Decision 11-11-002 November 10, 2011

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

In the Matter of the Application of Southern California Edison Company (U338E) for Summer Discount Plan Program.

Application 10-06-017 (Filed June 30, 2010)

# DECISION AUTHORIZING MODIFICATIONS TO THE SUMMER DISCOUNT PLAN OF SOUTHERN CALIFORNIA EDISON COMPANY

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# DECISION AUTHORIZING MODIFICATIONS TO THE SUMMER DISCOUNT PLAN OF SOUTHERN CALIFORNIA EDISON COMPANY

### 1. Summary

This decision grants authority to the Southern California Edison Company (SCE) to revise its Summer Discount Plan (SDP), which provides residential electricity users who permit SCE to curtail power to air conditioners with reductions to their bills. The authorized revisions will enable SCE to use the SDP as a full price-responsive demand side resource that it can bid into the California Independent System Operator's (CAISO) markets for dispatch. As revised, the SDP will transition from a rarely-used emergency program to a frequently-used price-responsive Demand Response program. In addition, the revisions to the SDP will enable the CAISO to use this asset in a way that avoids the purchase of redundant supply-side electricity resources.

Pub. Util. Code § 454.5(b)(9)(C) requires that an electrical corporation first meet its unmet resource needs through available energy efficiency and demand reduction resources that are cost effective, reliable, and feasible. This statutory requirement, known as the "loading order," calls for the use of cost-effective demand-side resources before seeking supply side resources. The revised SDP complies with these policies.

In addition, the revised SDP fulfills the terms of a settlement agreement adopted in Decision 10-06-034 in which parties agreed that SCE would introduce a price-responsive option into its SDP.

To avoid customer attrition in this program, in which 330,000 residential customers of SCE currently participate, the revised SDP continues incentive payments to residential customers at current levels and permits customers to obtain from SCE a new switch that affords the option to "override" a limited

number of service disruptions. This decision authorizes incremental funding of \$26.6 million to the SDP to make these changes and to inform customers.

Despite the increase in authorized costs, SCE projects that benefits will continue to exceed costs. To manage any uncertainties associated with the projected benefits and costs, this decision adopts the Division of Ratepayer Advocates' recommendation that the Commission order SCE to file updated information on this program following the summer of 2012 to ensure that the program continues to produce benefits in excess of costs. This updated information can permit subsequent program modifications, if needed, to ensure that this program remains cost-effective in the face of the uncertain customer response to these many changes.

2. Background: Proceeding Arose from Decision 10-06-034, which Adopted a Settlement Resolving Issues that Led to the "Double Purchase" of Power to Meet Resource Adequacy Standards

This proceeding had its origins in Phase III of Rulemaking (R.) 07-01-041. The Scoping Memo for Phase III of R.07-01-041 noted:

The Commission has recommended that the CAISO [California Independent System Operator] account for existing DR [Demand Response] in a way that does not promote procurement of redundant supply-side resources. A key to resolving this issue is identifying where there are disconnects or gaps between existing retail DR programs and the CAISO's operational needs for the wholesale market, both at this time and when MRTU [Market Redesign and Technology Upgrade] will be implemented.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Assigned Commissioner's and Administrative Law Judge's Amended Scoping Memo and Ruling, (R.07-10-041) July 18, 2008 at 2.

Over the course of Phase III, the CAISO made it clear that its operational needs did not require an emergency-triggered DR program whose size amounted to 3.5% of the system peak. The CAISO instead argued that a program capped at only 2% of system peak was operationally warranted.<sup>2</sup> In addition, the CAISO pointed out that although emergency-triggered DR qualified for Resource Adequacy (RA) payments, that

... unlike all other power that counts for Resource Adequacy, the California Independent System Operator currently procures costly "exceptional dispatch energy or capacity" before using this energy resource, a practice that has led to charges that ratepayers "pay twice" for this power.<sup>3</sup>

Thus, a price responsive Summer Discount Plan (SDP) avoids the need for a "double purchase" of RA power and avoids unnecessary charges that are ultimately passed through to consumers.

In Phase III of R.07-10-041, parties agreed to a settlement that would reduce the amount of emergency-triggered DR to 2% of system peak. As part of this settlement, Southern California Edison Company (SCE) agreed to transition its air conditioning SDP from a program that was triggered only in emergencies to one that was triggered by price. Specifically, SCE agreed to bid into the CAISO's MRTU system for dispatching this DR resource like other price-responsive DR programs.

As part of the settlement in R.07-10-041, SCE agreed that:

SCE will propose a voluntary, price-responsive option for its A/C [air conditioning] Cycling program (called Summer Discount Plan (SDP)) by the end of the second quarter 2010, including an option to

<sup>&</sup>lt;sup>2</sup> D.10-06-034 at 10.

<sup>&</sup>lt;sup>3</sup> *Id.* at 2.

allow SDP to be bid into the ISO [CAISO] market. Implementation of transition is expected to occur over the 2011-2014 timeframe. SCE agrees to actively promote customer transition to the priceresponsive option through customer communications and by decreasing incentives from current levels for reliability-based MW [megawatts].<sup>4</sup>

SCE's revised SDP seeks to fulfill this settlement obligation.

## 2.1. Procedural Background

The procedural history of this application is typical of many proceedings that include evidentiary hearings.

On June 30, 2010, SCE filed Application 10-06-017 (Application) seeking:

... approval to incorporate a price-responsive element into the SDP [Summer Discount Plan] for its 330,000 existing residential customers and ... \$26.6 million in incremental funding for 2011 and 2012 to make this possible.<sup>5</sup>

The Application proposed a schedule that would lead to a proposed decision issuing on April 30, 2011. Simultaneously with its application, SCE served its *Testimony in Support of the Application* on the service list in this proceeding.<sup>6</sup>

On July 26, 2010, SCE submitted proof of compliance<sup>7</sup> with Rules 3.2(b) and (c) of the Commission's Rules of Practice and Procedure, August 2009

<sup>6</sup> This testimony became Exhibit (Ex.) SCE-1

<sup>&</sup>lt;sup>4</sup> Joint Motion of California Independent System Operator Corporation, California Large Energy Consumers Association, Division of Ratepayer Advocates, Enernoc, Inc., Pacific Gas and Electric Company (U39E). San Diego Gas and Electric Company (U902E) and Southern California Edison Company (U338E) and The Utility Reform Network (Settling Parties) for Adoption of Settlement (Joint Motion) February 22, 2010, at 9-10.

<sup>&</sup>lt;sup>5</sup> Application at 1.

<sup>&</sup>lt;sup>7</sup> Southern California Edison Company's (U338E) Proof of Compliance with Rule 3.2(b) and (c) of the Commission's Rules of Practice and Procedure, July 26, 2010.

(Rules), which require that applicants for an increase in rates provide notification to certain public agencies and to the general public via a notice in a "newspaper of general circulation."

Resolution ALJ 176-3258 (July 29, 2010) categorized the proceeding as ratesetting and reached a preliminary determination that hearings would prove necessary to the resolution of this matter.

On July 30, 2010, the Division of Ratepayer Advocates (DRA) filed a protest to the application<sup>9</sup>. In its Protest, DRA stated that it "intends to conduct discovery and review SCE's Application and supporting testimony, and issue a report with its recommendations." In addition, DRA identified seven issues that it concluded warranted further examination.

On August 13, 2010, SCE submitted proof of compliance<sup>11</sup> with Rule 3.2(d), which requires that applicants for an increase in rates provide notification to their customers through either a direct mailing or a bill insert.<sup>12</sup>

On August 16, 2010, SCE filed a response<sup>13</sup> to DRA's protest. SCE responded directly to each point raised by DRA and concluded that "SCE's SDP program transition is the best way to introduce an economic trigger while

<sup>&</sup>lt;sup>8</sup> Commission Rules of Practice and Procedure, (http://docs.cpuc.ca.gov/word\_pdf/RULES\_PRAC\_PROC/105138.pdf), Rule 3.2(b) and (c) at 17.

<sup>&</sup>lt;sup>9</sup> Protest of the Division of Ratepayer Advocates on Southern California Edison Company's Application for Summer Discount Plan (Protest), July 30, 2010.

<sup>&</sup>lt;sup>10</sup> *Id.* at 3.

<sup>&</sup>lt;sup>11</sup> Southern California Edison Company's (U338E) Proof of Compliance with Rule 3.2(d) of the Commission's Rules of Practice and Procedure, August 13, 2010.

<sup>&</sup>lt;sup>12</sup> Rules, Rule 3.2(d) at 18.

<sup>&</sup>lt;sup>13</sup> Southern California Edison's Company's (U338) Response to Protest, August 6, 2010.

maintaining and utilizing the benefits of such a large and successful DR program."14

On August 31, 2010, a prehearing conference (PHC) was held in San Francisco to address the issues concerning the management of this proceeding, including proposals concerning scheduling. The discussions during the course of the PHC led to a consensus among the parties on a statement of proceeding scope and on a schedule, which was adopted in the Scoping Memo.<sup>15</sup>

On September 16, SCE served Supplemental Testimony, as requested by DRA to "the extent necessary to comply with the guidance ruling submitted in Rulemaking 07-01-041."16

On October 28, 2010, DRA served its testimony on parties in the proceeding. On November 5, 2010, DRA served amended testimony on parties in the proceeding.<sup>17</sup>

On November 23, 2010, SCE served Reply Testimony.<sup>18</sup>

On December 8, 2010, a single day of evidentiary hearings took place at the Commission's offices in San Francisco.

SCE and DRA filed Opening Briefs on January 10, 2011. Neither party requested oral argument in this matter. With the filing of Reply Briefs on

<sup>14</sup> *Id.* at 12.

<sup>&</sup>lt;sup>15</sup> Assigned Commissioner's Ruling and Scoping Memo (Scoping Memo), September 15, 2010. In addition, the Scoping Memo required that requests for Oral Argument be made simultaneously with the filing of Opening Briefs.

<sup>&</sup>lt;sup>16</sup> TR 5:5-7. SCE's Supplemental Testimony became Ex. SCE-2.

<sup>&</sup>lt;sup>17</sup> DRA's Amended testimony became Ex. DRA-1 and replaced the testimony served on October 28.

<sup>&</sup>lt;sup>18</sup> SCE's Reply testimony became Ex. SCE-3.

January 31, 2011, the proceeding was submitted. In addition, on January 31, 2011, DRA filed a Motion To File Confidential Attachment of its Reply Brief Under Seal. 19

# 2.2. Statutory Provisions Most Relevant to this Proceeding

The SCE proposal for a new SDP changes both the rates for this program and the conditions of service. The Pub. Util. Code requires that:

451. All charges demanded or received by any public utility, or by any two or more public utilities, for any product or commodity furnished or to be furnished or any service rendered or to be rendered shall be just and reasonable. Every unjust or unreasonable charge demanded or received for such product or commodity or service is unlawful. ... All rules made by public utility affecting or pertaining to its charges or service to the public shall be just and reasonable.<sup>20</sup>

The Pub. Util. Code also requires that the Commission actively supervise changes in existing programs:

454(a) Except as provided in Section 455, no public utility shall change any rate or so alter any classification, contract, practice, or rule as to result in any new rate, except upon a showing before the commission and a finding by the commission that the new rate is justified.<sup>21</sup>

<sup>&</sup>lt;sup>19</sup> In Opening Comments on the Proposed Decision, SCE argued that the data DRA seeks to protect is public and therefore the Commission should deny DRA's motion. In Reply Comments on the Proposed Decision, DRA withdrew its motion and filed the information of concern as a public attachment to its Reply Comments on the Proposed Decision. These actions render the issue of confidential treatment of this information moot.

<sup>&</sup>lt;sup>20</sup> § 451.

<sup>&</sup>lt;sup>21</sup> § 454(a).

Furthermore, the Pub. Util. Code actively endorses the use of programs to reduce demand:

454.5(b)(9)(C) The electrical corporation will first meet its unmet resource needs through all available energy efficiency and demand reduction resources that are cost effective, reliable, and feasible.<sup>22</sup>

These three provisions of the Pub. Util. Code shape the Commission's assessment of SCE's application. Specifically, the Commission must review the proposed rates and conditions of service to ensure that they are "just and reasonable" while also recognizing the priority assigned by statute to demand reduction programs that are "cost effective, reliable, and feasible." <sup>23</sup>

# 3. The Current SDP Program and the Proposed Modifications

To assess SCE's proposed revisions to its SDP program, it is necessary to review the major features of the program as it exists today.

SCE's current SDP program uses a special radio-triggered switch on the air conditioning circuit to curtail energy usage during periods designated as emergencies by the CAISO. The SDP can be invoked between June 1 and September 30. Currently, there are two program options available: a base program, in which curtailments are limited to 15 events per summer, and an enhanced program, in which there is no limit to the number of curtailments in a summer. All curtailments are limited to six hours per day.<sup>24</sup>

Program participants have three options for load control – 100% cycling (or full interruption of the air conditioner operation during the curtailment

<sup>&</sup>lt;sup>22</sup> § 454.5(b)(9)(C).

<sup>&</sup>lt;sup>23</sup> *Id*.

period); 67% cycling (the air conditioner operates one-third of the time during the curtailment period) or 50% cycling (the air conditioning operates half the time during the curtailment period). The load control switch is under SCE's direct load control via a broadcast radio signal that triggers all switches in a specific area.<sup>25</sup>

In return for participating in the SDP program, customers receive an annual credit on their electric bill. For those in the enhanced, 100% cycling option, the current credit is \$198 if the customer has a 4.5 ton central air conditioning unit. The exact customer credit varies with the size of the air conditioning unit. SCE applies the credit to the participants' summer bill statements as a daily credit. The exact customer credit to the participants summer bill statements as a daily credit.

Currently, 73% of the SDP program participants have chosen to maximize the incentives that they receive by choosing the enhanced program and electing 100% cycling. Curtailments under the current program, however, occur rarely, in part because it is a goal of the CAISO to avoid system emergencies. The SDP program had two service territory disruptions in 2010, none in 2009, 2008, 2007 or 2006, but three in 2005. Therefore, despite the common customer choice of a program that would permit extensive interruptions, few customers have much experience with such disruptions.

<sup>&</sup>lt;sup>24</sup> SCE Opening Brief at 6.

<sup>&</sup>lt;sup>25</sup> *Id*.

<sup>&</sup>lt;sup>26</sup> *Id.* at 5.

<sup>&</sup>lt;sup>27</sup> *Id.* at 6.

<sup>&</sup>lt;sup>28</sup> *Id.* at 4.

To transition customers from the current summer discount plans onto a new price-responsive program that is triggered frequently throughout a year, SCE identified various challenges. The challenges include the size of the current SDP program, the widespread employment of radio-triggered load control switches, and customer expectations that the program will be triggered rarely – that SCE offers a discount on the electric bill for virtually no sacrifice.

SCE noted that the current SDP program is the largest in the state and one of the largest in the country.<sup>29</sup> In the Application, SCE argued that:

In arriving at the plan described in this application, SCE considered the challenges associated with changing a program with high enrollment, high customer satisfaction, and extensive infrastructure investment. SCE examined options to find the best way to transition existing SDP residential customers from a rarely-used emergency program to a redesigned price-responsive DR program that will be called frequently without causing customer attrition and stranded infrastructure costs. SCE also sought the best way to structure the SDP program for wholesale market use so as to provide the most benefit based on its characteristics – a flexible, limited-use, quick-response resource available on the hottest days.<sup>30</sup>

The Application then argued on behalf of its proposal that:

SCE's proposed SDP program effectively addresses these challenges and balances the need for market integration, customer retention and satisfaction and both emergency and price-responsive capacity. The modified SDP program also minimizes costs by continuing to leverage the existing program and technology infrastructure investments. Further, allowing SDP to convert to a price-responsive program and function in the CAISO market will assist SCE in

<sup>&</sup>lt;sup>29</sup> SCE Opening Brief at 2.

<sup>&</sup>lt;sup>30</sup> *Id.* at 2.

meeting the terms of the Settlement and meet the Commission's objective to incorporate DR into market design protocols.<sup>31</sup>

SCE's application sought approval for an SDP that differs greatly from the current program. The revised SDP can be called at any time throughout the year, but with a maximum of 90 event-hours during a calendar year (the new program would not be just for the summer). There would be a single program for customers to select (unlike today where customers can choose an "enhanced" or "base" plan). During the course of a day, there could be multiple events, but the total interruptions in a single day will be capped at six hours.

Unlike the current plan, where the utility always has control over the air conditioner switch, the customer would have a choice between a switch that gives utility control over the air conditioner (the case today) or the choice of a switch with an override capability that would allow customers who press a button to opt-out of a particular curtailment event. Under the proposed revised SDP, a customer who elects the opt-out plan could opt out of five events per year (by pressing a button on a new load-control switch).

The new plan would also have two cycling options – 50% cycling, or 100% (total shutdown) – instead of the three options in the current plan.

The incentive payments to customers would depend on the cooling capacity of their air conditioner (i.e. the size of the air conditioner), the cycling strategy, and the override choice. For those with a 4.5 ton air conditioner who elect 100% cycling with no override, the incentive plan would provide a payment of \$198 – the same payment that most SDP participants receive today.

<sup>&</sup>lt;sup>31</sup> *Id*.

There will, however, be a major difference in the operation and dispatch of the SDP. SCE plans to submit bids into the CAISO market on days where the price of energy will be high. If the price bid by SCE is reached, the CAISO will call on SCE's DR program to reduce demand, and SCE will interrupt electric service to air conditioners. Most importantly, instead of interrupting service only in emergency situations – which have occurred only five times in the last six years on a system-wide basis – a goal of this new program would be to avoid the cost of buying high-priced energy in periods of high demand. As a consequence, the program managers expect to interrupt air conditioning service several times each year.<sup>32</sup>

Thus, the SDP program will produce a major change for the customers who participate in this program. Specifically, the SDP program will change from one in which customers had little expectation of service disruption to one in which customers will expect service disruptions and will experience several a year.

#### 4. Issues Before the Commission

In its Application, SCE characterizes the major issue before the Commission as follows:

SCE seeks approval to incorporate a price-responsive element into the SDP for its 330,000 existing residential customers and seeks \$26.6 million in incremental funding for 2011 and 2012 to make this possible.<sup>33</sup>

<sup>&</sup>lt;sup>32</sup> Although there is no announced policy, the program's evaluation methodology has a confidential forecast that indicates that the program will be managed to produce multiple uses of this DR asset over the course of a year.

<sup>&</sup>lt;sup>33</sup> Application at 1. Also see Scoping Memo at 6.

Consistent with the controlling statutes, the Commission's review will determine whether SCE has provided information that shows that the resulting rates and terms of service are just and reasonable and that the resulting program remains supportive of the policy of encouraging the use of "cost effective, reliable and feasible" DR programs as an asset in meeting California energy needs.

In addition, the Scoping Memo grouped the issues identified by DRA as follows (quoting directly):

- 2. issues associated with the recovery of the costs of the SDP program;
- 3. issues associated with the cost-effectiveness of the SDP program;
- 4. issues associated with the level of program costs; and
- 5. issues associated with the details of the changes to the SDP program.<sup>35</sup>

The resolution of these issues will enable the Commission to determine whether the proposals to modify the SDP are just and reasonable.

## 5. Discussion and Analysis

This section of the decision addresses the issues before the Commission as follows:

- (1) Issues associated with the changes to the SDP program;
- (2) Issues associated with program scale, the level of costs and the recovery of costs of the SDP program;
- (3) Issues associated with the costs and benefits of the SDP program; and

<sup>&</sup>lt;sup>34</sup> § 454.5(b)(9)(C).

<sup>&</sup>lt;sup>35</sup> Scoping Memo at 6.

(4) Timing issues associated with program implementation and subsequent evaluation.

For the sake of exposition, this decision will consider the issues related to costs – including level of costs, recovery of costs, and balance of costs and benefits – in a single section.

### 5.1. Proposed Changes to the SDP Program

As outlined above, the major change proposed to the SDP Program is the transition for a DR program that is triggered only in supply emergencies to one that is triggered for both economic circumstances and supply emergencies.

#### 5.1.1. Positions of Parties

SCE argued in support of its proposed changes to the SDP program that the "new program is designed to retain the program's high satisfaction and participation to maximize its demand response capacity." Concerning the changes that make the SDP price-triggered, SCE argued that:

SDP offers a known and reliable response on very short notice. The resource is readily available on hot days when the California wholesale market prices are expected to be high and volatile. If approved, SCE's proposal will allow this flexible, limited-use DR resource to be competitively dispatched at the high cost hours of the year.<sup>37</sup>

SCE also contended that the "SDP program will preserve the emergency-based triggers in effect today." SCE argued that since the new program will be

<sup>&</sup>lt;sup>36</sup> SCE Brief at 5.

<sup>&</sup>lt;sup>37</sup> *Id.* at 7, footnotes omitted.

<sup>&</sup>lt;sup>38</sup> *Id*.

dispatched "more than it is today" it will maximize "the price-responsive benefit of the program." <sup>39</sup>

Concerning the proposed incentive schedule, SCE argued that "SDP incentive levels are outside the scope of consideration in the Application" because "they were agreed to in SCE's 2009 GRC [General Rate Case] Phase 2 settlement approved on August 20, 2009."<sup>40</sup>

Nevertheless, in support of the proposed incentive structure, SCE argued that "the rates proposed in this Application are what they would have been if the current program were to continue under the terms of the GRC Phase 2 all-party settlement." Finally, SCE linked the incentives to customer satisfaction, and stated that:

SCE's proposal seeks to maintain customer enrollment and satisfaction with the program. In anticipation of this SDP application, SCE filed its rate design window application to prevent additional unnecessary and confusing changes from the customer's point of view. By keeping SDP cost-effective incentives the same as they are today, the proposed SDP program can maintain customer satisfaction and enrollment levels despite other changes with the program.<sup>42</sup>

SCE further pointed out that the new SDP program "will use the same technology and existing infrastructure of the current program." On behalf of the customer override switch, SCE argued that "with more events and the same

<sup>&</sup>lt;sup>39</sup> *Id.* at 8.

<sup>&</sup>lt;sup>40</sup> *Id.* at 10.

<sup>&</sup>lt;sup>41</sup> *Id.* at 12.

<sup>&</sup>lt;sup>42</sup> *Id.* at 12.

<sup>&</sup>lt;sup>43</sup> *Id*.

incentive levels, customer choice is critical to the transition."<sup>44</sup> Therefore, SCE contended that the override switch is "a necessary feature in the SDP proposal."<sup>45</sup> Moreover, SCE stated that the override option "aligns with future SCE load control programs," and that a "key feature of future enabling technology like the programmable communicating thermostat is that a customer may override an event."<sup>46</sup> Although SCE stated that it expects that few customers will override events, SCE argued that the override option is "critical to preventing attrition."<sup>47</sup>

DRA requested that the Commission reject SCE's new proposed program in favor of the status quo with some proposed modifications. DRA recommended that the Commission reject SCE's proposal to make the override-enabled switch available to all that want one, but instead require that SCE limit the override-enabled devices to "newly enrolled SDP customers or customers needing replacement due to equipment failure." Concerning the air conditioning control devices, DRA argued that replacing current functioning switches will lead to stranded costs and is "both unnecessary and costly." Instead, DRA recommended that for those with existing air conditioning control devices, SCE should "accommodate override requests from these customers via email or telephone."

<sup>&</sup>lt;sup>44</sup> *Id.* at 13.

<sup>&</sup>lt;sup>45</sup> *Id.* at 14.

<sup>&</sup>lt;sup>46</sup> *Id.* at 15.

<sup>&</sup>lt;sup>47</sup> *Id*.

<sup>&</sup>lt;sup>48</sup> *Id*.

<sup>&</sup>lt;sup>49</sup> *Id.* at 6.

<sup>&</sup>lt;sup>50</sup> *Id.* at 3-4.

DRA also recommended major changes to the incentives offered to customers concerning the SDP program. In particular, DRA proposed to limit incentives, so that legacy customers participating at the 100% cycling rate would have a \$99 annual incentive, and \$49 for 50% cycling. New customers with override features would be offered "\$49 incentive for the 100% cycling strategy, and \$27 for the 50% cycling strategy." DRA also recommended that SCE file a new application in 2012 to request funding for 2013 and 2014, and also include a report on "actual experience during 2011 and 2012." <sup>52</sup>

Finally, DRA recommended that "the Commission consider rejection of the application" and instead reconsider it "in the 2012-2014 demand response cycle application, should it [the Commission} determine that more comprehensive changes need be made than what DRA suggests here." <sup>53</sup>

#### 5.1.2. Discussion

The position of the parties is best understood through tables that compare the status quo with the proposals of SCE and DRA.

Table 1 details customer incentives under all the three different programs.

<sup>&</sup>lt;sup>51</sup> *Id.* at 4.

<sup>&</sup>lt;sup>52</sup> *Id.* at 4

<sup>&</sup>lt;sup>53</sup> *Id.* at 3.

Table 1

Current SDP	Current Customer	SCE Recommended SDP		DRA Recommended SDP	
Program	Incentives	Incentive		Incentives	
Base		Without Override	With	Legacy Device	Override
Program			Override		Device
50 % cycling	\$27	\$99	\$49	\$49	\$27
67% cycling	\$55	Eliminated option		Eliminated option	
100%	\$99	\$198	\$99	\$99	\$49
cycling					
Enhanced					
Program	ΦEE	Eliminated antion	austomone.	Eliminated antice	2 24242422
50 % cycling				Eliminated option, customers	
		transitioned to Base 50% cycling		transitioned to Base 50% cycling	
67% cycling	\$110	Eliminated option, customers		Eliminated option, customers	
	transitioned to Base 50% cycling		transitioned to Base 50% cycling		
100%	\$198	Eliminated option, customers		Eliminated option, customers	
cycling	rcling transitioned to Base 100% cycling		transitioned to Base 100%		
				cycling	

Since 73% of customers currently choose the 100% cycling and Enhanced option, they maximize their SDP benefits, which would average \$198.<sup>54</sup> Thus, a consequence of the DRA-recommended incentive levels would be to decrease by \$99 the average benefit received by 73% of the program participants.

Under the SCE-recommended incentive levels, these 73% of customers would receive the same average benefit for participating in the SDP. Thus, although the customers will need to accept the more frequent disruptions in service as the SDP transitions from a rarely-used emergency-triggered program into one that is used as a DR resource to manage grid loads and energy costs via service curtailments throughout the year, customers would continue to receive the same level of financial benefits.

<sup>&</sup>lt;sup>54</sup> SCE-1 at 9, Table II-1.

Table 2 provides a summary of the program elements in the current program, in the SCE recommended revised SDP, and the DRA recommended program.

Table 2

Program Elements	Current Design	SCE Recommended Design	DRA Recommended Design	
Curtailment event triggers	Emergency use only	Economic and emergency	Economic and Emergency	
Estimated Frequency of Curtailments	Less than once a year	Program managed to produce multiple curtailments per year	Program managed to produce multiple curtailments per year	
Event Duration	Maximum six hours per day	Multiple events may occur in a single day, each with potentially varying durations. However, in all cases, a customer will not be interrupted for more than six hours in a single day.	Multiple events may occur in a single day, each with potentially varying durations. However, in all cases, a customer will not be interrupted for more than six hours in a single day.	
Local control technology options	Direct load control switch operated by SCE only	Two options:  Direct load control by SCE  Direct load control switch with customer override. Customers permitted to override up to five events per year.	Two options:  • Direct load control by SCE for all present customers and new customers opting for "no override program.  Customers contact SCE and request override.  • Override switch an option for new customers	
Load control options	<ul><li>50% cycling</li><li>67 % cycling</li><li>100% cycling</li></ul>	<ul><li>50% cycling</li><li>100% cycling</li></ul>	<ul><li>50% cycling</li><li>100% cycling</li></ul>	
Factors determining level of customer incentive payments	Payments based on:      AC unit tonnage     Cycling choice Credits apply to participants' summer bill statements as daily credit	Payments based on:  • AC unit tonnage  • Cycling choice  • Override option  Credits apply to  participants' summer bill  statements as daily credit	Payments based on:      AC unit tonnage     Cycling choice     Override option Credits apply to participants' summer bill statements as daily credit	

A review of Tables 1 and 2 shows that there are major differences between the current SDP, the SDP recommended by SCE, and the SDP recommended by

DRA. In general, the revised SDP recommended by SCE maintains incentives at the levels that customers currently receive, but promises that service curtailments will become more common as SCE uses the SDP as a price-responsive demand response resource, rather than as only an emergency triggered program. As part of SCE's recommended SDP, customers may choose an option that, for a smaller incentive payment, permits them to override a curtailment event.

DRA's recommended SDP has several major changes, all of which decrease the benefits that program participants receive. First, DRA's recommended program provides for a maximum incentive that is about 50% of what customers currently enjoy despite the fact that SCE will disrupt their service significantly more than it does under the current SDP.

Second, DRA envisioned saving a significant amount of the costs of new switches by requiring SCE to offer customers an alternative that enables customers to override a service curtailment by contacting SCE and having SCE remotely override the service curtailments. However, SCE has provided unrebutted and convincing evidence that it cannot accommodate more than a few override requests made during an event by e-mail or by a phone call through its current manual process. SCE's testimony made clear that its current VHF RF communications technologies is a "broadcast" technology, not a "point-to-point" communications technology, and "[t]here are technological limitations on how much data can be broadcast during any give timeframe." 55 SCE argued that as a result, it "cannot adequately support sending unique messages to

<sup>&</sup>lt;sup>55</sup> SCE-3 at 3.

individual devices where there is a time-critical nature to the message." <sup>56</sup> SCE estimated that given its current manual process it is able to accommodate "approximately 20 [requests] per hour in a given region." <sup>57</sup> As a result of these facts, this decision concludes that the DRA proposal would have the consequence of denying an override option to participants currently in this program.

Thus, the DRA-recommended SDP has the effect of halving the incentive payments received by 73% of the customers participating in the program<sup>58</sup> while making it impossible for most of them to exercise customer choice pertaining to the SDP air conditioning program other than dropping out of the program. The DRA-recommended SDP would disrupt a program that by itself constitutes "80% of the state's entire reliability-based resource." In consideration of these facts, this decision finds the DRA-recommended SDP an unreasonable imposition on customers and inconsistent with California policy of encouraging the use of DR resources.

## 5.2. Program Scale, Costs and Cost Recovery for SDP

The parties in this proceeding also contested the level of resources that should be committed to the deployment of new load control devices and the overall size of the SDP and the size of the incentives awarded to customers.

<sup>&</sup>lt;sup>56</sup> SCE Reply Brief at 4.

<sup>&</sup>lt;sup>57</sup> SCE-3 at 3.

<sup>&</sup>lt;sup>58</sup> SCE-1 at 9.

<sup>&</sup>lt;sup>59</sup> SCE Opening Brief at 2, calculation contained in Appendix A. The calculation is based on utility reports filed at the Commission.

#### 5.2.1. Positions of Parties

SCE defended the SDP and seeks to maintain its scale. SCE argued that the SDP is a "large, valuable and successful program with high enrollment and satisfaction that has been approved and enlarged by this Commission over its 30-year history." SCE pointed out that its SDP "is the largest retail demand response program in the state and one of the largest in the country." The program includes "330,000 customers and represents 543 MW of demand response capacity."

The costs of the SDP consist of the incentives paid to customers to join the program and the costs of administering the program itself, which include the operating costs of installing the new switch, marketing the program, and program administration. In the record of this proceeding, the costs of the incentives are confidential, while the incremental costs of operating this program are forecasted to amount to \$8,298,160 for 2011 and \$18,301,160 for 2012.63 As a result, the total costs of the program are confidential. It is important to keep in mind that the costs associated with the installation of new switches with override buttons, however, would only be fully incurred when a program participant requests the override button.

SCE argued that to maintain the scale of this program as it transitions to a DR resource that actively participates as a resource in the CAISO markets, the

<sup>&</sup>lt;sup>60</sup> SCE Opening Brief at 16.

<sup>61</sup> *Id.* at 2, footnotes omitted.

<sup>62</sup> *Id.* at 3, footnotes omitted.

<sup>&</sup>lt;sup>63</sup> SCE-1 at 30.

SDP requires a continuation of the current incentives paid to customers,<sup>64</sup> an expansion in customer choice associated with the program,<sup>65</sup> and an investment in new equipment that permits customers the choice to override a curtailment event.<sup>66</sup>

Specifically, SCE provided testimony that the proposed changes to the SDP — the deployment of a new switch with an override button (when desired by a customer) and new marketing and educational activities (for the entire program) — will add \$8,298,160 in incremental costs for 2009-2011 and require \$18,301,160 to extend the program for the year 2012.

In contrast, DRA opposed the scope and costs of SCE's program. DRA argued that "[t]he current SDP program already provides generous annual incentives." DRA argued that SCE's proposal is one "to raise incentives" and "would inflate the already high expectations of customers who participate in the program." In contrast, DRA praised Pacific Gas and Electric Company's SmartAC program, which provides customers "a one-time sign up bonus of \$25, up to \$50."

DRA argued that SCE's proposal, which would collapse the standard and enhanced programs into a single program that would receive incentives at the "enhanced" level, is one that "could result in a windfall to current SDP

<sup>&</sup>lt;sup>64</sup> SCE Opening Brief at 10.

<sup>65</sup> *Id.* at 13.

<sup>66</sup> Id. at 14.

<sup>&</sup>lt;sup>67</sup> DRA Opening Brief at 14.

<sup>&</sup>lt;sup>68</sup> *Id*.

<sup>&</sup>lt;sup>69</sup> *Id*.

customers at the expense of other residential customers."<sup>70</sup> DRA opposed the SCE proposal because:

Under SCE's proposal, incentives to customers enrolled currently in the Base SDP program will see their incentives double if they choose to keep their existing switch - from \$99/year on average to \$198/year. Yet the increase is not supported by a correlating increase in available hours that a customer may be exposed to an event; they will still be at risk for a maximum of 90 event hours for the year. In the case of a currently enrolled customer on the Enhanced 100% cycling option, at the transition to the new SDP program, the same customer would receive the same amount of incentives, \$198, if they choose the non-override option. However, in this case the same customer who was once exposed to an unlimited number of events under the Enhanced program is now transitioning into a program with a limited number of events – at a maximum of 90 hours per year. It would be logical to expect a correlating decrease in incentives should a customer be less exposed to risk. But that is not the case here.<sup>71</sup>

In response to DRA, SCE argued that DRA's proposed modifications to the current program would lead to "SDP incentives [that] violate the GRC [General Rate Case] Phase 2 Settlement and are not cost-based." DRA, however, argued that "[t]he GRC Phase 2 Settlement Agreement does not preclude the Commission's consideration of whether SCE's approved incentive levels are reasonable."

Finally, DRA opposed SCE's plan to replace current program switches with switches with an override button whenever a customer requests. Instead,

<sup>&</sup>lt;sup>70</sup> *Id.* at 16.

<sup>&</sup>lt;sup>71</sup> *Id.* at 14, footnotes omitted.

<sup>&</sup>lt;sup>72</sup> SCE Opening Brief at 11.

<sup>&</sup>lt;sup>73</sup> DRA Reply Brief at 2.

DRA would permit the installation of switches with an override button only for "new customers and legacy customers requiring switch replacement." DRA argues that this change in the program would reduce the costs that the SDP program would incur from \$26,599,320 to \$10,189,605 – a decrease of \$16,409,715 in program costs of 2011 and 2012.

#### 5.2.2. Discussion

On the issue of the scale and scope of the SDP, SCE and DRA have presented a clear policy choice.

On this issue, this decision finds that SCE has the better argument. SCE seeks to maintain the scale of the current SDP, in both membership and incentives offered, while transitioning it to a program that actively participates in the CAISO market. SCE's program is consistent with the statutory vision that the electric infrastructure will permit the "[d]evelopment and incorporation of cost-effective demand response, demand-side resources, and energy-efficient resources."<sup>75</sup>

DRA, in contrast, seeks to reduce the scale of the incentives offered to customers to participate in the SDP. As noted previously, under the DRA's proposal, 73% of current program participants would experience a 50% reduction in the incentives payments they receive.

As a result of these considerations, this decision declines to adopt the reduction in incentives that DRA recommends for the SDP. The SDP is a critical component of California's DR program, and there is no compelling reason to

<sup>&</sup>lt;sup>74</sup> DRA Opening Brief at 4.

<sup>&</sup>lt;sup>75</sup> Pub. Util. Code § 8360(d).

reduce the incentive payments to the 73% of the program's participants that now receive the maximum benefit, particularly at a time when the operations of the SDP will lead to multiple service curtailments for the first time in the experience of many customers. It is not conceivable that this program will remain a popular choice if it were revised to reduce the incentives to customers and increase the frequency of service disruptions.

DRA's analysis of the SDP is unconvincing. For example, DRA argues that the terms of the current "enhanced" program permit unlimited number of curtailments to a customers air conditioning load during the summer and that imposing service disruptions will not affect service participation. DRA's argument ignores the fact that the experience of customers over the last decade has created the expectation among customers that their air conditioning service will be disrupted rarely if at all. As noted by SCE, in the past five years, "only five events affected the entire service territory." SCE observed further that "many current SDP customers have not been dispatched at all until 2010."

DRA's argument that under SCE's proposal incentive payments are increasing without a "correlating increase in available hours that a customer may be exposed to an event" is unpersuasive. DRA's argument cites a number of disruptions that "may occur" under the terms of the SDP, but ignores the fact that such disruptions have almost never occurred. Moreover, with SCE's new program, disruptions in service year will routinely occur multiple times per year as part of an actively managed DR program. Thus, even if this is not a dramatic

<sup>&</sup>lt;sup>76</sup> SCE Opening Brief at 3.

<sup>&</sup>lt;sup>77</sup> *Id*.

<sup>&</sup>lt;sup>78</sup> DRA Opening Brief at 14.

change in the *terms* of the SDP, it will be a major change in the *operations* of the SDP and in a customer's experience of the program.

This decision finds SCE's proposal to install a device with a button<sup>79</sup> that can override a service curtailment as a reasonable approach to providing customers with choice and control over their participation in the SDP. By providing a device with an override button to desiring customers who have safe access to the button, SCE has offered choice to all its customers. SCE's argument that offering customers the ability to obtain such a device is critical to maintaining the high levels of support for the SDP is persuasive. The availability of such a feature, even when not selected, effectively communicates to the customer that the SDP is a program to maximize customer choice and not a program to shift control of a customer's air conditioning unit to the utility.

We also do not adopt DRA's proposal to limit the deployment of the new device to situations where the customers do not currently have a device. As noted above, the current communications technology deployed by SCE does not permit customer choice without such a switch. As a consequence, DRA's proposal would result in very different choices available for new customers enrolling in this program and those currently enrolled. This would have the consequence of narrowing the choice of those customers who have faithfully participated in this DR program in favor of those signing up now. Such an outcome is inconsistent with the Commission's obligation to ensure that all customers face similar choices concerning service wherever possible. Although DRA rightly notes that it is not possible to know whether the override option is

<sup>&</sup>lt;sup>79</sup> A device with a button will only be installed in those situations where a customer has safe access to it.

necessary to ensure current levels of program participation, it is clearly neither prudent nor in the consumer interest to deny the customer such an option and then see what happens.

In summary, SCE's proposal to maintain incentive payments to program participants at current levels and to deploy switches with override buttons to all participants in the SDP who desire such a device (and are willing to receive lower benefits) is reasonable.

### 5.3. SDP Program – Costs and Benefits

The methodology for assessing costs and benefits was not an issue in this proceeding. In preparing Ex. SCE-2, SCE followed the guidance contained in an August 27, 2010 Ruling by Administrative Law Judge (ALJ) Hecht that was issued in R.07-01-041 and requested by DRA in this proceeding. SCE's calculations show a Total Resource Cost (TRC) benefit-to-cost ratio of 1.02. Occording to this ratio, the benefits from the revised SDP, including deploying new devices with override buttons, slightly exceed the costs of the program – including both the incentives paid to customers and the costs of otherwise running the program.

#### 5.3.1. Positions of Parties

Concerning the cost-benefit ratio of 1.02, SCE argued that:

This ratio shows an optimal balance between ratepayer funding and the DR potential that the funding is meant to support. The key is to maximize enrollments though optimized customer incentive levels while maintaining cost-effectiveness. Not paying for override features or reducing incentives would technically improve the cost

<sup>&</sup>lt;sup>80</sup> SCE Opening Brief at 18.

effectiveness. However, this would result in lower enrollments and reduce the overall value of the program.<sup>81</sup>

Clearly, the estimation of the benefits and costs of a SDP carries uncertainty. On this issue, SCE argued:

Although the proposed program is different from the current one, it is an existing program and SCE understands where the cost-effectiveness of the program lies. Most of the benefits of the SDP program are not dependent on variable weather or events, but rather on capacity. If anything, the program changes are likely to increase the cost-effectiveness of program because the CAISO will have more flexibility to call the program.<sup>82</sup>

DRA argued against this approach, stating:

A TRC cost effectiveness ratio of 1.02 is unacceptable. SCE should be ordered to raise its demand response cost-effectiveness rations based upon lessons learned from program experience, not continually show the Commission that it can manage programs that are just "barely" cost-effective (i.e., a ratio of 1.0 means the costs equal the benefits of the program). What this actually shows is SCE's approach to raise incentive levels just enough so that the TRC ratio hovers above 1.0.<sup>83</sup>

#### DRA concludes:

The Commission should acknowledge the cost effectiveness of the proposed SDP program is marginal, and should reject it on this basis. ... The Commission should not allow SCE to offer marginally cost effective DR programs and should disregard SCE's threats that consumers may leave SDP *en masse*.<sup>84</sup>

<sup>81</sup> SCE Opening Brief at 18, footnotes omitted.

<sup>&</sup>lt;sup>82</sup> *Id*.

<sup>83</sup> DRA Reply Brief at 8.

<sup>84</sup> Id. at 10.

#### 5.3.2. Discussion

The SDP as proposed by SCE offers benefits in excess of the costs, and therefore benefits all ratepayers. Proceeding with this new program is in the public interest.

DRA rightly points out that the benefit/cost ratio provides only a sliver of benefits in excess of costs. There are, however, several reasons why this does not present a problem presently. First, a large element of the "cost" of the SDP is the incentives paid to customers for participation. It is both fair and reasonable that those who permit the disruption of their service in order to reduce peak demands should benefit from their action. Moreover, it does not seem fair or reasonable to design an SDP with a high benefit/cost ratio, under which the ratepayers who do nothing to reduce their electric usage receive benefits made possible by the actions of others who consent to the disruption of their service.

Second, since California energy policy adopts a "loading order" that sets a priority on investment in energy efficiency and demand side resources, <sup>85</sup> a policy of requiring a high benefit/cost ratio for the approval of a DR program would be inconsistent with this policy. In particular, it would create an evaluation "hurdle" that would discourage the deployment of demand side resources, disqualifying projects that produce benefits in excess of costs.

Third, since a large portion of the "cost" of an SDP reside in the incentives paid to customers for participating in the program, it is possible to manage these costs over time by modifying the incentives paid to those who participate in the program. Although the total amount of incentive payments forecast for this

<sup>85 § 454.5(</sup>b)(9)(C).

program is confidential, in its Opening Comments on the Proposed Decision, DRA points out that customer incentives paid in 2009 and 2010 were public information in A.11-03-003 and amounted to over \$60 million in both 2009 and 2010.86 SCE, in Reply Comments of the PD does not respond to the disparity in confidential treatment of incentive payments between this application and A.11-03-003, but objects to DRA's citation to the record in A.11-03-003.87 Even though this decision treats the projected incentive payments for future years as confidential, SCE's own filings make it appropriate to reveal that the incentive payments are much larger than the operating costs of this program. Since these incentive payments are so large, if the costs and benefits of the SDP fail to follow SCE's forecast, it should prove possible in future years to alter the incentives in ways that ensure that the benefits exceed costs. Indeed, DRA's recommended modifications to the SDP rely on reductions in the customer incentives (while assuming continuing levels of participation in the program) to produce a higher benefit/cost ratio.

In summary, there is at this initial stage no need to require that the program produce benefits far in excess of program costs.

# 5.4. Timing of Program Changes and Subsequent Evaluation

During the course of the proceeding, issues arose concerning the timing of the transition to the new SDP and to the timing and use of subsequent information resulting from the implementation of the SDP program.

<sup>&</sup>lt;sup>86</sup> DRA Opening Comments on PD at 2.

<sup>&</sup>lt;sup>87</sup> SCE Reply Comments on PD at 1.

#### 5.4.1. Positions of Parties

SCE argued that it "needs a decision this year to have the SDP program ready for summer 2012. SCE explained:

To successfully transition the SDP program, SCE needs ample time for both customer education and system enhancements. In SCE's proposal, SCE described that it plans to begin its customer education and outreach campaign after the summer season of 2011 concludes so that customers are aware of the program changes and can make choices about override or cycling options. In addition, SCE needs to make system enhancements to SCE.com as well as the billing customer service, and load control systems to effectuate the program modifications and customer choice options. <sup>88</sup>

Furthermore, SCE contended that should this application be consolidated with the 2012-2014 DR Application, "SCE would not be able to timely implement these customer conversion activities or the systems enhancements necessary to enable customer choices and revised program dispatch rules.<sup>89</sup> SCE further contended that such delay in consideration of the application "will further delay SCE's ability to comply with Commission guidance and state policy of increasing price responsive DR and the integration of DR resources into the CAISO market."<sup>90</sup>

SCE, however, supported filing an update to its SDP request when it has more information concerning the operation of the newly modified program. SCE stated that it

... understands that it will have better information in 2012 than it does today for 2013 and 2014, and therefore supports the concept

<sup>88</sup> SCE Opening Brief at 18-19, footnotes omitted.

<sup>89</sup> *Id.* at 19.

<sup>&</sup>lt;sup>90</sup> *Id.*, footnotes omitted.

raised by DRA to file an update to the SDP request in 2012 ... [A] reasonable compromise is to allow SCE to file an update in the fourth quarter of 2012.<sup>91</sup>

DRA, however, has argued that:

DRA continues to recommend the Commission consider rejection of the application for reconsideration in the 2012-2014 demand response cycle application, should it determine that more comprehensive changes need to be made that what DRA suggests here. If a new application is necessary, the Commission may issue an expedited proceeding (or separate track within the 2012-2014 DR cycle application) in which a decision may be timely issued before the 2012 summer season.<sup>92</sup>

Concerning the updating of the 2012-2014 DR application, DRA agreed with SCE that "[i]t would be a reasonable compromise to allow SCE to file an update in the fourth quarter 2012."

#### 5.4.2. Discussion

SCE has presented sufficient information to demonstrate the reasonableness of proceeding at this time with the SDP as proposed. The SDP not only complies with previous Commission decisions, it advances the statutory goal of expanding the use of demand side resources to meet California energy needs. It is not in either the ratepayer or the public interest to delay consideration of this matter to the 2012-2014 cycle.

The filing of updated information in the fourth quarter of 2012 will assist the Commission in exercising oversight as this major demand side management

<sup>&</sup>lt;sup>91</sup> *Id.* at 20.

<sup>&</sup>lt;sup>92</sup> DRA Opening Brief at 3.

<sup>93</sup> DRA Reply Brief at 12.

program transitions to a resource that the CAISO can dispatch based on its price and the savings it produces for California.

#### 6. Conclusion

SCE's proposed changes to the SDP are reasonable, justified, and consistent with the Public Utilities Code. The changes achieve the Commission's policy goal of integrating this major DR program into the CAISO's dispatch system and enable the use of air conditioning curtailments when electricity prices are high. The revised SDP also ends the current situation in which the CAISO pays twice for the RA function provided by the SDP. Finally, the revised SDP gives customers more options to control electric consumption and continues to provide participating customers with the benefits that they provide.

In addition, requiring the filing of an update in SCE's Demand Response Application Cycle Funding Request for 2013-2014 after the summer of 2012 will ensure that the SDP does not impose costs on consumers who do not participate in this program.

In summary, the revisions to the SDP expand the usefulness of this major DR program, empower customers to control their electric usage, and protect non-participants from program costs.

## 7. Comments on Proposed Decision

The proposed decision of ALJ Sullivan in this matter was mailed to the parties in accordance with Section 311 of the Public Utilities Code and comments were allowed under Rule 14.3 of the Commission's Rules of Practice and Procedure.

Comments on the proposed decision were filed on October 10, 2011, by SCE and DRA. Reply comments were filed on October 17, 2011, by SCE and DRA.

#### 7.1. Comments of Parties and Discussion

SCE, in its Reply Comments on the Proposed Decision, argued that the Commission should adopt the proposed decision without substantial modification. SCE's Opening Comments on the Proposed Decision recommended minor technical corrections to the proposed decision and argued that the Commission should reject DRA's Motion To File Confidential Attachment of its Reply Brief Under Seal.

As noted above, DRA's withdrawal of its motion rendered the issue concerning confidential treatment of this data moot. More broadly, as discussed above, forecast information concerning the amount of incentive payments that SCE will provide to its customers in the summer discount plan remains under seal as confidential, although similar information on incentive payments paid in prior years has been subject to disclosure by SCE. Despite the confidential nature of the exact level of incentive payments, it does not broach any confidence to note that the incentive payments far exceed the operating costs of the SDP.

In its Comments on the Proposed Decision, DRA argued that SCE's incremental funding to the SDP may lead to stranded costs. DRA argued that "[i]f in the future, the Commission orders SCE to leverage its SmartConnect and HAN-enabled [Home Area Network] PCT [Programmable Communicating Thermostat] technology, all of the new AC switches with the over-ride feature SCE will install in 2011 and 2012 will have to be discarded, thereby adding further to the stranded costs ratepayers are facing in this application." <sup>94</sup>

<sup>94</sup> DRA Comments on Proposed Decision at 3.

SCE replied to this argument by stating that its "override-enabled switches will work with HAN-Enabled Technology in a unified SDP Program." 95

This decision notes that this is an issue that the Commission can address in the future and there is no reason to reject this available technology at this time for one that might be available in the future. In particular, the record in this proceeding makes clear that the incremental costs of these switches and modifications to the SDP generate benefits that justify the costs.

DRA also argued that the proposed decision "does not address the possible consequences of providing the override option to all SDP participants." This argument, however, fails to recognize that this decision has addressed this issue extensively in Section 5.2 above. Moreover, the decision also notes that because SCE must file updated information based on its implementation of this program, the Commission may modify the program and incentives to ensure that the benefits exceed the costs.

Finally, DRA proposed additional language modifying ordering paragraph 4 to both require a full new application and ensure that SCE provides the information that DRA believes essential to the 2012 update application. Specifically, DRA asked for the following language:

The Southern California Edison Company shall file an updated Summer Discount Plan Application in the fourth quarter of 2012 using information obtained from the operation of the revised Summer Discount Plan. Such information shall include, but not be limited to, the number of eligible SDP customers who have chosen the override option and an analysis of their behavior during each

<sup>&</sup>lt;sup>95</sup> SCE Reply Comments on Proposed Decision at 1.

 $<sup>^{96}\,</sup>$  DRA Comments on Proposed Decision at 4.

event called during 2011-2012. Additionally, the updated application should explicitly require that SCE take into account the effect of SDP's override option on its *ex-ante* load impact estimate for 2013-2014 for evaluating SDP's cost effectiveness.<sup>97</sup>

In reply, SCE argued that:

It simply makes more sense to update the SDP analysis that SCE provided in the DR Application as that would provide a more informative picture for the Commission. SCE would update the SDP load impacts for both legacy and new customers, updated for switch selection results projected forward for new customers, and estimates of override frequency. SCE would also be able to employ the new DR cost-effectiveness protocols and DR Reporting Template required the for the DRA application.<sup>98</sup>

Finally, SCE argued that DRA's other proposed changes to Ordering Paragraph 4 "are unnecessary and restrictive."

This decision finds that it is appropriate for SCE to file the updated information in the DR Application, not a new application or in this application. That is the most appropriate forum for assessing the new information and making whatever modifications are needed.

The decision, however, finds DRA's recommended language to shape SCE's update filing is helpful and shows forethought on DRA's part. Moreover, DRA had made it clear that concerning its requested information, SCE's filing shall "include, but not be limited to" the requested information. Thus, DRA's requirement is not limiting the information that SCE can submit. For these

<sup>97</sup> DRA Opening Comments on Proposed Decision at 6-7.

<sup>&</sup>lt;sup>98</sup> SCE Reply Comments on Proposed Decision at 2.

reasons, this decision modifies Ordering Paragraph 4 to reflect the language recommended by DRA.

## 8. Assignment of Proceeding

Michael R. Peevey is the assigned Commissioner and Timothy J. Sullivan is the assigned ALJ in this proceeding.

### **Findings of Fact**

- 1. Resolution ALJ 176-3258 categorized this proceeding as ratesetting.
- 2. In the current SDP, SCE curtails energy usage during periods designated as emergencies by the CAISO. The SDP can be invoked between June 1 and September 30. Currently, there are two program options available: a base program, in which curtailments are limited to 15 events per summer, and an enhanced program, in which there is no limit to the number of curtailments in a summer. All curtailments are limited to six hours per day.
- 3. In the current SDP, participants have three options for load control 100% cycling (or full interruption of the air conditioner operation); 67% cycling (the air conditioner operates one-third of the time during the event) or 50% cycling (the air condition operates half the time during the event). The load control switch is under SCE's direct load control.
- 4. In the current SDP, in return for participating in its programs, customers receive an annual payment. For those in the enhanced, 100% cycling option, the current payment is \$198 if the customer has a 4.5 ton central air conditioning unit. The exact customer credit varies with the size of the air conditioning unit. SCE applies to the participants' summer bill statements as a daily credit.
- 5. Currently, 73% of the program participants have chosen to maximize the incentives that they receive by choosing the enhanced program and electing 100% cycling.

- 6. The current program interrupts service rarely. The SDP program had two service territory disruptions in 2010, none in 2009, 2008, 2007 or 2006, but three in 2005.
  - 7. Currently, 330,000 residential customers participate in SCE's SDP.
- 8. In the revised SDP proposed by SCE, a service interruption can be called at any time throughout the year, but with a maximum of 90 event-hours during a calendar year (the new program would not be just for the summer). There would be a single program for customers to select (unlike today where customers can choose an "enhanced" or "base" plan), with specific options within the program. During the course of a day, there could be multiple events, but the total interruptions in a single day will be capped at six hours.
- 9. In the revised SDP proposed by SCE, the customer would have a choice between a switch that gives utility control over the air conditioner (the case today) or the choice of a switch with an override capability that would allow customers who press a button to opt-out of a particular event. Under the proposed SDP, a customer who elects the opt-out plan could opt out of five events per year. Customers who choose the switch with the override button will receive fewer benefits.
- 10. The revised SDP proposed by SCE would have two cycling options 50% cycling, or 100% (total shutdown) instead of the three options in the current plan.
- 11. In the revised SDP proposed by SCE, the size of the incentive payments to customers would depend on the cooling capacity of their air conditioner (i.e. the size of the air conditioner), the cycling strategy, and the customer's choice of an override switch. For those with a 4.5 ton air conditioner who elect 100% cycling with no override, the incentive plan would provide a payment of \$198.

- 12. In the revised SDP proposed by SCE, SCE plans to submit bids into the CAISO market on days where the price of energy will be high. If the price bid by SCE is reached, the CAISO will call on SCE's DR program to reduce demand, and SCE will interrupt electric service to air conditioners.
- 13. In the revised SDP proposed by SCE, instead of interrupting service only in emergency situations which have occurred only five times in the last six years on a system-wide basis a goal of this new program would be to avoid the cost of buying high-priced energy in periods of high demand. As a consequence, the program managers expect to interrupt air conditioning service several times each year.
- 14. The revised SDP proposed by SCE will change the SDP from one in which customers had little expectation of service disruption to one in which customers will expect service disruptions and will experience several a year.
- 15. The proposed changes to the SDP listed in Findings of Fact 12 through 18 are reasonable because the changes maintain incentive at the levels that customers currently receive as service curtailments become more common, because they enable SCE to use the SDP as a price-sensitive DR resource, and because they eliminate the need for the CAISO to purchase additional RA functionality to avoid emergency conditions.
- 16. The proposed changes to the SDP listed in Findings of Fact 12 through 18 create a DR resource to manage grid loads and energy costs via service curtailments throughout the year.
- 17. The changes to the terms of the SDP are just and reasonable because they result in a program that provides benefits to those who participate, result in a DR resource of use to California, and result in benefits to all ratepayers, including those who do not participate in the program.

- 18. The changes to the terms of the SDP result in a revised service that enables SCE to first meet it unmet resource need through a demand reduction resource that is cost effective, reliable and feasible.
- 19. The changes to the terms of the SDP maintain the current scale of this program because the new terms maintain incentives to program participants at current levels.
- 20. The proposed changes to the SDP the deployment of a switch with an override button and new marketing and educational activities will add \$8,298,160 in incremental costs for 2009-2011 and require \$18,301,160 to extend the program for the year 2012.
- 21. SCE, in assessing the costs and benefits of the revised SDP, followed the guidance and methodology provided in an August 27, 2010 ruling in R.07-01-041. The methodology demonstrated that the TRC benefit-to-cost ratio of the revised SDP is 1.02.
- 22. Because the revised SDP maintains benefits in excess of costs, the incremental costs of \$8,298,160 for 2009-2011, and \$18,301,160 for the year 2012 are reasonable.
- 23. Since Pub. Util. Code § 454.5(b)(9)(C) creates a preference for DR resources, it is reasonable to approve a DR program when benefits exceed costs.
- 24. It is fair and reasonable that those customers who permit the disruption of their service in order to reduce peak demands should receive the bulk of the benefits from their action.
- 25. A major element of the costs of the revised SDP is incentive payment to each program participant.
- 26. A DR program that seeks to maximize the savings distributed will necessarily have a benefit-to-cost ratio close to 1.

- 27. If the costs and benefits realized by the SDP fail to follow those forecast, it is possible to alter incentive payments in ways that produce that benefits exceed costs. This enables the Commission to ensure that ratepayers who do not participate in SDP do not bear costs for those who do participate.
- 28. It is reasonable for SCE to implement the revisions to its SDP as soon as practical.
- 29. It is prudent to require that SCE file in the fourth quarter of 2012 updated information concerning its SDP based on its experience in the summer of 2012.
- 30. The changes to the SDP proposed by SCE are reasonable. SCE has demonstrated that the incremental increases in revenue requirement and resulting charges are just and reasonable. SCE has shown that its changes in rates and program terms and conditions are justified.

#### **Conclusions of Law**

- 1. Decision 10-06-034 adopted a settlement that called for SCE to move its air conditioning SDP from a program that was triggered only in emergencies to one that was bid into the CAISO's market redesign and technical update system for dispatching this resource like other price-responsive DR programs.
- 2. On July 26, 2010, SCE submitted a filing that demonstrates that SCE has complied with Rules 3.2(b) and 3.2(c), which require that any applicant for an increase in rates provide notification to certain public agencies and to the general public via a notice in a "newspaper of general circulation."
- 3. On August 13, 2010, SCE submitted a filing that demonstrated compliance with Rule 3.2(d), which requires that applicants for an increase in rates provide notification to their customers through either a direct mailing or a bill insert.
- 4. The changes to the SDP proposed by SCE enhance and maintain a demand response resource as envisioned in Pub. Util. Code § 454.5(b)(9)(C).

- 5. Requiring the SDP to meet a benefit-to-cost hurdle much greater than 1.0 is not consistent with Pub. Util. Code § 454.5(b)(9)(C), which seeks to maximize the use of demand side resources.
- 6. The changes to the SDP requested by SCE are consistent with the Public Utilities Code and prior decisions of this Commission.
  - 7. The changes to the SDP set forth in the order below should be adopted.

#### ORDER

### IT IS ORDERED that:

- 1. The Southern California Edison Company (SCE) is authorized to revise its Summer Discount Plan (SDP) as proposed in this application. Specifically, the SCE is authorized to offer the SDP for residential customers without an override option and with an override option that permits the customer to override up to five curtailment events.
  - (a) The program without override will be available with either 50% cycling or with full curtailment. Customers without the override feature choosing the 50% cycling option will, for a typical application, receive an incentive payment of \$99. Customers without the override feature who permit full curtailment of air conditioning will, for a typical application, receive an incentive payment of \$198.
  - (b) The program with the override feature will be available with either 50% cycling or with full curtailment. Customers with the override feature choosing the 50% cycling option will, for a typical application, receive an incentive payment of \$49. Customers with the override feature who choose the full curtailment option will, for a typical application, receive an incentive payment of \$99.

SCE is authorized to incorporate into its SDP both economic and emergency triggers and is authorized to manage the program to produce multiple curtailments each year. SCE is authorized to have multiple curtailment events in

a single day with varying durations, but no customer will be interrupted for more than six hours in a single day. The specific size of the incentives are determined based on the size of the customer's air conditioning load and are determined based on an incentive of \$.36/ton/day for a 100% cycling option, with discounts applicable based on the override and cycling features selected.

- 2. The Southern California Edison Company is authorized to file a Tier 1 with the Commission's Energy Division implementing tariffs consistent with the changes authorized at any time within six months of the mailing of this decision.
- 3. The Southern California Edison Company is authorized incremental funding for 2011 and 2012 totaling up to \$26.6 million for this transition. The \$26.6 million are reasonable costs for this transition and may be recorded in the Demand Response Balancing Account for eventual recovery.
- 4. The Southern California Edison Company shall update its Demand Response Application Cycle Funding Request for 2013-2014 in the fourth quarter of 2012 using information obtained from the operation of the revised Summer Discount Plan. Such information shall include, but not be limited to, the number of eligible SDP customers who have chosen the override option and an analysis of their behavior during ach event called during 2011-2012. Additionally, the updated application should explicitly require that SCE take into account the effect of SDP's override option on its *ex ante* load impact estimate for 2013-2014 for evaluating SDP's cost effectiveness.

## A.10-06-017 ALJ/TJS/jt2

5. Application 10-06-017 is closed.

This order is effective today.

Dated November 10, 2011, at San Francisco, California.

MICHAEL R. PEEVEY
President
TIMOTHY ALAN SIMON
MICHEL PETER FLORIO
CATHERINE J.K. SANDOVAL
MARK J. FERRON
Commissioners

I reserve the right to file a concurrence.

/s/ TIMOTHY ALAN SIMON Commissioner