advice Letter to seek approval for program cancellations and fund shifts. SCE also refers to D.11-07-030, Ordering Paragraph #3, which directed the IOUs to rebalance their portfolios, consistent with D.09-09-047, to justify their compliance with Commission policy. SCE filed AL 2627-E to seek approval for programmatic changes that require Commission approval, and concludes that TURN's accusations of non-compliance are not factual.

TURN's protest states that SCE's advice letter does not provide sufficient transparency to specific programs and measures that will be supported by the

[5] TURN Protest, October 3, 2011, p1. TURN's protest also addressed PG&E's and SDG&E's re-balancing advice letters, as well as SCE's Advice Letter 2628-E, which seeks modifications to SCE's On-Bill Financing program.
[6] Ibid.
[7] Reply of Southern California Edison Company to The Utility Reform Network's Protest of Advice Letter 2627-E, "Request for Cancellation of Specified 2010-2012 Energy Efficiency Program And Fund Shifting Approval Required for Portfolio Rebalancing". October 11, 2011. p 2.

shifted funds, and how any program modifications comply with the directives in D.09-09-047.[8]

SCE responded that the IOUs are subjected to fund shifting rules, which was attached in Attachment B to AL 2627-E, and that their advice letter also specified the sub programs that would be impacted by the proposed fund shifts. SCE also notes that TURN's protest does not specify how its advice letter should show compliance, and again repeats that all of their proposed shifts are in compliance with D.09-09-047. Lastly, SCE asserts that their proposal supports increasing advanced lighting, HVAC, in addition to increased innovation, further supporting D.09-09-047.[9]

TURN's protest also provided a list of questions directed to each individual IOU requesting further explanation and rationale for the requested programmatic fund shifts amongst programs. These questions were also filed directly to SCE in the form of a data request. **Attachment A** provides all of TURN's questions and SCE's response to each question.

DISCUSSION

This section of the resolution is divided into five major categories: TURN's protest, program cancellations, reallocation of cancelled program funds, fund shifts within existing programs, and program modifications.

TURN's Protest

TURN's protest alleges that SCE's advice letter is misaligned with Commission policy for energy efficiency, but does not provide any concrete evidence of misalignment. To the extent that we find that SCE's requests do not align with Commission policy, the requests are denied as discussed later in this section.

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[8] TURN Protest, October 3, 2011, p 2.
[9] SCE Reply to TURNs Protest, p 3.

TURN did raise a legitimate concern that SCE's advice letter does not provide sufficient transparency to specific programs and measures. In a data response to TURN (and later to Energy Division), SCE provided additional details and data to support its advice letter filing. We find SCE's response to TURN's request for more information to be satisfactory (see Attachment A).

Program Cancellations

SCE requests approval to cancel seven third party programs from the residential, commercial, industrial, and agricultural sector. Attachment A in SCE's Advice Letter provides reasoning for these program cancellations, along with alternate existing programs that can better satisfy customer demand in lieu of the cancelled programs. Table 1 summarizes the seven programs that SCE is seeking authority to cancel along with the program's 2010-2012 approved budgets, remaining budget, and the percent of funds expended as of November 30, 2011. Table 1 also presents the programs to which SCE would redirect customers and the estimated 2010-2012 remaining budget for these programs.

Table 1

	2010-2012 Approved Budget	**2010-2012 Remaining Budget**	**Percent of Expendtures (11/30/11)**	**Alternative Program Option**	**Estimated 2010-2012 Remaining Budget in Alternative Program (11/30/11)**
Efficient Affordable Housing	$ 1,506,194	$ 994,000	34%	Multifamily EE	$ 25,832,870
Automated Energy Review for Schools	$ 2,000,634	$ 1,376,000	31%	Savings by Design	$ 30,987,743
Private College Housing	$ 1,308,535	$ 1,039,000	21%	No longer c/e	
Livestock Industry Resource Advantage	$ 3,624,365	$ 2,964,000	18%	Agriculture EE	$ 18,124,240
Data Centers Optimization Program	$ 2,533,516	$ 2,389,000	6%	Data Center EE	$ 1,734,211
Solid Waste Program	$ 1,612,403	$ 1,341,000	17%	Industrial EE	$ 54,332,704
Sustainable Portfolios	$ 8,623,801	$ 7,763,000	10%	Cancelled	
Total		**$ 17,866,000**			

We have reviewed the seven third party programs in Table 1 along with the potential impacts to current participants in the market and anticipated future participants. Per Commission policy, third party programs are independently administered, cater to niche markets and encourage innovation. SCE states that some of these third party programs are new, and they are not getting traction in the market, while others have instituted a new measure mix that will not result in cost-effective savings. Additionally, some of these programs never got off the ground. For example, the Efficient Affordable Housing Program was never implemented, due to a cancellation of gas measures which occurred after SCG parted from the program. Similarly, the Sustainable Portfolios Program encountered a conflict of interest with a contractor that decided to do EM&V work for Energy Division.

SCE has a wide range of statewide programs that have the budget and expertise to provide an alternative for most customers affected by the cancelled programs.

We approve the cancellation of the following seven programs: Efficient Affordable Housing, Automated Energy Review for Schools, Private College Housing, Livestock Industry Resource Advantage, Data Centers Optimization, Solid Waste Program, and Sustainable Portfolios. The total of remaining funding for these seven programs is $17,866,000.

Reallocation of Cancelled Program Funds

SCE requests to shift funding from all of the aforementioned cancelled programs, totaling $17,866,000, to the Public Schools Program, which includes Public Pre-Schools, Elementary Schools and High Schools. SCE explains that there has been unexpected customer demand for this program and they have been successfully enrolling schools and completing installations. Per an SCE response to an Energy Division data request, the Public Pre-Schools, Elementary Schools and High Schools Program has a TRC of 1.98 and is very cost-effective. In addition, SCE reported installed energy savings of 8.4 million kWh for the Public Schools Program.[10]

We approve SCE's proposal to shift the remaining funds from the seven cancelled programs, totaling $17,866,000, to the Public Pre-Schools, Elementary Schools and High Schools Program.

Additional Program Fund shifts

SCE requests approval of fund shifts from three statewide energy efficiency programs: Marketing, Education and Outreach (ME&O), Industrial Energy Efficiency and the Statewide New Construction Program and one local program (Integrated Marketing and Outreach).

<u>Statewide Marketing, Education and Outreach (ME&O) and Integrated Marketing and Outreach:</u>
SCE seeks to transfer $3.2 million from the statewide ME&O and the local Integrated Marketing & Outreach Program to the Advanced Consumer Lighting sub-program, which is a part of the statewide Residential Energy Efficiency Program. SCE claims ME&O will be executed more efficiently and will continue equivalent levels of program activity. SCE estimates this fund shift will result in an increase of energy savings by 81 million kWh and a demand reduction of 11 MW.

While SCE estimates an increase in savings and demand reduction for this particular fund shift, we will not approve SCE's request to use funds from its Statewide ME&O program. The Statewide ME&O program has been suspended per an October 13, 2011 Assigned Commissioner Ruling.[11] That ruling asked for stakeholder input with regard to the future of the Statewide ME&O program and

[10] SCE's December monthly report on the Energy Efficiency Groupware Application (EEGA)

[11] http://docs.cpuc.ca.gov/efile/RULINGS/145410.pdf

potential uses of its remaining funds. Because the Commission may decide to retain the Statewide ME&O program or use its funds for other purposes, we will not approve any shifting of its funds at this time. SCE may shift $3.2 million from its Integrated Marketing and Outreach program to the Advanced Consumer Lighting sub-program.

SCE's request to move funds from the Statewide ME&O to the Advanced Consumer Lighting Program is denied. SCE may shift $3.2 million from its Integrated Marketing and Outreach program to the Advanced Consumer Lighting Program.

Industrial Energy Efficiency (Calculated Incentives sub-program)
SCE requests to shift $14.8 million from the Industrial Calculated Incentives sub-program to the Commercial Deemed Incentives sub-program. SCE is requesting this fund shift from the Industrial Calculated Incentives sub-program, which has reported slower than usual progress due to the economy and ability of customers to commit higher capital cost projects. The Commercial Deemed Incentives sub-program has spent 94% of its 2010-2012 budget[12] and as of December 1, 2011 the program reported installed savings of 332 million kWh.[13] SCE estimates this fund shift will result in an estimated increase of energy savings by 85 million kWh and a demand reduction of 23 MW.

The Industrial Calculated Incentives sub-program has only spent 27% of its total budget for the three year cycle, and was approved at $74.8 M. Taking into account current commitments and the proposed $14.8 million reduction in funds, SCE would have approximately $39.8 million to implement projects for the 2012 calendar year. Energy Division submitted a data request to inquire about current projects in the pipeline as well as forecasted demand for these program commitments to ensure customers interested in participating in the Calculated Incentives sub-program are not a risk of being turned away. SCE anticipates no

[12] SCE AL 2627-E, p4.
[13] SCE November Monthly Report from EEGA. Uploaded 12/30/11. http://eega.cpuc.ca.gov/ReportsMonthly.aspx

future problems with customer demand and will manage their budget accordingly.

We approve SCE's proposed fund shift of $14.8 million from the Industrial Calculated Incentives sub-program to the Commercial Deemed Incentives sub-program.

New Construction (California Advanced Homes and Savings by Design)

SCE seeks to shift $11.1 million from their statewide New Construction Program (California Advanced Homes (CAHP) and Savings by Design (SBD)) to the Residential & Commercial HVAC Program (Upstream HVAC Incentive sub-program). SCE requests these funds from the New Construction Program, as this market has shown a decrease in participation. In addition, the current 2011 forecast continues to predict a decrease in projects and installations. Meanwhile, the Upstream HVAC Incentive sub-program has recorded high participation rates and spent 99% of its budget. SCE anticipates a further increase in demand for the remainder of the program cycle. SCE proposes this fund shift will result in an estimated increase of energy savings by 31 million kWh and a demand reduction of 15 MW.

The New Construction Program (CAHP and SBD) has spent 27% of its three year approved budget of $67 million[14]. As noted in SCE's advice letter, in the near term, increased demand for new construction is not anticipated. Given the economic downturn, existing buildings present a bigger opportunity for savings. The Upstream HVAC Incentive sub-program provides incentives for manufacturers and dealers, and focuses on increasing sales for higher efficiency air conditioners and chillers. HVAC is a major end-use for existing buildings with a significant potential for energy savings. The Upstream HVAC Incentive sub-program has already installed 42 million kWh, exceeding its three year energy savings goal by the end of 2011.

[14] Ibid.

We approve SCE's shift of $11.1 million from the New Construction Program to the Residential & Commercial HVAC Program (Upstream HVAC Incentive sub-program).

Program Modifications

Residential Programs
SCE makes the following requests to modify three sub-programs within the California Statewide Residential Energy Efficiency (CalSPREE) Program.

1. CalSPREE (Home Energy Efficiency Survey)

SCE requests to expand the Residential Home Energy Efficiency Survey (HEES) sub-program to include a behavioral-based strategy. SCE requests that this additional component to the program be considered an adjunct to the HEES program, rather than a pilot and therefore excluded from pilot requirements. SCE states its proposal to expand HEES with a behavior-based strategy is a natural extension of the behavior-based strategies that are currently being added to standard home residential surveys. SCE also notes that a similar behavior-based program has already been piloted through one of its local government partnerships, Palm Desert, in the 2006-2008 program cycle. If this program component is approved, SCE also requests that it be extended through the transition funding period (2013-2014).

Behavior based strategies are an innovative approach to reduce energy use through customer outreach utilizing comparison data. This additional behavior component will further assist SCE in tracking customers' actions and follow through. We agree with SCE that its proposal to expand the HEES sub-program with a behavior-based strategy is an adjunct to the program, and therefore exempt from pilot criteria requirements. However, SCE's request to extend the proposal through the transition funding period is out of scope and should be addressed in the forthcoming 2013-2014 energy efficiency application.

We approve SCE's request to expand the Residential Home Energy Efficiency Survey to include a behavior-based strategy. We do not consider the proposed change to be a pilot and is therefore exempt from pilot requirements. We deny

SCE's request to extend this program strategy to the 2013-2014 funding period, as this is out of scope and should be addressed in the forthcoming 2013-2014 energy efficiency application.

2. CalSPREE (Advanced Consumer Lighting Program – Ambient LED Lighting Trial)

SCE requests to offer incentives at varied levels outside of the designated levels in the program implementation plan for the Ambient LED Lighting Trial within the Advanced Consumer Lighting Program. SCE also proposes the addition of the following three new LED measures in this trial: (1) LED Screw-in-A-Lamps (general service lamps); (2) LED Screw-in-Directional Lamps; and (3) LED Recessed Down Light Kit.[15]

LEDs are still very new to the market, and extensive data does not exist for them at this time. Energy Division and TURN both submitted data requests inquiring about the additional LED products being proposed, and the analysis and rationale for the varied incentive levels. SCE's response to TURN's data request can be found in Attachment A. We agree that SCE's proposed changes to its Ambient LED Lighting Trial could provide new information that would be useful in future years.

As noted earlier, we denied SCE's request to shift funds from the Statewide Marketing, Education, and Outreach Program to the Advanced Consumer Lighting sub-program. SCE may shift $3.2 million from its Integrated Marketing and Outreach program to the Advanced Consumer Lighting sub-program. SCE may implement its proposed program changes for its Advanced Lighting sub-program. SCE shall submit the proposed LED measures to the Energy Division's workpaper review process.

3. CalSPREE (Home Energy Efficiency Rebate Program)

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[15] SCE AL 2627-E, p 7.

SCE seeks approval to create a two-tiered structure for refrigerator rebates through the Home Energy Efficiency Rebate sub-program. Tier 1 refrigerators would be eligible for a $75 rebate, and Tier 2 refrigerators would be eligible for a $35 rebate. These recommended Tiers are based on the Department of Energy's ENERGY STAR Program Requirements.

We approve SCE's request to create a two-tiered structure for refrigerator rebates in the Home Energy Efficiency Rebate Program.

Nonresidential/Crosscutting Programs

SCE makes the following requests to modify three sub-programs within the Emerging Technologies, Industrial/Agriculture Energy Efficiency, and the Residential & Commercial HVAC Program.

1. Emerging Technologies (Technology Resource Innovation Outreach)

SCE seeks permission to fund a trial within the Technology Resource Innovation Outreach (TRIO) subprogram, which is part of the statewide Emerging Technologies Program.[16] SCE asks that this trial be considered as supplementary to the TRIO sub-program, instead of a stand-alone pilot. SCE requests if this program component is approved, that it be extended through the 2013-2014 funding period.

The TRIO subprogram brings together innovative technologies and investors through, symposiums, round tables, and support services. SCE suggests, based on previous TRIO symposiums, that there is a need to support new products through third party implementers. SCE specifically proposes to fund a competitive bidding process in the TRIO subprogram as a way to find, fund and foster innovative technologies. SCE states that the proposed activity is already encompassed within the program logic of the statewide Emerging Technologies

[16] Total requested funding for the trial is $1.3 million. Commission approval is not necessary for this particular fund shift. SCE included the proposal in its advice letter as the proposal is not currently an approved program activity.

Program and is therefore not a stand-alone pilot. Third party implementers have proven highly successful in other market sectors and emerging technologies hold significant potential for capturing cost-effective savings so we approve SCE's proposal to include a competitive bidding process in its TRIO subprogram. We also agree that the proposed change to the TRIO program is not a pilot and therefore exempt from pilot requirements.

We approve SCE's request to include a competitive bidding process in its Technology Resource Innovation Outreach (TRIO) sub-program. We do not consider the proposed change to be a pilot and is therefore exempt from pilot requirements. We deny SCE's request to extend this program strategy to the 2013-2014 funding period, as this is out of scope and should be addressed in the forthcoming 2013-2014 energy efficiency application.

2. Statewide Industrial & Agricultural Energy Efficiency Program (Non-residential Audits – Retro-commissioning)

SCE plans to pursue a new customized approach in the Retro-commissioning sub-program within the Industrial and Agricultural Non-Residential Audit Program. This new strategy would include a water loss audit coupled with incentives for applied intervention strategies to pave the way to address embedded energy from water.

The Commission recognizes the importance of the water-energy nexus, and has recently emphasized this in the Assigned Commissioner Ruling and Phase IV Scoping Memo dated October 25, 2011. We also recognize the energy savings potential of the Water Leak Detection Program,[17] and support additional cost-

[17] "Embedded Energy in Water Pilot Programs Impact Evaluation Final Report", March 2011
http://www.energydataweb.com/cpucFiles/33/FinalEmbeddedEnergyPilotEMVReport_1.pdf

effective measures and techniques that continue to capture the embedded energy in water.

We approve SCE's plan to pursue a new customized strategy in the Industrial and Agricultural Programs (Non-Residential Audits – Re-commissioning), that would include a water loss audit coupled with incentives.

3. Residential & Commercial HVAC program (Upstream HVAC Equipment Incentive sub-program)

SCE seeks approval to pursue higher efficiency packaged air conditioners that incorporate thermal energy storage to further promote IDSM solutions. SCE states this measure would be added to the Residential & Commercial HVAC program (Upstream HVAC Equipment Incentive sub-program), and that a work paper will be submitted to Energy Division for approval of this measure at a later date.

Earlier in this resolution, we approved the fund shifting of $11.1 million to the Upstream HVAC Equipment Incentive sub-program. Upstream incentives are a significant driver of high efficiency HVAC sales and energy savings in the market place. We agree that SCE's proposed program change integrates demand response with energy efficiency and thus will promote integrated demand side management solutions.

We approve SCE's proposal to pursue higher efficiency packaged air conditioners that incorporate thermal energy storage in its Upstream HVAC Equipment Incentive sub-program. SCE shall submit a workpaper for this new technology pursuant to the Commission's Energy Division Phase 2 workpaper process.

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. TURN’s protest alleges that SCE’s advice letter is misaligned with Commission policy for energy efficiency but does not provide any concrete evidence of misalignment.
2. SCE’s response to TURN’s request for more information is satisfactory.
3. It is reasonable for SCE to cancel the following third party programs: Efficient Affordable Housing, Automated Energy Review for Schools, Private College Campus Housing, Livestock Industry Resource Advantage Program, Data Centers Optimization Program, Solid Waste Program, and Sustainable Portfolios.
4. It is reasonable to cancel the aforementioned seven programs due to the fact that some programs have never been implemented, others are new and are not gaining traction in the market, others have instituted a new measure mix that will not result in cost-effective savings, and one had a potential a conflict of interest.
5. SCE has a wide range of statewide programs that have the budget, measure offerings and delivery mechanisms to provide customers a satisfactory alternative to the cancelled programs.
6. It is reasonable for SCE to shift the remaining funds from the seven cancelled programs ($17,866,000) to the Public Schools Program, as it is highly cost-effective with a Total Resource Cost (TRC) of 1.98 and 8.4 million kWh of installed energy savings.
7. The Commission is in the process of determining the future direction of the Statewide Marketing, Education and Outreach Program.
8. Because the Commission may decide to retain the Statewide Marketing, Education and Outreach program or use its funds for other purposes, we will not approve any shifting of its funds at this time.

9. It is reasonable for SCE to shift $3.2 million from its Integrated Marketing and Outreach program to the Advanced Consumer Lighting sub-program.
10. It is reasonable for SCE to shift $14.8 million from the Industrial Calculated Incentives sub-program to the Commercial Deemed Incentives sub-program, which has spent 94% of its programmatic funds in the first two years.
11. It is reasonable for SCE to shift $11.1 million from the New Construction Program to the Upstream HVAC Incentive sub-program, which has encountered high participation rates and is overspent with 99% of its budget committed in the first two years.
12. It is reasonable for SCE to include a behavior-based strategy in its Residential Home Energy Efficiency Survey.
13. The behavior-based strategy in SCE's Residential Home Energy Efficiency Survey is not a pilot and therefore exempt from existing pilot requirements.
14. SCE's request to extend the behavior-based strategy in the Residential Home Energy Efficiency Survey to the 2013-2014 funding period should be denied because it is out of scope and should be addressed in a future application.
15. It is reasonable for SCE to offer a variety of LED incentives, and new LED measures in the Ambient Lighting Trial in its Advanced Consumer Lighting Program.
16. It is reasonable for SCE to offer a two-tiered structure for refrigerator rebates in the Home Energy Efficiency Rebate Program.
17. It is reasonable for SCE to fund a new competitive bidding process in its Technology Resource Innovation Outreach (TRIO) subprogram, which would encourage innovative technologies.
18. The new competitive bidding process for the TRIO subprogram is not a pilot and therefore exempt from existing pilot requirements.
19. SCE's request to extend the new competitive bidding process in the TRIO subprogram to the 2013-2014 funding period should be denied because it is out of scope and should be addressed in a future application.
20. It is reasonable for SCE to pursue a new customized approach in the Retro-commissioning subprogram within the Industrial and Agricultural Non-Residential Audit Program, which will include a water loss audit.
21. It is reasonable for SCE to pursue higher efficiency packaged air conditioners that incorporate thermal energy storage in its Upstream HVAC Incentive sub-program.

THEREFORE IT IS ORDERED THAT:

1. Southern California Edison Advice Letter 2627-E is approved unless otherwise noted in this order.
2. Southern California Edison's request to shift funds from the Statewide Marketing Education and Outreach program is denied.
3. Southern California Edison's request to extend the behavior-based strategy in the Residential Home Energy Efficiency Survey to the 2013-2014 funding period is denied.
4. Southern California Edison's request to extend the new competitive bidding process in the TRIO subprogram to the 2013-2014 funding period is denied.
5. Southern California Edison shall submit workpapers to the Energy Division's workpaper review process for its proposed LED measures and air conditioners that incorporate thermal energy storage.

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 March 8, 2012; the following Commissioners voting favorably thereon:

____
Paul Clanon
Executive Director

ATTACHMENT A:
Summary of SCE's Response to TURN's Data Request

1. **TURN questioned** if SCE conducted an analysis on energy savings, demand reduction, and portfolio cost-effectiveness as a result of the adopted changes to ex-ante savings per D.11-07-030.
   a. Regarding cost-effectiveness, SCE benchmarked the impact of the revised ex-ante assumptions adopted in D.11-07-030 and found SCE's portfolio TRC decreased from 1.56 to 1.21, representing a 23% decrease in cost-effectiveness.
   b. Regarding energy savings, with the updated ex-ante values as adopted in D.11-07-030, SCE's portfolio decreased from 3.35 billion kWh to 2.94 billion kWh; a 12% decrease.
2. **TURN questioned** if SCE based its proposal to reallocate cancelled program funds from the seven programs to the "Public Schools Program" on any process and early impact M&V studies?
   a. **SCE responded** that they did not conduct any process or early impact M&V.
3. **TURN requested** a list of all participating schools, incentives per school, and energy efficiency measures installed.
   a. **SCE provided** a list of all the projects for the Public Pre-Schools, Elementary Schools and High School Programs, with installed projects, committed projects, and schools on the wait list. The sites have not been audited so the savings are estimated based on current installations. Lastly, measure level pricing was not disclosed. Third party implementers implement these programs, and they use confidential fixed cost pricing, which was negotiated.
4. **TURN questioned** what energy efficiency measures were being considered for possible energy efficiency upgrades in the Solar Schools project being discussed by SCE.
   a. **SCE stated** they will be offering the same measures for the Solar Schools project that are being used for the Public Pre-Schools, Elementary Schools, and High Schools Program. SCE attached the measure list.

5. **TURN questioned** the analysis behind SCE's statement, "The long-term benefits of the 'Solar Schools project' will include over $2 million in estimated energy savings."
    a. **SCE explained** that the statement referred to the estimated customer bill savings expected from the pilots in the Solar Schools project, and that this was derived from a forecast model, which included the typical energy efficiency measure installments for the Public Schools Program. Additional analysis was attached.
6. **TURN requested** a full and complete accounting of the current budget for CalSPREE, as well as a breakdown of how the proposed $3.2 million fund shift to CalSPREE will be spent?
    a. **SCE provided** a file with budget information for all the sub-programs under the CalSPREE as of September 2011. SCE stated it expects to use the additional funding for incentives for the upstream component of SCE's Advanced Consumer Lighting program. SCE also lists the various bulbs being considered.
7. **TURN questioned** the analysis behind SCE's statement, "The additional funding will increasingly support SCE's pursuit of more advanced technologies, and will promote the next generation of efficient lighting, while also producing substantial cost-effective".
    a. **SCE stated** that specialty bulbs are more advanced than any other affordable residential lighting products and gives additional supporting detail. SCE estimates the $3.2 million fund shift in this program, which has a TRC of approximately 3.5, will result in an addition energy saving of 40 million kWh, and a demand reduction of 5.5 MW.
8. **TURN requested** a list of the deemed savings measures that comprise the claimed savings for the Deemed Incentives sub-program to date?
    a. **SCE provided** an attachment specifying measures installed to date in the Commercial Deemed Incentives program by key measure grouping.
9. **TURN questioned** whether SCE assumes that the trend in program accomplishments to remain essentially the same by measure groupings as experienced to date.
    a. **SCE responded** that they anticipate the trend to stay the same or to increase, noting that the measure mix is expected to change, and that

lighting will decrease as other end-used measures are expected to grow.

10. **TURN questioned** what activities SCE might change in the relative mix of key measure savings for the program going forward?
    a. **SCE responded** that they are currently considering converting current customized solution measures to be eligible under the deemed incentives sub-program, offering more HVAC equipment measures, and expanding LED lighting offerings.
11. **TURN requested** information and data underlying the proposed behavioral-based strategy for expanding the "CalSPREE Home Energy Efficency Survey", including all vetting with consultants, other utilities, and Energy Division.
    a. **SCE stated** that the behavior-based strategy is an interim, stopgap comparative billing program approach to add to its current and planned behavior-based program offerings. SCE did not have discussions with consultants, other utilities, and Energy Division.
12. **TURN requested** additional information and any data sets that explain why this behavior-based pilot should be excluded from "pilot requirements", and what specifically does this mean to SCE.
    a. **SCE stated** that Decision 10-04-029 already approved behavior type programs as a resource program, with approved M&V methodologies, and their proposed behavior-based strategy is a natural extension of the HEES sub-program. SCE cited PG&E for implementation of this approach as part of the HEES sub-program, rather than a standalone pilot. Lastly, SCE explained that if approved, they would not be required to submit an Advice Letter for approval of the ten pilot criteria specified in D.09-09-047.
13. **TURN questioned** whether SCE intends to claim savings toward goals from the aforementioned behavior-based program, and if so, what are the projected savings for planning purposes.
    a. **SCE recited** D.10-04-029, which states, "savings for behavior-based energy efficiency programs shall be credited solely on an ex post basis". Given this information, SCE is not intending to claim ex ante savings for this program, but will support ex post claims based on EM&V results.

14. **TURN requested** the current and proposed incentive/rebate levels for each specific LED product in the CalSPREE (Advanced Consumer Lighting Program – Ambient LED Lighting Trial).
    a. **SCE responded** that quasi-experimental design of this trial will include an incremental incentive ranging from $0 - $25. Further, SCE will apply restrictions on products with low price points to avoid payment of incentive amounts exceeding the price discount. Lastly, SCE indicated that the zero incentive level is for a comparison/control group.
15. **TURN questioned** the analysis behind SCE's incentive levels for each specific LED product, including but not limited to market share analysis, participation rates and cost-effectiveness.
    a. **SCE stated** the reasoning behind the zero incentive as justifying the control group, and noted maximum of $25 was chosen based on the fact that prices are anticipated to decrease for LEDs and that manufacturers were actually quoting higher incentives from other utilities. Regarding market share analysis, SCE explained that since the products slated for the LED Trial are not yet in the market, there has not been any tracking information performed. Regarding participation rates, SCE explained that since the program has not begun, participation rate are not known. Lastly, SCE attached a preliminary analysis for the feasibility of achieving a 1.0 Total Resource Cost (TRC) benefit ratio.
16. **TURN requested** the current manufacturer and retail pricing for the specific LED products, indicating retail channel.
    a. **SCE responded** that they have not performed any shelf surveys on products for which to be able to answer this question, but does point to the ED EM&V study being conducted by KEMA, as a source for better information when available. SCE provided additional information based on inquires of potential participating manufacturers in the Advanced Ambient LED Trial Study.
17. **TURN questioned** if SCE performed any process, early M&V, or other market analysis for the CalSPREE Home EE Rebate Program, when determining that the "adjustment will increase cost-effectiveness of the program while also promoting the highest levels of energy efficient appliances"?

   a. **SCE responded** with an attachment of the 2006-2008 process evaluation by KEMA, also posted to CALMAC, which describes how increasing the rebate is recommended.

18. **TURN requested** the specifications for Tier 1 and 2 refrigerators and the current rebate levels.
   a. **SCE responded** that the Tiers are based on the ENERGY STAR Program Requirements. Tier 1 would qualify for a $35 rebate; these would be at least 20% more efficient than the minimum government standard. Tier 2 would qualify for a $75 rebate; these would be at least 30% more efficient than federal requirements, and the product must be EPA or ENERGY STAR certified. Lastly, SCE noted that $50 is the current rebate for Tier 1 and 2 refrigerators.

19. **TURN questioned** if SCE performed any market analysis to determine whether the Technology Resource Incubator Outreach (TRIO) sub-program of the Emerging Technologies program "has been effective in facilitating technology incubation in the 2010-2012 cycle".
   a. **SCE responded** with a description of the TRIO program and an attachment with sample evaluation forms and debrief/evaluation summaries for a March 2010 TRIO event. SCE mentioned that the responses are positive and indicate the likelihood of participants recommending the program to others.

20. **TURN requested** the energy savings, demand reductions, and cost-effectiveness for each program and key measure groupings through June 30, 2011 as well as projected through December 31, 2012, with AND without fund shifting.
   a. **SCE attached** an excel document with energy savings and demand reduction for all sub-programs in SCE's 2010-2012 energy efficiency portfolios.

STATE OF CALIFORNIA EDMUND G. BROWN JR., *Governor*

PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

February 7, 2012

ID #:11050
Draft Resolution E-4474
March 8, 2012 Commission Meeting

TO: Parties to SCE Advice Letter 2627-E

Enclosed is Draft Resolution E-4474 of the Energy Division. It will be on the agenda at the next Commission meeting that is at least 30 days from the date of this letter, which is expected to be March 8, 2012. The Commission may then vote on this Resolution or it may postpone a vote until later.

When the Commission votes on a Draft Resolution, it may adopt all or part of it as written, amend, modify or set it aside and prepare a different Resolution. Only when the Commission acts does the Resolution become binding on the parties.

Parties may submit comments on the Draft Resolution no later than **Monday, February 27, 2012**. Please ensure that both the Resolution number and a descriptive title of the content of the Resolution are included in the cover sheet or in the text of any electronic submission. An original and two copies of the comments, with a certificate of service, should be submitted to:

Honesto Gatchalian
Energy Division
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102
Fax: 415-703-2200
jnj@cpuc.ca.gov

A copy of the comments should be submitted in electronic format to:

Jordana Cammarata
Energy Division
Email: jnc@cpuc.ca.gov

Bruce Kaneshiro
Energy Division
Email: BSK@cpuc.ca.gov

Those submitting comments must serve a copy of their comments on 1) the entire service list attached to the draft Resolution, 2) all Commissioners, 3) the General Counsel, and 4) the Director of the Energy Division, on the same date that the comments are submitted to the Energy Division.

Comments shall be limited to fifteen pages in length. Comments shall focus on factual, legal or technical errors in the draft Resolution. Comments that merely reargue positions taken in the advice letter or protests will be accorded no weight and are not to be submitted.

Replies to comments on the Draft Resolution may be filed (i.e., received by the Energy Division) by five days after the comments, or in this case March 5, 2012. Replies shall be limited to identifying misrepresentations of law or fact contained in the comments of other parties. Replies shall not exceed five pages in length, and shall be filed and served as set forth above for comments. Late submitted comments or replies will not be considered.

/s/ Bruce Kaneshiro
Bruce Kaneshiro
Project and Program Supervisor
Energy Division

Enclosures:

Certificate of Service
Service Lists

CERTIFICATE OF SERVICE

I certify that I have by mail this day served a true copy of Draft Resolution E-4474 on all parties in these filings or their attorneys as shown on the attached lists.

Dated February 7, 2012 at San Francisco, California.

/s/ Bruce Kaneshiro

Bruce Kaneshiro

NOTICE

Parties should notify the Energy Division, Public Utilities Commission, 505 Van Ness Avenue, Room 4002 San Francisco, CA 94102, of any change of address to insure that they continue to receive documents. You must indicate the Resolution number on the service list on which your name appears.

Parties to SCE Advice Letter 2627-E

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