PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

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PUBLIC UTILITIES COMMISSION
STATE OF CALIFORNIA

ENERGY DIVISION

RESOLUTION E-3624
August 5, 1999

RESOLUTION

Resolution E-3624. Southern California Edison Company (SCE) requests authorization for an experimental voluntary energy curtailment program, Schedule General Service-Energy Curtailment (Schedule GS-EC) and associated contract. Denied.

BY ADVICE LETTER 1371-E FILED March 22, 1999

Summary

In Advice Letter 1371-E, SCE seeks authority to establish an experimental Schedule GS-EC which would pay customers an incentive payment for voluntary curtailments. To implement Schedule GS-EC, SCE also seeks approval of the companion contract, Energy Curtailment Agreement.

The Center for Energy Efficiency and Renewable Technologies, Dynegy, Alliance for Retail Markets, and the California Farm Bureau Federation filed timely protests on or before April 12, 1999. The California Large Energy Consumers Association, the Office of Ratepayer Advocates, and the California Energy Commission filed late protests.

Considering the market power concerns, the reduced need for the program due to PX Block Forward Program, and the projected benefits of the program, on balance, the costs associated with the program outweigh the benefits. Therefore, SCE's Advice Letter 1371-E is denied.

Background

In Advice Letter 1371-E filed on March 22, 1999, SCE seeks authority to establish an experimental Schedule GS-EC which would pay customers an incentive payment for voluntary curtailment. To implement Schedule GS-EC, SCE also seeks approval of the companion contract, Energy Curtailment Agreement. The utility anticipates calling curtailment events when California Power Exchange (PX) energy price is approaching $100/MWh or more.

During the rate freeze, bundled customers do not see the price signals of high PX prices during peak demand periods because rates are frozen. Since its rates are frozen, SCE states that it has inadequate information on how bundled customers would react to changes in the market price of electricity and the knowledge gained from the program will be valuable in designing rates in the post-transition period. Moreover, SCE believes that it also important for customers to learn how to respond to high energy prices. Schedule GS-EC, SCE claims, will also foster market efficiency by creating demand responsiveness which may result in lowering the overall market price to the benefit of all consumers. Hence, SCE has designed Schedule GS-EC with these two goals in mind—learning how customers may respond to price changes and mitigating high market prices during peak periods. SCE plans to file an annual report with the Commission by March 31 describing the results of program for the prior year.

SCE estimates that the program would provide benefits up to $49 million at a cost of $40 million reflecting solely the costs associated with the incentive payments. The gross benefit of $49 million is based on savings from reduced energy purchases and lower PX market-clearing prices relative to SCE bidding in its total energy requirements into the PX. [1] The incentive payment is based on a formula which we will subsequently describe in greater detail. SCE proposes to recover the incentive payments through the Transition Revenue Account (TRA). However, its advice letter filing does not include any proposed changes to the TRA account. The net benefit of nine million dollars would be further offset by revenue losses associated with the curtailed energy.

SCE states that the curtailment program would work in conjunction with its forward purchase proposal, Application (A.) 99-03-062, to better manage its procurement costs. That is, PX price reductions can be achieved by lowering demand through the GS-EC curtailment program or by increasing supply through its forward purchase application.

Schedule GS-EC is an experimental schedule that is optional for bundled customers on Schedule TOU-8 or options thereto. Customers on TOU-8-CR-1, I-6 with Spot Pricing Option and Real Time Pricing (RTP) schedules are not eligible since they already receive price signals which provide them with an incentive to curtail during peak periods. SCE requests the GS-EC program to commence on June 1, 1999 and end the earlier of March 31, 2002 or when the rate freeze ends. The program is limited to 2000 MW.

To qualify for service on GS-EC, customers must have meters which can read hourly loads and a signed Energy Curtailment Agreement. The Agreement specifies the Customer Specific Energy Forecast (CSEF) which is used to determine the amount of energy curtailed. CSEF may be based on historical information or the five day rolling average energy usage prior to a curtailment event. The recorded curtailed energy is the difference between the actual recorded energy and the CSEF. Curtailment events occur during the summer (June 1 to October 31 of each year) on weekdays. There would be no limit to the number of curtailment events.

[1] Assuming an the ISO price cap of $250, 72 hours of curtailment, and 2000 MW.

Should SCE choose to initiate a curtailment event, it will notify customers 48 hours prior to the event: the amount it intends to pay for the curtailment, the duration, and forecasted temperature. The customers must notify SCE the earlier of 5pm of that same day, or the closing time specified by SCE of their commitment to curtail and the amount they intend to curtail. Commitments will be processed on a first-come, first-served basis. SCE will not accept commitments past the deadline. SCE will notify a customer if its commitment is not accepted. The curtailment commitment is for a minimum of 100 kWh and cannot exceed the amount designated on the Energy Curtailment Agreement.

The payment is in the form of a credit to the customer's bill. In the illustrative example filed in Attachment B to the Advice Letter but not indicated on the tariff itself, the maximum credit or incentive payment is based on the maximum hourly day-ahead PX price for the past 15 months less the average summer on-peak TOU-8 energy rates plus a price responsiveness term. This term is the product of the responsiveness of the PX price to curtailed load during the summer on-peak, SCE's peak net usage, and a factor of .7 to ensure benefits of the program are realized by all customers, not just those who participate in the curtailment program. The credit will apply to recorded curtailments that are within +/- 50% of a customer's curtailment commitment.

Should a curtailment event be cancelled, SCE will notify customers as soon as practicable and provide a credit of $100 to the customer's bill.

In the event of non-performance, there are no penalties but SCE may remove the customer from Schedule GS-EC. SCE may also terminate customers from the program if the customer fails five times to participate in the program after being notified.

Notice

Notice of SCE Advice Letter 1371-E was made by publication in the Commission Daily Calendar and by mailing copies to interested parties.

Protests

The Center for Energy Efficiency and Renewable Technologies (CEERT), Dynegy, Alliance for Retail Markets (ARM), and the California Farm Bureau Federation (Farm Bureau) filed timely protests on or before April 12, 1999. The California Large Energy Consumers Association (CLECA), the Office of Ratepayer Advocates (ORA), and the California Energy Commission (CEC) filed late protests on April 15, 1999, April 16, 1999, and April 29, 1999, respectively. SCE replied to the protests in April and May 1999.

<u>Expanding the program</u>

Some protestants believe the program should be expanded. CEERT states the program should be expanded to other classes to preserve equity among customer classes and should not distort customer choice between the utility and energy service provider (ESPs). While CLECA agrees there should be no double payment to customers already being served on interruptible schedules, CLECA believes the program is unnecessarily restrictive and customers on I-6 with Spot Pricing Option, TOU-8-CR-1, Real Time Pricing , and ISR schedules should be able to participate in the program. CEC prefers to have a curtailment program through the PX where all providers could participate rather than a utility program limited to a subset of its customers.

SCE replies that it is willing to consider offering similar programs to other classes including residential customers in the future provided they are cost-effective. SCE is agreeable to offering the program to direct access or unbundled customers in the future, if there is consensus among ESPs on eligibility. SCE also notes that ESPs can offer their own curtailment programs. SCE also states that the PX may be working with ESPs to develop similar programs. SCE agrees to include customers on the Spot Pricing Option and TOU-8-CR-1 schedules but continues to exclude customers on Real Time Pricing and Virtual Direct Access because these customers' bills are impacted by high PX prices and will have an incentive to curtail.

Termination Date
ORA proposes the experimental program should end on October 31, 1999 or October 31, 2000, unless the Commission explicitly authorizes continuation.

In its reply, SCE agrees to terminate the program the earlier of October 31, 2000 or when the transition period ends. However, SCE may request the program be re-established for the summer of 2001, if the rate freeze is not anticipated to end.

Reasonableness Review
ORA requests Schedule GS-EC be subject to reasonableness review since there were no workpapers supporting SCE's estimates of program costs and benefits. The reasonableness review of Schedule GS-EC would be part of the Annual Transition Cost Proceeding (ATCP) which also reviews the TRA, the account which SCE proposes to record incentive payments. ORA does not object to SCE's accounting treatment of the incentive payments. ORA also believes the reasonableness review should include an independent assessment of the program by the CEC. ORA proposes that the Commission require SCE to provide the CEC the necessary data to conduct such an assessment.

SCE responds that it is premature and unnecessary to have a reasonableness review or independent assessment of an experimental program. Since it will be submitting an annual report on the program, SCE suggests the Commission take further action only after it has reviewed SCE's report. SCE is amenable to the CEC reviewing applicable program data.

Reporting

ORA, CEERT, and CEC believe SCE should file a report on the program. CEERT wants SCE to file an annual report which would contain the observed price elasticity for participating customers, program costs, and lessons learned. The report would be filed as part of the record in the Post-Transition Ratemaking Proceeding, A.99-01-016 et al. and the Distributed Generation and Competition OIR, R. 98-12-015. ORA requests the annual report on the program be filed by January 15th of each year rather than March 31st proposed by SCE so that the Commission would have adequate time to evaluate the program for changes for the coming year. The CEC believes that by understanding customer price responsiveness through the proposed curtailment program, SCE is positioning itself for the post-freeze era--yet the CPUC has not decided whether the utility will have a continuing procurement role. To mitigate this concern, CEC proposes all information obtained from the program be disseminate to all market participants. However, during the operation of the program, SCE should be restricted from transferring customer-specific information to entities other than the program's operations staff.

SCE states it is willing to file an initial preliminary report by December 1, 1999. The report would include: the number of curtailment events, the time periods that SCE called for curtailment, the number of customers who committed to curtail in each event, the committed load reduction for each event, and the incentive payment by event. SCE intends to seek assistance from the PX to evaluate the benefits from the program. Final program data and actual results will be submitted in a follow-up report after December 1999. Interested parties will be able to review both reports.

Information on price elasticity of the participants will only be provided to the Commission under Section 583 of the Public Utilities (PU) Code. Due to the experimental nature of the program, SCE opposes submitting the report in other proceedings.

Appropriate forum

CEERT agrees that the advice letter process is the appropriate vehicle given that the program's expected starting date is June 1, 1999.

Dynegy, ARM and ORA believe that the advice letter process is not the appropriate forum to address this issue. Dynegy and ARM further argue that since the Advice Letter itself states the Schedule GS-EC and SCE's forward purchase program (A.99-03-062) seek to address the same goal, they should be consolidated into one proceeding. The appropriate proceeding is the market structure rulemaking proposed by Commissioner Duque because the Advice Letter raises the same market structure issues that would addressed by the rulemaking.[2]

[2] March 11, 1999 Scoping Memo and Ruling of Assigned Commissioner in A.99-01-016 et al.

SCE argues that the advice letter process is the appropriate forum given its experimental nature. SCE states its forward purchases application seeks approval of broader ratemaking authority than this Advice Letter. SCE believes that ARM's request to change forums is a stalling tactic, and the advice letter process affords parties the opportunity to discuss the issues thoroughly through protests and comments on the draft resolution. SCE also states that its program is for the transition period and the issues that would be addressed in the market structure rulemaking pertain to the post-transition period. Therefore, there is no conflict with Commissioner Duque's Ruling.

<u>Impact on competition</u>
ORA, CEC, ARM, and Dynegy are concerned about the potential anti-competitive implications of GS-EC program. These anti-competitive impacts include inappropriate customer retention and the utility abusing its default provider status. Dynegy argues that SCE has monopsony power since SCE is the buyer for its large base of default customers and by reducing consumption of these customers through programs such as GS-EC, SCE can influence the PX price. ARM and CEC claim since ESPs are not default providers, they do not have the necessary large customer base needed to cost-effectively implement programs like GS-EC. ARM states that the ESPs also do not have the benefit of CTC recovery which further enhances the cost-effectiveness of SCE's program. Additionally, ARM points out that the GS-EC program is another tool to retain customers, thus making direct access an ineffective force to thwart any market power the utility might have in the PX market. The CEC also contributes the ESPs' inability to offer similar products due to the price freeze and the methods used to calculate energy costs. The overall impact of these potential anti-competitive outcomes is to discourage new entrants and continued ESP presence in the California markets.

In response to the protestants' anticompetitive allegations, SCE states that the program is in response to generator market power and does not represent buyer market power. SCE claims it is the lack of price responsiveness due to frozen rates that has distorted energy markets. The Market Monitoring Committee of the PX and the Market Surveillance Committee of the ISO have issued reports on the market structure problems in the various energy markets, including the price spikes that occurred in July 1998 in the ISO markets. SCE believes its curtailment program is consistent with the reports' recommendation to mitigate noncompetitive generation bidding by encouraging demand-side bidding. SCE argues that its program allows participants to pay the true market value of electricity rather than a price distorted by market power.

SCE states that to the extent that demand responsiveness programs lower the PX price, all buyers from the PX, including ESPs, will benefit. Moreover, ESPs can offer their own program.

SCE claims the program facilitates efficient competition on the supply side and efficient decision-making on consumption. This is because the savings to a buyer do not exceed the reduction in energy costs when the customer curtails. Under the program, the participant will pay sellers to produce another megawatt hour of electricity only if the market price matches the economic value of that additional energy to the buyer, which is how efficient competitive markets operate.

SCE believes Dynegy 's comments are an effort in attempting to preserve its generator market power and profit by maintaining high PX prices. SCE contends all market players, including Dynegy, can affect the market-clearing price by varying the quantities that they buy and sell. SCE notes that the 2000 MW limit of its curtailment program is less than 5 % of peak demand in the ISO control area as well as the 3000-4000 MW of supply controlled by several new generation owners. Furthermore, SCE argues that ARM and Dynegy fail to explain why a voluntary curtailment program constitutes an exercise of market power.

Dynegy and ARM argue that GS-EC program undermines the market/regulatory assumptions used by new generators or other market participants when they entered into market transactions. Dynegy believes that the Commission would be changing the rules of the game by allowing the UDC to exert market power through programs such as GS-EC after investments have already been made. ARM suggests participants in the Palo Verde and California Oregon Border (COB) forward markets which have financial instruments tied to the PX price are also harmed by SCE's proposed curtailment program because they entered into those contractual arrangement without the assumption of a GS-EC program. ARM contends that if the CPUC approves GS-EC without advance warning, these forward contractual arrangements would be undermined.

SCE notes that those who entered into forward contracts in anticipation of higher prices knowingly take the risk that market, weather, or regulatory conditions may change. All of these factors have a larger impact on the value of future prices than its experimental program, SCE contends. SCE also claims there have not any significant changes in the Palo Verde or COB futures prices since it filed this Advice Letter. SCE also notes that although buyers of forward contracts may lose money if the PX price declines as the result of the curtailment program, sellers of those contracts profit.

<u>CTC Recovery</u>
Dynegy and ARM believe that most significant benefit of the GS-EC program is the accelerated recovery of CTC costs which accrues to SCE shareholders at the expense of a competitive electricity procurement market. They argue that since customers are not impacted by price spikes because rates are frozen, any benefits customers receive from an early end to the rate freeze are indirect. ARM also recommends that since the shareholders are the beneficiaries of the program they should bear all costs associated with developing the program. The CEC concurs.

SCE states that early recovery of transition costs has been a goal of the Commission and the legislature. Consumers also have been advocating for early recovery. SCE claims that shareholders benefit from PX price reduction through this program only if SCE is unable to end rate freeze prior to December 2001. SCE further states that

SCE's shareholders, ESPs, and ratepayer interests are aligned with respect to the impact proposed curtailment program, i.e., reduced PX price spikes. However, SCE also states that shareholders should not bear the costs from the program because the program is for customers' benefit.

Broad Discretion

The Farm Bureau, CEC, and ORA raise concerns regarding SCE's broad discretion in implementing the program. Rather than have SCE call curtailments at its sole discretion, the Farm Bureau suggests customers should be made aware of the range of market conditions which curtailments may be initiated. Protestants also question the cost-effectiveness of the curtailment program and the ability to assess the cost-effectiveness, given the lack of specificity on when curtailments would be called and the level of the incentive payment. ORA also queries the efficacy of a program which makes payments on a broad bandwidth of 50% of the customer's curtailment commitment. ORA and CEC oppose SCE's ability to provide customized rates to individual customers. ORA recommends the program be modified so that rates are fixed and uniform or that the incentive payment design be the forefront of the reasonableness review. CEC suggests, for experimental purposes, to discover the degree of price responsiveness, SCE be allowed to offer different percentages of the PX price to various groups of participants.

SCE states that its advice letter defines the bounds of the incentive payment, and it needs discretion within those limits to vary the price in order to learn about customers' willingness to participate at various incentive payment levels. During any one single curtailment event, all customers will receive the same incentive rate. SCE acknowledges that there is less specificity on the curtailment program's operations relative to its other utility programs. SCE argues that administering the program requires flexibility because the program is responding to dynamic market conditions. Furthermore, customers would be harmed if the process by which curtailments would be called were revealed to the competing generators and other suppliers.

SCE replies that it cannot implement CEC's suggestion of offering different incentive levels to various customer classes because the PU Code requires similarly situated customers be offered the same rate.

CEC-Program Modification

Other program modifications that the CEC believes are necessary prior to approval are accounting for rebound energy and notifying customers of the Hourly PX tariff option. Customers should specify how they plan to curtail, e.g. through load shifting to other periods or conservation. By taking rebound energy into account, SCE would avoid paying imbalance charges that it would otherwise incur.[3] CEC believes that customers should be aware of other ways to benefit from load curtailment, such as the Hourly PX

[3] Rebound energy would include but is not limited to energy that was not used due to the curtailment but is later consumed in another time period.

tariff option. CEC contends that customers can save more money by curtailing load on this tariff option when prices are high rather than curtail under SCE's program which only pays a fraction of the PX price. CEC recommends that SCE informs customers of both alternatives.

SCE replies that it does not plan to analyze the secondary impacts during hours outside the program operations since such analysis would require additional resources beyond the design and budget for the program.

SCE intends to notify customers of the curtailment program through a bill insert or other mailing. The utility claims it has informed customers of the Hourly PX tariff option, but there has been little interest.

In its protest, the CEC includes a list of necessary data requirements should the Commission wish the CEC to assess SCE's curtailment program, as proposed by ORA. The CEC would release its report in February of the year following the program season. The CEC would also be willing to testify in CPUC reasonableness proceeding and make recommendations on program improvements. Data requirements include:

Hourly load data for the season for eligible rate groups.
SCE indicates hourly load data for the rate groups would not be available in time for CEC's report. However, SCE does not believe this should impair CEC's ability to assess the program since it will have information on customers within the rate groups that participated in the program.

Individual interval metering data for all participating customers for the season.
SCE will not provide individual customer's meter data unless that information is released by the customer. SCE proposes to add to the contract a section requesting the release of customer-specific information for the purpose of a CPUC/CEC study. SCE, however, will release aggregate data for each event, provided at least 15 customers participate and no one individual customer accounts for more than 15% of the total reduction bid. Because the program does not end for the season until October 31, final program data would not be available to the CEC until mid-December.

Records of specific customer contacts proposing load curtailment, price offered by SCE, customer's hour by hour load curtailment agreement, and whether SCE actually requested curtailment for that event.
SCE explains that all customers will be informed of a curtailment event at the same time through a paging system which customers will be required to subscribe. All customers will receive the same message which includes the date and time period of the event, incentive rate (cents/kWh), and forecasted temperature. All eligible customers may bid in every event. SCE will reject bids that are (1) received after 5 p.m., (2) greater than the customer's historical Customer Specific Energy Forecast or customer's maximum load, or (3) in excess of 2000 MW that have been already accepted for that event.

SCE proposes to release the following information for each event to the CEC:

- total number of GS-EC bids and MWh reductions by hour
- actual MWh of load reduction by hour as determined through billing process
- individual customer loads, bids, and actual reductions, if customer consents
- incentive payment offered
- hours of curtailment requested
- PX MWh
- PX market clearing price, and
- calculation of implied elasticity whenever the maximum credit changes per the calculation in the tariff

Records from SCE indicating precisely which specific customers were contacted and how SCE selected particular customers when the aggregate load reduction was less than the capability of the pool.
SCE plans to contact all eligible customers to participate in the program through a letter and will also inform customers through their customer service representative. For any individual curtailment event, all customers would be notified by pager. However, SCE claims there is no way to keep records of which customers actually received a page. Bids will be accepted on a first-come , first-served basis. SCE will close the program for that event, once it has accepted 2000 MW.

The conditions which would trigger SCE to notify customers of a likely curtailment event.
SCE reiterates its position that if such conditions were released they would be detrimental to customers. In general, SCE plans to trigger a GS-EC event based on its forecast of the PX market-clearing price.

The payment history to each customer.
SCE will only release this information with the consent of the customer. Aggregate payment information will be provided to the CEC.

SCE's program set-up and operating costs
SCE does not see the need to provide this information to the CEC since it is not requesting recovery of the program's administrative costs.

Discussion

The critical issue in evaluating this Advice Letter is whether the benefits from the GS-EC program, such as mitigating possible price spikes, gaining information on customer price responsiveness patterns, and ending the rate freeze early, outweigh the costs of the program which may include potential adverse impacts on electricity generation or procurement competition as cited by ARM and Dynegy.

The dilemma is that to mitigate price spikes-- which may be due to market distortions resulting from a lack of price responsiveness in a frozen rate environment -- with price responsiveness programs like GS-EC, may in turn, confer market power upon the utility. The potential for price responsiveness programs to reduce price spikes is dependent, at least in part, on the level of load that will be curtailed. As the level of the curtailment increases, the total load bid into the PX market decreases and the corresponding market-clearing price decreases as well, all other factors remaining constant. However, the larger the load which is subject to curtailment by the utility, the greater are the market power concerns such as those raised by the protestants. [4]

SCE argues that it cannot exercise market power because the curtailments are voluntary and ESPs can offer comparable programs. Although customers may choose whether or not to curtail, it is the utility that decides when to call for voluntary curtailments, which in turn cause a decrease in the market-clearing price. Therefore, it is the utility that determines when the market-clearing price will be lowered. As we will discuss later, it is not clear that ESPs can offer a similar program due to SCE's incentive payment mechanism.

Ideally these market power issues should be thoroughly discussed and addressed in an application. However, summer is upon us and we must reach closure on SCE's proposed GS-EC program as we did for PG&E's price responsiveness program E-BID, in draft Resolution E-3619. In that draft Resolution, we recommended PG&E's E-BID program be approved with modifications. However, there are significant differences between the two programs. PG&E's program is small, with only 200 MW, and its incentive payment is equal to the market-clearing price less the otherwise applicable rate. Neither is true for SCE.

In this Advice Letter, SCE is requesting a 2000 MW program, ten times the program size we considered in PG&E's Advice Letter 1865-E. In reply to protests, SCE argues that 2000 MW is less than 5% of peak demand in the ISO control area and is comparable to the 3000-4000 MW controlled by several new generation owners. We are not persuaded by SCE's arguments for several reasons. First, it is unclear how many new generation owners share in the 3000 MW-4000 MW cited by SCE. Second, while theoretically one MW (especially if it is the last MW to clear the market) can affect the market-clearing price, any potential market power problems that may occur with a 200 MW program would be magnified by a factor of ten for SCE's program. We are also perplexed that SCE would need a program ten times that of PG&E's when PG&E's peak demand is higher than SCE's.[5]

[4] It is also possible for a very small load to have market power, especially if it is the last megawatt needed to balance demand and supply on a real-time basis.

[5] PG&E's area peak was 21,862 MW compared to SCE's 19,118 MW for 1997. Financial and Statistical Reports 1997 for PG&E and SCE.

SCE's incentive payments for voluntary curtailments are substantially flawed in several respects.

The payment level is neither clearly defined nor included in the proposed tariffs or the Energy Curtailment Agreement.

There is no defined incentive payment level in the tariffs or the contract. Additionally any information on the incentive payment mechanism that is in Attachment B to the Advice Letter is only illustrative. Although SCE proposes to recover the costs associated with the incentive payments through the TRA, the Advice Letter does not include any proposed changes to the TRA to reflect the incentive payment.

The incentive payment is not included in the PX credit.

To maintain a competitive marketplace, the incentive payment should be included in the PX credit. ESPs compete against the PX credit which reflects SCE's cost of procuring electricity. Since the incentive payment is one of the costs associated with purchasing supply from GS-EC customers, it should be included in the PX credit. By excluding the incentive payment from the PX credit, SCE understates its true costs and potentially hinders the ESP's ability to compete.

Unlike PG&E's program, SCE's incentive payment is not equal to the actual PX market-clearing price less the otherwise applicable rate.

Under PG&E's E-BID program, customers who curtail are paid the market-clearing price less the otherwise applicable rate. Essentially, PG&E pays the costs it avoids by not having to serve E-BID customers. Similarly, by not serving the load of GS-EC customers, SCE saves the PX costs it would have had to pay if the GS-EC customers had not curtailed, less the revenue loss from the TOU-8 rate due to the curtailment. SCE's incentive payment, however, adds a price responsiveness component to these savings. Consequently, ESPs may find it difficult to offer comparable programs, especially since SCE does not include the incentive payment in the PX credit. Additionally, a price responsiveness term that is only illustrative further exacerbates the situation.

SCE's incentive payment is also likely to be inflated because it uses the historical PX price.

The incentive payment may also be overstated because SCE uses the maximum hourly day-ahead PX price for the past 15 months for all hours of the curtailment, even if historically an hour has not been at the maximum PX price. Another reason is that the future PX price is likely to be lower than the historical price due to the introduction of the PX Block Forward program. With another source of potential supply from the PX Block Forward program, there would be less demand for the PX day-ahead market.[6] Lower demand is likely to lead to lower PX prices. Thus, with more moderate price spikes, the need for the price responsiveness program and its potential benefits are also dampened.

In addition to the potential market power issues due to SCE's program size and incentive mechanism, we are also concerned with expected benefits to customers. Even without the PX Block Forward program reducing the benefit of the GS-EC program, the benefits from the program may not be significant in terms of the transition cost recovery period. According to SCE's own projections, the maximum net benefits from the program are estimated to be less than nine million dollars. It is not clear that with less than a nine million dollar contribution to headroom whether the transition cost recovery period would be appreciably shorter for customers.[7]

Another benefit that SCE seeks from the GS-EC program is to learn how customers may respond to price changes and allow customers to learn how to respond to price changes. SCE already has some knowledge regarding customer responsiveness because it has customers on the Real Time Pricing schedule and the Hourly PX rate option. Therefore, we do not believe this benefit can only be derived from the GS-EC program. Nor do we see significant benefits to TOU-8 customers from learning how to respond to price changes since these customers are already on a schedule with time-variant rates.

Considering the market power concerns, the reduced need for the program due to the PX Block Forward Program, and the projected benefits of the program, we find, on balance, the costs associated with the program outweigh the benefits. Therefore we decline to approve SCE's GS-EC program. Since we do not approve the GS-EC program on its merits, we need not address the other issues raised by the protestants.

However, so that SCE will have another tool to mitigate price spikes this summer, we will offer SCE the same option that was provided to PG&E in draft Resolution E-3619. In that draft Resolution we accepted PG&E's E-BID program with modifications. SCE should submit a letter by July 9, 1999 to the Energy Division and to all parties stating whether it accepts, rejects, or requests modifications to the price-responsiveness program offered in Resolution E-3619.

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[6] While we expect the PX Block Forward market to lower PX prices, we are unclear as to all the impacts of the demand responsiveness program would have on the PX Block Forward market. Nonetheless, the utility should not be in a position to use its GS-EC program to gain an unfair advantage in the PX Block Forward market. Additionally, we recognize that these programs are new and may have some interactions which we are currently unaware of.

[7] SCE's total transition cost for the first six months is $1.861 billion which is equivalent to $10.2 million per day.

Comments

The draft Resolution of Energy Division in this matter was mailed to parties in accordance with the Public Utilities Code Section 311 (g).

The draft Resolution denied SCE's GS-EC program but allowed SCE to initiate the same program that was approved for PG&E in Resolution E-3619. The draft Resolution required SCE to submit a letter to the Energy Division whether it accepts, rejects or requests modifications to the demand responsiveness program approved in Resolution E-3619. On July 19, 1999, SCE notified the Energy Division that it declines to participate in the demand responsiveness program presented in Resolution E-3619.

In its July 19, 1999 letter, SCE rejected the offer in the draft Resolution because it believes 1) the incentive payment formula is insufficient to elicit an effective response from its customers, 2) neither condition for initiating curtailments is workable, 3) extensive changes would have to be made to its program to comport with the program authorized for PG&E , and 4) the risks to shareholders are undefined.

SCE did not request any modifications to the proposed program to address any of its preceding concerns. Instead SCE proposes that the Commission initiate a process to develop a demand responsiveness program that provides benefits to customers, is acceptable to stakeholders, and can be implemented as soon as possible.

On July 20, 1999, ARM filed comments supporting the draft Resolution. However, it suggested changes the draft Resolution to further explain why ESPs cannot replicate the utility's demand responsiveness program. The draft Resolution has described the reasons why the ESPs cannot offer similar programs. No additional discussion is required, especially since SCE has elected not to initiate the demand responsiveness program approved in Resolution E-3619.

We believe demand responsiveness programs should be further explored and direct the Energy Division to meet with SCE to discuss other types of demand responsiveness programs that would be acceptable to both to ratepayers and shareholders.

Findings

1. In Advice Letter 1371-E filed on March 22, 1999, SCE seeks authority to establish an experimental Schedule GS-EC which would pay customers an incentive payment for voluntary curtailments. To implement Schedule GS-EC, SCE also seeks approval of the companion contract, Energy Curtailment Agreement.

2. The Center for Energy Efficiency and Renewable Technologies, Dynegy, Alliance for Retail Markets, and the California Farm Bureau Federation filed timely protests on or before April 12, 1999. The California Large Energy Consumers Association,

the Office of Ratepayer Advocates, and the California Energy Commission filed late protests.

3. SCE replied to the protests in April and May 1999.

4. During the rate freeze, most bundled customers do not see the price signals of high PX prices during peak demand periods because rates are frozen.

5. SCE claims that Schedule GS-EC will also foster market efficiency by creating demand responsiveness which is non-existent in a frozen rate environment, and this price responsiveness may lower the overall market price to the benefit of all consumers.

6. SCE states that under frozen rates it has inadequate information on how bundled customers would react to changes in the market price of electricity and the knowledge gained from the program will be valuable in designing rates in the post-transition period. Moreover, SCE believes that it also important for customers to learn how to respond to high energy prices.

7. SCE has designed Schedule GS-EC with two primary goals in mind: learning how customers may respond to price changes and mitigating high market prices during peak periods.

8. The utility anticipates calling curtailment events when California Power Exchange energy price is approaching $100/MWh or more.

9. SCE estimates that the program would provide benefits up to $49 million at a cost of $40 million; these costs are based solely on incentive payments. The net maximum benefit of nine million dollars would be further offset by revenue losses associated with the curtailed energy.

10. The gross benefit of $49 million is based on savings from reduced energy purchases and a lower PX market-clearing price relative to SCE bidding in its total energy requirements into the PX.

11. There is no defined incentive payment mechanism in the proposed tariffs or contracts.

12. An illustrative incentive payment mechanism based on a formula is shown in Attachment B to the Advice Letter. The maximum illustrative incentive payment is based on the maximum hourly day-ahead PX price for the past 15 months less the average summer on-peak TOU-8 energy rates plus a price responsiveness term. This term is the product of the responsiveness of the PX price to curtailed load during the summer on-peak, SCE's peak net usage, and a factor of .7 to ensure benefits of the program are realized by all customers, not just those who participate

in the curtailment program. The incentive payment will apply to recorded curtailments that are within +/- 50% of a customer's curtailment commitment.

13. SCE proposes to recover the incentive payments through the Transition Revenue Account (TRA). However, its advice letter filing does not include any changes to the TRA account to reflect this proposal.

14. SCE states that the GS-EC curtailment program would work in conjunction with its forward purchase proposal, A. 99-03-062, to better manage its procurement costs. SCE also states PX price reductions can be achieved by lowering demand through the GS-EC curtailment program or by increasing supply through its forward purchase application.

15. Schedule GS-EC is an experimental schedule that is optional for bundled customers on Schedule TOU-8 or options thereto. Customers on TOU-8-CR-1, I-6 with Spot Pricing Option and Real Time Pricing (RTP) schedules are not eligible since they already receive price signals which provide them with an incentive to curtail during peak periods. SCE requests that the GS-EC program commence on June 1, 1999 and end the earlier of March 31, 2002 or when the rate freeze ends. The program is limited 2000 MW.

16. To qualify for service on GS-EC, customers must have meters which can read hourly loads and a signed Energy Curtailment Agreement.

17. Curtailment events occur during the summer (June 1 to October 31 of each year) on weekdays. There would be no limit to the number of curtailment events.

18. Under Schedule GS-EC, SCE would initiate curtailments at its own discretion.

19. Curtailment commitments would be processed on a first-come, first-served basis. The curtailment commitment is for a minimum of 100 kWh and cannot exceed the amount designated on the Energy Curtailment Agreement.

20. While we approved PG&E's price responsiveness program E-BID with modifications, there are significant differences between E-BID and GS-EC. E-BID is only 200 MW and its incentive payment mechanism is equal to the market-clearing price less the otherwise applicable rate.

21. SCE's GS-EC program is ten times the size of PG&E's price responsiveness program, E-BID. Any market power problems which may occur with PG&E's program would be increased by a magnitude of ten for SCE.

22. The costs associated with SCE's incentive payment are not included in the PX credit.

23. By not including the incentive payment in the PX credit, SCE understates its true cost of procuring electricity and could potentially undermine the ESPs' ability to compete.

24. With GS-EC customers curtailing, SCE saves the PX costs that it would have had to pay if the GS-EC customers did not curtail less the revenue loss from the TOU-8 rate due to the curtailment.

25. By adding a price-responsiveness component to its incentive payment, SCE pays its GS-EC customer more to curtail than it avoids in costs from not serving those customers. Consequently, ESPs may find it more difficult to offer comparable programs to their customers, especially since SCE does not include the incentive payment in the PX credit but proposes to recover the associated costs through the TRA. An illustrative price responsiveness term further exacerbates the situation.

26. SCE's incentive payment is also likely to be inflated because it plans to use the historical maximum PX price for all hours of curtailment.

27. Another reason that the incentive payment may be inflated is that the actual PX price in the future is likely to be lower due to the PX Block Forward Market. This new market is likely to introduce another source of supply which will decrease the demand in the PX market. Lower demand in the PX market should lead to lower PX prices, which in turn will dampen the need for and benefit of demand price responsiveness programs.

28. There may not be significant benefits to customers from a shorter transition cost recovery period, since the net benefits of the program are less than nine million dollars which may be further reduced due to the opening of the PX Block Forward market.

29. SCE already has some knowledge regarding customer responsiveness because it has customers on the Real Time Pricing schedule and the Hourly PX rate option. Therefore, the GS-EC program does not provide unique or substantive benefits in this area either. Nor are there significant benefits to TOU-8 customers from learning how to respond to price changes since these customers are already on a schedule with time-variant rates.

30. Considering the market power concerns, the reduced need for the program due to the PX Block Forward Program, and the projected benefits of the program, on balance, the costs associated with the program outweigh the benefits. Therefore, SCE's Advice Letter 1371-E is rejected.

31. Since we do not approve the GS-EC program, we need not address the other issues raised by the protestants.

32. However, we will offer SCE the same option that was provided to PG&E in draft Resolution E-3619. SCE should submit a letter by July 9, 1999 to the Energy Division and to all parties stating whether it accepts, rejects, or requests modifications to the price-responsiveness program offered in draft Resolution E-3619.

33. On July 19, 1999, SCE notified the Energy Division it declines to implement the demand responsiveness authorized in Resolution E-3619.

34. The Energy Division should meet with SCE to discuss alternative demand responsiveness programs.

Therefore it is ordered that:

1. Advice Letter 1371-E is rejected.

2. The Energy Division shall meet with SCE to discuss alternative demand responsiveness programs.

3. 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 August 5, 1999, the following Commissioners voting favorably thereon:

Wesley Franklin

WESLEY M. FRANKLIN
Executive Director

RICHARD A. BILAS
President
HENRY M. DUQUE
JOSIAH L. NEEPER
JOEL Z. HYATT
CARL W. WOOD
Commissioners