

Decision **REVISED PROPOSED DECISION OF ALJ WEISSMAN (Mailed 4/18/97)**

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking on the Commission's Proposed Policies Governing Restructuring California's Electric Services Industry and Reforming Regulation.

R.94-04-031
(Filed April 20, 1994)

Order Instituting Investigation on the Commission's Proposed Policies Governing Restructuring California's Electric Services Industry and Reforming Regulation.

I.94-04-032
(Filed April 20, 1994)

OPINION ON THE UNBUNDLING OF REVENUE CYCLE SERVICES

Summary

In an effort to promote retail competition for the provision of electric services to all customers, many interested parties have urged this Commission to allow competitive firms to provide their own consolidated billing, metering and other related services. In this decision, we conclude that competing energy service providers should be allowed to present consolidated bills that reflect the full cost of providing service. We establish that energy service providers that utilize consolidated billing are responsible for all payments, including payments of the Competition Transition Charge and the Public Goods charge regardless of whether they receive payment from their end-use customer. This decision also allows energy service providers to provide for their customers meters other than those commonly furnished by the utility distribution company. Many also argue that customers should not be required to pay the utility distribution company for the costs that the utility does not face when competing retail energy service providers are presenting consolidated bills, providing meters or fulfilling other related functions. Here, we conclude that in our unbundling proceeding, we will determine the appropriate way to separately identify these cost savings. Where the energy service provider furnishes the meter, that meter must be consistent with reasonable standards of open architecture and satisfy the distribution company's need for accurate calibration, appropriate installation, and the provision of information that is sufficient and reliable. By the same token, the distribution company will have to adhere to the same standards if it decides to adapt or replace its existing meters. In our direct access proceeding, we will determine rules for the development of open architecture standards. In that proceeding, we will also develop rules that will guide the energy service providers and distribution utilities in creating service agreements that will define the way the information needs of each entity will be met, no matter which one provides the meter.

In this decision, we also re-affirm the commitment in the Preferred Policy Decision (D.95-12-063 as modified by D.96-01-009) to bring the benefits of the hourly-pricing of electricity created in the Power Exchange (PX) to as many customers as possible. Competitive provision of metering services furthers that goal by allowing the market to respond to customers' desires to tap the benefits of real-time pricing provided by the PX's hourly price

signals.

Just as importantly, however, we will permit utilities to modify their existing meters, on a system-wide scale, with automated meter reading (AMR) technology. Such adoption would provide all customers if they choose with information about their hourly consumption patterns, and allow them to use that information, in conjunction with the PX's hourly energy prices and an hourly-rate tariff, to lower their bills. The decision to install AMR is left up to the utilities. However, in the spirit of this decision, only those utility customers who take advantage of the AMR option are required to reimburse the utility for its cost. The utility's shareholders are at risk for the full recovery of ARM costs, as will be discussed below.

Furthermore, we articulate the means by which the Commission can ensure that energy service providers utilizing unbundled services do so in a manner consistent with Commission consumer protection rules and in accordance with established standards and protocols.

Background

The Commission encouraged the creation of working groups to recommend means of implementing the policies it had adopted for restructuring the electric industry. The Ratesetting Working Group is such a group. Among other things, it set out to identify the highest priority steps for the Commission to take in unbundling utility rates prior to January 1, 1998. In discussing this issue, the group found itself at a disadvantage because the Commission had not determined, as a matter of policy, what aspects of utility service needed to be unbundled before 1998 in order to allow for meaningful retail competition at that time. The members of the working group were unable to agree on an answer. In order to prompt a determination by the Commission on this point, the Ratesetting Working Group presented a report dated August 26, 1996 that offered five options (see Decision (D.) 96-10-074 for a summary of these options).

The controversy centers on the fate of services and costs related to metering, billing and other information services. For convenience, we sometimes refer to these as Revenue Cycle Costs. Some say that these costs should be included in the bundled charge for distribution services. Others argue that these costs should be separately identified to allow some customers to elect not to buy these services from the distribution company. Of those who support unbundling, many argue that the costs must be separated now so that customers can begin

choosing whether or not to pay the distribution company for these services in January 1998. They assert that a failure to do so will reduce the availability of direct access opportunities to residential and small business customers. Others argue that the parties and the Commission should take more time before allowing unbundling to occur to allow for further study of communication and information needs.

Reflecting on the Ratesetting Working Group report and comments filed in response to it, the Commission issued D.96-10-074, in which it recognized the importance of resolving this issue and asked parties to address specific issues in additional comments that were submitted on December 20, 1996. The Commission held a full-panel evidentiary hearing on January 15, 1997, receiving sworn statements from 26 witnesses representing the full spectrum of interests. The Commission received additional information in comments that were filed on January 21, 1997 and, in response to a request from Southern California Edison Company (Edison), received final rebuttal comments on February 7, 1997. Numerous parties filed comments on the Proposed Decision on March 6, 1997 and reply comments on March 11, 1997. We have reviewed the comments and made changes or additions to this order where appropriate.

The following is a simplified summary of the models for unbundling revenue cycle costs and services proposed by various parties.

The PG&E Model

Pacific Gas and Electric Company (PG&E) proposes that a direct access suppliers be allowed to choose among three billing options:

1. **Consolidated Supplier Billing**, under which the distribution company would bill the energy supplier for the services provided directly by the distribution company to the customer and the supplier in turn would provide a consolidated bill to the customer,
2. **Consolidated Distribution Company Billing**, under which distribution company would place the supplier's energy charge on a distribution bill, or
3. **Dual Billing**, under which the energy supplier and the distribution company would bill separately for their own services.

In addition, PG&E asks the Commission to adopt one of two metering options:

4. **System-wide Deployment of Automated Meter Reading (AMR)**,

where the distribution company would retrofit almost all existing meters to allow for remote meter reading through radio transmission. The distribution company would have the sole right to install, calibrate and maintain the meter and would be allowed to recover the implementation costs from its ratepayers, or

5. **Customer Choice**, where competitive suppliers could furnish, for their customers, any meter technology meeting the utility's standards, so long as the utility would maintain the sole right to install, calibrate and maintain the meter to ensure that the utility's standards for safety, reliability and accuracy were met. This meter would replace the existing utility meter for all metering purposes.

PG&E has not expressed a preference of one metering option over the other. In either event, certain conditions would apply. First, only one meter would be needed at each point of service connection. Second, only one entity would read the meter. The energy supplier and the distribution company would share data-base level information about usage. Third, PG&E joins every other party in supporting the development of open architecture, or interoperability standards, which would allow meters with varying levels of functionality to connect to the network communications and data infrastructures. As is true of all other parties, PG&E believes that the market participants could develop the standards themselves. Finally, PG&E supports the use of load profiling (i.e., the use of template load shapes) to provide direct access for residential customers that do not have an hourly meter.

PG&E does not speak either for or against the separation of costs that would allow customers to avoid paying for services that they are not buying from the distribution company. However, PG&E does argue that in some instances, the savings due to customers who choose third-party service options may be small or non-existent and that the distribution company should not have to provide cost reductions to customers if the distribution company does not actually avoid any costs.

The SDG&E Model

San Diego Gas & Electric Company's (SDG&E) approach to the unbundling of revenue cycle costs and services differs from that of PG&E in two significant ways. First, SDG&E recommends that the Commission not order the broad implementation of AMR

technology, arguing that it would be too expensive, would limit entry of competitive suppliers and would limit technological innovation. Second, SDG&E recommends that the Commission require the distribution companies to provide a bill credit to reflect savings to the distribution company that result when energy suppliers provide revenue cycle services.

The Edison Model

Edison agrees with PG&E, SDG&E and most other participants that energy suppliers should be allowed to provide consolidated billing. In addition, Edison argues that it is acceptable for an energy supplier to install an additional meter in order to measure its sales and provide value-added services. However, Edison proposes keeping its own meter in place even where an energy supplier chooses to install one. A customer that chooses to use a meter other than the one offered by the utility would have two meters. Edison argues that it has the right to make its own usage measurements and that it should not be asked to trust the accuracy of another company's measurements or record keeping.

Edison would not be reducing its costs, because it would continue to meter each of its customers. Thus, it would have no savings to pass on to customers that elect to use a meter provided by an energy supplier. The utility also argues that any savings it would face if the energy supplier provides billing or other related services would be insignificant, but that it would be unlawful to reduce a customer's distribution charges even though these services are avoided by the utility. Edison asserts that it does not cost the same to serve each customer, so that any reduced charges based on the average cost of service would harm the utility. Edison envisions that energy suppliers would seek out the customers whom it costs less to bill (the ones with below-average costs) and leave the utility with the more expensive customers (the ones with above-average costs).

Finally, Edison proposes adding AMR technology to the meters of 85% of its customers and charging its future distribution customers for the resulting net cost. Edison argues that this would be the fastest and cheapest way of making hourly pricing available to all customers, and that this would improve the opportunities for direct access providers.

Models Offered by Other Energy Businesses

All of the potential energy suppliers participating in this proceeding argue that

direct access will not be available to all customers unless energy suppliers can offer revenue cycle services and unless the utilities reduce customer charges to reflect the resulting savings. None of these participants agree with Edison that it is appropriate for the utility to install AMR technology throughout its service territory at ratepayer expense. Instead, they would allow each customer to choose its own metering approach. This could enable energy suppliers to also offer value-added services to their electricity customers. The possibility of offering value-added services improves the incentive for energy suppliers to offer direct access opportunities to the lower usage customers (residential and small business) who provide less of an opportunity for the profitable sales of electric energy alone.

The Position of Ratepayer Groups

Most ratepayer representatives support the rapid unbundling of revenue cycle services and costs. This includes the Office of Ratepayer Advocates, The Utility Reform Network (TURN), Utility Consumer Action Network (UCAN), the California Farm Bureau Federation, the Department of General Services, the University of California, the California State University, Pacific Bell, and the Robinsons-May Department Stores. An exception is the California Small Business Association, which is not opposed to the unbundling of these services per se, but encourages the Commission to place adequate consumer protections in place before launching competition for meters and meter reading. In addition, none of these groups supports the system-wide addition of AMR technology to existing meters at ratepayer expense. The California Large Electric Consumers Association and the California Manufacturer s Association join others in specifically opposing Edison s metering proposal.

Discussion

The question, here, goes to whether or not energy suppliers should be allowed to provide their customers with retail services that include consolidated billing, metering and related services and, if so, whether the distribution utility should reduce its charges to reflect any resulting savings. Parties raise various issues that relate to the implementation of such a policy. Those implementation questions would be addressed in our direct access proceeding, to the extent that they concern rules and standards, and in the rate unbundling proceeding to the extent that they concern costs and savings. We will address the fundamental policy questions here, in

order to determine what additional work, if any, needs to be undertaken in those other proceedings.

There are long-run issues that might motivate this Commission to consider the merits of allowing energy suppliers to offer these services some time in the future. What prompts us to ask these questions now is a concern that direct access opportunities to residential and small commercial customers in 1998 might be severely limited if we fail to allow energy providers to provide these services and to offer their customers the resulting savings.¹

Billing

Among the participants, there is near unanimity in support of allowing energy suppliers to provide consolidated electric bills, if they choose to do so. The advantages of a consolidated bill are self-evident. Customers may find it more convenient to receive, analyze and pay a single bill. There is at least an opportunity for savings, since it might cost less to prepare, mail and process a single bill than it would cost to similarly handle separate bills from the energy supplier and the distribution company. By allowing the energy supplier to provide the single bill, the energy supplier has an opportunity to seek added value by reinforcing its business identity, combining billing for various services, or using the bill to advertise other business offerings. These opportunities may help encourage suppliers to serve the residential and small commercial markets, where the lower volumes provide less of an opportunity to profit through sale of electric energy alone. PG&E has described three different options that could be made available to customers and energy service providers (relying on dual bills, or consolidated bills provided either by the distribution company or the energy supplier). SDG&E and Edison endorse these options. We will direct each of the utilities to accommodate each of these options in a manner consistent with rules that we will develop in our direct access proceeding.

Energy service providers that utilize consolidated supplier billing will be responsible for payment of the billed amounts regardless of their ability to collect from their customers. The energy service provider will, in effect, be billed by the distribution company for the distribution services, Competition Transition Charge and Public Goods Charge associated

¹ See the discussion section of D.96-10-074.

with their customers usage and will be responsible to pay the distribution company the appropriate amount. It is then the responsibility of the energy service provider to recover those amounts from its customers. In this manner, the distribution company is indifferent to the collection ability of an energy service provider utilizing bill consolidation and its revenue stream is protected.

Because the energy service provider utilizing bill consolidation is responsible to make the payments for the services billed to customers, it is appropriate for the distribution company to be allowed to impose reasonable creditworthiness requirements on energy service providers utilizing bill consolidation. By reasonable, we mean creditworthiness requirements that are the same as those required of a similarly-sized and situated customers. This may decrease the risk of uncollectibles to the distribution company and will certainly maintain the security of the utilities revenue stream. We would not expect an energy service provider with \$100,000 in monthly consolidated billings to be treated any differently from any other \$100,000 a month customer of the distribution company. On the other hand, we would not expect the distribution company to do business with an energy service provider that is not creditworthy, just as we do not require a utility to do business with uncreditworthy customers. Utilities shall file their credit requirements by advice letter within 60 days of the effective date of this decision. These credit terms will further guard the revenue stream of the distribution company.

Furthermore, we will require energy service providers utilizing consolidated supplier billing to describe the distribution companies charges on their bills in a manner consistent with the bill reporting standards we set for the distribution companies. As part of their providing unbundled billing service to energy service providers, distribution companies will set terms and conditions that will ensure this uniformity of bill-reporting standards. How rates will be unbundled will be addressed in our unbundling proceeding. But uniformity of bill reporting is an important consumer protection issue and will be taken up in the consumer protection phase of our Direct Access proceeding.²

² For example if the Commission requires that the Public Access Charge will be separately stated and described as a State Mandated Public Goods Charge, all firms utilizing bill consolidation would have to list it on the bill the same way.

Meters and Meter Reading

There is less agreement about the involvement of energy suppliers in the furnishing of meters, meter reading and other related services. Most agree that the energy supplier should be able to install and monitor its own meters.³ However, Edison asks the Commission to allow it to install AMR technology for 85% of its customers at ratepayers expense. In addition, Edison asks to be allowed to double-meter all of its customers who choose to use an energy supplier's meter.

Edison argues that if it provided almost all of its customers with time-of-use capability, it would be doing the best thing possible to enable those customers to purchase from direct access providers. Underlying this is Edison's assumption that a customer must have a time-of-use meter in order to take advantage of direct access opportunities. The record does not support this assumption. Energy providers, customers and representatives of other utilities have all stated that load profiles could be used to determine the billing patterns for customers that do not have time-differentiated metering capability.

At the same time, however, the implementation of AMR may promote our goal of spreading the benefits of real-time pricing to as many customers as possible. In the Preferred Policy Decision we noted our concern that smaller customers' ability to use real-time pricing is inhibited by existing technologies (*Id.*; mimeo at p. 78). AMR potentially offers a solution to this problem by providing a simple technology with sufficient economies of scale to bring it within the reach of many customers. Edison assumes that the greatest societal benefit can be achieved by capturing the economies of sale that would result if all customers used the same metering system. It does appear likely that if everyone uses a given metering approach, the cost of producing that system per customer would be lower than if only a smaller set of customers uses it. However, other factors besides cost can be important to customers. Customer choice

³ This is consistent with the Commission's existing policy in this area. See D.95-12-063, Conclusion of Law 28, in which the Commission stated, "[s]uppliers or third-party intermediaries may install metering equipment on behalf of a customer so long as the meter meets standards adopted for the distribution utility.

among competing providers may foster technological innovation, provide value-added services, and act to keep prices low.

Lucent Technologies argues that in a competitive environment a utility's investment in AMR should be viewed as a strategic business decision that potentially could create barriers to competition by other energy suppliers. They argue that such a decision should not be dictated as a matter of public policy, nor financed with ratepayer funds. These concerns expressed by Lucent and others carry great weight. We want to ensure, among other things, that the additional costs created by AMR do not discourage customers from investing in competing technologies. It also would be important to ensure that new meter-reading technology did not reduce the ability of competing energy providers to offer value-added services to customers. This is important, because we see the potential to offer such services as a means of encouraging the market to offer Direct Access to smaller customers, including such services as real-time pricing.

For all of these reasons, we do not find it appropriate to direct the distribution utilities to install AMR or any other type of advanced metering system throughout their service territories at additional cost to ratepayers. Nor do we require that customers purchasing retail service from a competing energy provider maintain two meters on site, as Edison proposes. Instead, we will permit a distribution company to decide whether it wants to submit a proposal to adopt AMR or similar technology subject to the following conditions:

- . utility customers will have the choice of deciding whether they want to use the real-time metering capability offered by the technology
- . only customers electing to use the real-time pricing capability of AMR will be required to pay for the costs of that technology
- . utility shareholders will be at risk for the full recovery of the technology's costs
- . at the same time, the utility installing AMR would be not be required to lower its revenue requirement associated with metering as a result of cost savings achieved from adopting the technology
- . balances risk and reward between ratepayers and shareholders

. a utility deciding to adopt AMR would have to propose a deployment plan for the Commission's approval, showing how the technology would be geographically deployed, and on what timetable

These conditions address the competitive concerns expressed earlier by not obligating ratepayers to pay for AMR if they do not want it. This subjects AMR to a market test. To the extent its reputed cost advantages are as significant as Edison claims and providing customers see a need for the real-time pricing capability it offers it will be used. Shareholders of a utility adopting AMR assume the risk that such benefits may turn out to be smaller than predicted. Customers preferring to adopt an alternative supplier's meter would not be discouraged from such an option by having to pay the cost of the utility's AMR, and in fact would be advantaged by receiving a credit that would include among other things the utility's revenue requirement for meter reading and related activities. And finally, the requirements we lay out below for the sharing of information between the utility and alternative suppliers will prevent a utility from using AMR to restrict the ability of alternative suppliers to compete for its customers.

However, any system that is used by a regulated distribution company must comply with applicable standards of open architecture and provide opportunities for value-added uses to all competitors on an equal basis. We find that it is preferable to allow energy suppliers to provide and customers to choose the billing and metering systems that are best for their purposes.

This position in support of an open architecture and interoperability is consistent with this Commission's policy in telecommunications. In the Commission's Infrastructure Report to the Governor, *Enhancing California's Competitive Strength: A Strategy for Telecommunications Infrastructure* (November 1993), which Governor Wilson adopted, we established a clear policy preference for interconnected and interoperable communications networks and have long supported open platforms.⁴

⁴ [Enhancing California's competitive Strength: A Strategy for Telecommunications Infrastructure, A Report to the Governor; California Public Utilities Commission, November 1993; page 16, 47.](#)

In that report the Commission stated, simply put, telecommunications infrastructure is a hostile environment for conventional public planning. The astounding rate, vast scope and unpredictable nature of technological innovation strongly suggest that any public strategy which is preoccupied with direct technology planning faces a high probability of failure.⁵

As support for this position, the Commission cited a telecommunications industry representative and former state regulator who said:

If you could today wave a magic wand and decide that instantaneously a new or specific technology would be deployed in the State of California, you should definitely resist the temptation, because it has been proven time and time again that as technology deploys itself further and further, deeper and deeper into markets, it always improves along the way. To make any investment into a single technology now would be to deprive consumers of improved technologies of tomorrow.

AMR technologies are, at heart, communications technologies, and it is incumbent upon this Commission to ensure that the deployment of this network is consistent with our existing telecommunications infrastructure policies. In that report we clearly and persuasively argued for open platforms and hence it is appropriate to require that the AMR networks deployed also allow California to reap the diversity and innovation such an open model engenders.

Nonetheless, we must address legitimate concerns about the information needs of the various participants and the interchangeableness of metering systems.

When a customer chooses to purchase retail service from a firm other than the utility, the energy supplier and the distribution utility each have a strong interest in receiving information about usage that is reliable in terms of quality and accuracy. Each distribution utility and energy supplier may not have the same information needs but both need to be assured of the accuracy of the information they receive. Rather than establish a single standard for data

⁵ [Id.; p 26.](#)

quality and access, we will direct those energy suppliers that wish to offer their own metering services to enter into a service agreement with the distribution company specifying the nature of the information to be collected, the means for sharing data, and a reasonable approach for ensuring that the metering equipment is installed, calibrated and maintained properly. The distribution utility may not unreasonably refuse to enter into such an agreement. The Commission will review each agreement to determine that it is not discriminatory or anti-competitive. If the parties are unable to reach an agreement, the Commission will resolve the remaining disputes. In our direct access proceeding, we will establish the rules affecting this process and the conditions under which the distribution utility will provide billing information to all energy suppliers.⁶

We want not only to encourage direct access, but also preserve the vitality of competition after the customer makes an initial choice. If a customer obtains a meter that is not easily used by other energy suppliers, another barrier to competition has been erected. All participants agree that in order to avoid constructing such a barrier, those who plan to participate in the market place must agree upon standards for open architecture for meters and communication. This is consistent with the Commission's requirement, as articulated in the our Telecommunications Infrastructure Strategy, that communication networks be interoperable. This refers to creating specifications that will ensure that all meters will provide information and communicate via an open architecture. Many participants expressed confidence that open platform standards could be developed within several months. What is required is a direction from this Commission for the parties to do so. In this decision, we direct the participants to begin this process and to report back to the Commission no later than July 25, 1997 within the direct access proceeding with the standards that the participants propose to be adopted.

The California Energy Commission supports the unbundling of Revenue Cycle Costs and Services. However, it would have the utilities separately identify the costs for the various components of Revenue Cycle Services now and would allow firms other than the distribution utility to compete for the provision of these services only at some later date. Its

⁶ In developing and administering this process, we will draw on our experience in arbitrating and reviewing interconnection agreements for local telecommunications services. In comparison, the subject matter of the agreements contemplated here is far more limited and discreet.

stated goal in delaying the start of competition would be to allow time for a stakeholder working group to develop a retail information management plan that specifies information management arrangements, infrastructure and protocols for the restructured industry. The Energy Commission argues that while large consumers may be well positioned to take advantage of competitive offerings, smaller consumers are not, creating the concern that large consumers might invest in unique technology that will inhibit and perhaps prevent a universal infrastructure that all customers and suppliers may use. Thus, the Energy Commission encourages this Commission to put detailed rules and standards in place before allowing any customers to receive competitively-provided revenue cycle services. In addition, before competition for these services begins, the Energy Commission asks that this Commission consider a system of randomly assigning an energy provider to those customers that fail to choose a provider.

We agree with the Energy Commission that it is important to create standards to ensure open architecture, but are persuaded by the testimony of others that much of this work can be done in the next few months. With the meter and communication protocols and service agreements discussed above, there is no apparent reason that the participants, with assistance of this Commission, cannot ensure the use of technology that would make direct access options available to customers in all classes.

It is important for all current and potential energy service providers to begin planning for an environment in which they will have the opportunity to offer meters of their own choice. However, we are concerned that to encourage such offerings as early as January 1, 1998 could prompt hasty choices by competitors, thus increasing the likelihood of consumer dissatisfaction. For all but the largest customers (20 kilowatts (kW) or greater), we prefer to use the time available through 1998 to encourage a more studied movement through the various steps that must precede such a new commercial offering: the development of standards for open architecture, the completion of service agreements between service providers and distribution companies, and the selection of appropriate technologies. For these reasons, we will defer the initiation of competitive offerings of meters and meter reading until January 1, 1999 for customers below 20 kW.

Cost Separation

Currently, PG&E and Edison propose to bundle all revenue cycle service costs with their distribution charges. SDG&E and many other participants propose separately identifying the cost savings realized by the distribution utilities when other firms provide revenue cycle services in order to ensure that customers can benefit from the resulting savings. Those who oppose removing these redundant charges rely on three fundamental arguments. First, as discussed above, they argue that the cost differences are too small to affect business decisions. This assertion is unproven both because the Commission has yet to determine the level of cost savings and because the record does not demonstrate that even a small savings would not affect business decisions.

Second, PG&E and Edison assert that billing and metering costs are not the same for all customers and that while it would be most practical to identify those costs on an average cost basis, this would enable energy suppliers to focus on the low cost customers and leave the distribution utility without the revenues needed to serve the remaining customers. We believe that these arguments are more appropriately addressed in our unbundling proceeding, and we make provisions below to do that. The arguments do not affect the threshold question whether or not appropriate costs savings should be reflected in a customer's bill, which is our concern here. We want to determine these costs accurately as possible and to that end are open to proposals that would deaverage costs.

In determining these costs accurately it is entirely appropriate to consider the net reduction in costs to the utilities that occur as a result of unbundling and the provision of certain functions by entities other than the utilities. It would be unfair and inaccurate to consider costs that are reduced while not considering costs that may be increased in order to provide the function on an unbundled basis.

Parties have raised one threshold issue about cost separation that does need to be addressed here. This involves Public Utilities Code Section 368(b), which, it is argued, might prohibit reflecting these cost savings in the customer's bill. This section states, in part, that

[t]he separation of rate components...shall be used to ensure that customers of the electrical corporation who become eligible to purchase electricity from suppliers other than the electrical corporation pay the same unbundled component charges, other than energy, a bundled service customer pays. Some argue that this language requires charging direct access customers for all

services, whether they buy them or not (and whether the utility incurs costs to provide them to a given customer or not). We do not read this section to require customers to pay for services that they elect not to buy. Instead, we understand this section to mean that direct access customers must pay the same amount as bundled customers pay for the services that they do buy.

There is no persuasive reason to cause customers to pay for costs that are not incurred just as there is no persuasive reason to excuse customers from paying for costs incurred on their behalf. We will direct the administrative law judge in our unbundling proceeding to set a schedule for separately identifying the net cost savings resulting from a customer's election to receive certain revenue cycle services from another service provider and to reduce distribution charges where appropriate. We ask parties in that proceeding to pay special attention to the question of how to identify metering costs for a utility that elects to adopt AMR under the conditions we have specified above.

Other Services

In addition to billing, meters and meter reading, there are costs related to customer service inquiries and uncollectibles that are logically related to revenue cycle services. It is appropriate to separately identify customer service inquiry savings to be used to reduce customer charges in those situations where an energy supplier chooses to handle such inquiries. We will direct the utilities to do so. TURN objects to separately identifying costs related to uncollectibles out of concern that without the protection of a universal uncollectibles pool, businesses may be motivated to avoid serving areas which are perceived to have customers who pose a higher credit risk. This is a valid concern that suggests a need for caution. We will ask parties to separately identify the costs in the unbundling proceeding.

Impact of AB 1890

Although AB 1890 provides guidance and direction on a multitude of topics, it does not directly address revenue cycle unbundling. However, there are several aspects of the legislation which should be considered in our decision in order to assure ourselves and the public that we have a proper context for making this decision.

Section 366(a) directs the Commission to take actions as needed to facilitate direct transactions between electricity suppliers and end use customers. The term direct transactions is used in the Code as a synonym for what we have termed direct access. Many parties have commented that direct access can best be facilitated by allowing competitive electricity suppliers and customers to have the option to use various billing and metering options, including options which utilize the incumbent utility and options which do not. In our judgment, today's decision is an action that is needed to facilitate direct access. By allowing the competitive offering of revenue cycle services, we will increase both customer's and supplier's options. Further, it is appropriate for us to consider incipient supplier's comments that many would, in fact, not choose to enter the market (at least the small customer market) at all if they could not provide revenue cycle services. We cannot facilitate direct access if we do not take actions to allow the necessary players to enter the market. Facilitating the competitive offering of revenue cycle services, as described in this decision, is a fair and appropriate action that is fully consistent with Section 366(a).

Section 375 states that in order to mitigate potential negative impacts on utility personnel directly affected by electric industry restructuring transition charge recovery should be allowed for reasonable employee related transition costs. This section is relevant because of our concern that revenue cycle unbundling could have a negative impact on utility employees. We do not have any specific information in the record in this case as to the magnitude of impacts on utility employees; however, we acknowledge that some impact is possible. We have taken into consideration the comment of the Coalition of Utility Employees in this proceeding on this and other matters. We find that there are likely to be significant benefits to the public due to revenue cycle unbundling, and that there may be negative impacts, on a lesser cumulative scale, on certain employees. On balance, the public interest is better served by enabling competing firms to provide revenue cycle services, especially since Section 375 provides for mitigation of the negative impacts on employees. We defer the question of what employee-related transition costs may arise as a result of this decision to the transition charge track of the electric restructuring proceeding.

Section 370 requires that direct access customers must pay their transition charge obligations directly to the electrical corporation providing electricity service in the area where

the customer is located. Outside of our formal record, some of those offering comments have interpreted this section to forbid the Commission from allowing for competitive billing arrangements such as those proposed by PG&E. There is no support for this position on the record in this case. Each of the major utilities, as well as many parties, have advocated the three billing options outlined in this decision. We believe that the intent of Section 370 is to ensure that the utility receives the transition charge payment from each customer. The payment can be made in one step directly from the customer to the utility, or in multiple steps directly from the customer to the utility through intermediaries. Certainly, there are situations today in which utilities receive payments through intermediaries, such as when the bill is provided to and paid by an authorized agent of the customer. If properly structured, such transactions are seamless and result in direct payment of appropriate utilities charges. We see no inconsistency between this decision and Section 370.

Responses to Various Other Specific Comments on the Proposed Decision

Several of the comments offered by parties in response to the Proposed Decision merit a response here. Many questions raised in those comments will be addressed in our direct access proceeding. For instance, Edison questions the merits of issuing this decision if it fails to define entry requirements for potential competitors and establish a dispute resolution mechanism. These are issues that we do intend to address in our direct access proceeding. While they are an important part of the restructuring process, it is not necessary to resolve them before making the threshold decisions addressed here. We also plan to address, in the direct access proceeding, a question raised by Los Angeles County about the information that should be made available to customers to assist them in verifying the accuracy of their bills. That proceeding will also be the forum for considering consumer protection rules as suggested by the Center for Energy Efficiency and Renewable Technologies and Edison.

PG&E asks the Commission to specify that the distribution utility should be the default biller when there is no other clear choice. Others argue that the distribution company need not be the default biller. This is also an issue that is

appropriately resolved in the direct access proceeding, where we are considering the full range of issues affecting direct access.

Various parties raise issues that relate to the appropriate way to identify the cost savings to the distribution company when certain revenue cycle services are provided by a third party. Edison and PG&E argue that such things as the cost of changing accounts, removing meters and replacing meters may offset the cost savings. Others ask the Commission to specify the costing approach (marginal versus fully-allocated costs, for example) that will be used to calculate the savings. We will address all of these questions in our rate unbundling proceeding. Our goal remains to separately identify real savings. We will not determine the appropriate way to do this until we have heard from all the parties.

PG&E's notes in its comments that the Proposed Decision correctly concludes that customers should not have to pay the distribution company for revenue cycle service costs which the distribution company avoids because an energy service provider provides those services. PG&E argues, however, that distribution company's avoided costs should be set on a net cost basis and that the net avoided costs consists not only of costs not incurred by the distribution company but also the distribution company costs that are incurred as a result of unbundling. We agree.

Several parties have suggested that the process for developing standards of open architecture should be more tightly prescribed, or that the deadlines should be altered. We will look to the parties to inform us collectively when there is a need for further guidance. For the time-being, we are most concerned that interested parties get to work and strive to meet the deadlines set forth in this order.

Edison discusses the need to ensure that third-party billers are held responsible for paying the amounts billed for the distribution company, including the competitive transition charges. We emphasize that under the consolidated billing approach adopted herein, the distribution company will bill the energy service provider for all charges (including the transition costs) and the energy service provider will then bill its customers. In this circumstance, the energy service provider

is responsible for paying the distribution company's charges, even if the customer is delinquent or fails to pay. In order to provide further assurance that it will be paid, Edison asks us to impose a bonding requirement on all energy service providers choosing to issue consolidated bills. We will allow distribution companies to impose the same creditworthiness requirements on those carriers that the distribution company would impose on similarly-sized customers. We are committed to taking all reasonable steps to protect the distribution company's revenue stream in such circumstances..

In its comments, Edison raises the concern that if the Rate Reduction bonds are to be assured credit ratings equivalent to the rating they would obtain if the billing remained entirely in the hands of the distribution company, the financial community must be confident that the distribution company's will obtain payment of their charges. By allowing the distribution company to impose reasonable creditworthiness requirements, the Commission will ensure that there is no diminution in the security of the revenue stream upon which the Rate Reduction bonds are based. By imposing these reasonable credit tests, unbundling will not reduce the security of the revenue stream. Because energy service providers may have greater creditworthiness than the average customer they serve, the security of the revenue stream may be enhanced.

Edison also expresses concern that the proposed decision asserts the need for creating standards, but never explains the source of our authority to require energy service providers to meet those standards. As noted earlier, the Commission can make the provision of a service to an energy service provider contingent on the energy service provider abiding by specific terms and conditions contained in the tariff or service agreement for that service. In this way, the Commission can and will ensure compliance with the standards by energy service providers.

The California Small Business Association (the Association) expressed concerns about the potential for tampered meters, defective or non-performing meters and energy theft. The Association is concerned that service providers may

sell or use tampered meters which report higher or lower than actual energy consumption. It is also concerned that service providers may knowingly use defective or non-performing meters with the intent of defrauding customers. The Association also raises the concern that energy theft may be facilitated because meters and meter reading are unbundled. Regardless of the Commission's jurisdiction, the use of tampered, defective or non-performing meters by energy service providers with the intent to defraud either the end-use customer or the utility are prohibited by existing state law. It is against the law to defraud customers and this Commission routinely assists local law enforcement, local District Attorneys and the Attorney General's office to investigate and prosecute those individuals or firms that engage in such illegal behavior in the other industries we regulate.

As metering and meter reading are unbundled, we expect the distribution companies and energy service providers to ensure that metering and meter reading equipment meet the same standards of reliability that we demand today from utility owned meters. The interconnection agreement that a provider of unbundled meters would have with the distribution company should specify the accuracy standards agreed to by both parties and approved by this Commission. Failure to meet those requirements would be a breach of the agreement and could, if allowed under the agreement, result in the termination of the interconnection agreement and could result in a termination of unbundled service to the energy service provider.

Most disputes between the distribution company and an energy service company providing its own metering service regarding the accuracy of metering data would be resolved in the context of the service agreement between the distribution company and the energy service provider. We encourage the distribution companies and energy service providers to include alternative dispute resolution (ADR) processes in their service agreements. In addition, if any customer or distribution company felt that the meters employed by energy service providers did not meet the standards for accuracy, they could file a complaint, formal or informal, with the Commission just as they may do today if they have concerns regarding the utility's meter.

If a service provider's meters were inaccurate, a distribution company could file a complaint with the Commission alleging a violation of the terms of the service agreement between the distribution company and the provider and could ask the Commission for the authority to terminate unbundled service to that provider or to require the provider to install appropriate metering. In addition, the distribution company would retain the ability to back-bill the customer or provider to recover under-collected revenues. Customers, too could file a complaint with the Commission regarding the metering accuracy of a provider and ask that the Commission find the provider in violation of its service agreement and require the provider to resolve the problem or face termination of its service agreement with the distribution company. In this way the Commission can assure that the accuracy of the meter is enforced.

CellNet faulted the Proposed Decision for failing to state the conditions under which utilities can proceed with AMR. It notes that stating these conditions is in the public interest because there are scale economies available to utilities that will result in access to low-cost, detailed usage information by consumers, utilities and energy service providers. In response, we now provide additional guidance to the utilities regarding their ability to adopt AMR technologies. The utilities may modify their existing meters, on a system-wide scale with AMR. However, only those utility customers who take advantage of the AMR hourly incremental pricing and other services offered by AMR, are required to reimburse the utility for its cost. The utility shareholders are at risk for the full recovery of AMR costs.

Edison comments that the proposed decision is silent on consumer protection issues. Edison seems confused as to where the issues related to consumer protection should be addressed. There is a separate proceeding in our restructuring effort designed to develop consumer protection issues. On October 30, 1996, the Direct Access Working Group Protection and Education Report was filed. The Commission will promulgate consumer protection rules in an upcoming consumer protection decision. It is in that decision that we will address consumer protection issues related to our restructuring of the electric market, including those

raised by the issue of revenue cycle unbundling.

The Proposed Decision on Direct Access addresses some consumer protection issues. In particular, it requires the use of third-party verification and written positive declaration for aggregation before a small commercial or residential consumer could be changed from one service provider to another. Furthermore the Commission on March 31, 1997 in D.97-03-069, spelled out an aggressive and multi-faceted consumer education program based, in part, on recommendations found in the Direct Access Working Group Report on Consumer Education. Consumer education and consumer protection rules are necessary regardless of the Commission's policy on unbundling. Hence, these issues are being addressed in a more comprehensive fashion in our Direct Access and Consumer Protection portion of the proceeding.

There is no debate regarding the importance of consumer protection rules and a determined consumer education program. In its reply comments, Enron states that consumer protection rules are important and must be addressed. We are determined that prior to the provision of unbundled revenue cycle services, including implementation of bill consolidation, the Commission's consumer education program (which includes the utilities Joint CEP, the Commission's own outreach efforts and the formation of an Electric Education Trust) will be in place and that effective consumer protection rules will have been promulgated.

Furthermore, we have noted in this decision how the terms and conditions a distribution company sets for providing unbundled billing service can be used to ensure that an energy service provider conforms to our bill reporting standards. As we pursue our consumer protection efforts, we may explore how to generalize this concern of using our jurisdiction over distribution service to safeguard consumers from unfair market practices of any entity—another energy service provider, a distribution company affiliate, or the distribution company itself.

Edison also faults the Proposed Decision because it fails to mandate the reciprocal unbundling of the gas industry. Enron agrees, but notes that this should not retard the implementation of direct access and unbundling of revenue cycle

services for the electric industry. We have generally allowed the regulatory policies in these two industries to evolve independently. Although natural gas utilities were required to provide retail wheeling to large customers in the 1980 s, electric utilities were not. However, we agree with Edison that the time for us to consider unbundling of the revenue cycle in the gas industry is now. We direct the Commission s Division of Strategic Planning to include this area as a topic to be incorporated into the development of the Commission s new gas industry strategy. Edison should pursue its arguments for revenue cycle unbundling for gas utilities in gas industry proceedings where it will undoubtedly find allies for its position.

Conclusion

We will move ahead expeditiously in our direct access proceeding to set forth the rules governing consolidated billing and metering activities and to further consider the redlining concern raised by TURN. In addition, we will direct the administrative law judge in the unbundling proceeding to set a schedule for separately identifying the cost savings resulting when energy suppliers provide revenue cycle services. The following table reflects our current goals related to the services and cost separation discussed in this order.

Goal	Target Date
Participants Submit Agreement on Open Architecture for Meters and Metering	July 25, 1997
Distribution Utilities Facilitate Three Billing Options (Consolidated Supplier Billing, Consolidated Distribution company Billing and Dual Billing)	January 1, 1998
Rules in Effect Governing Service Agreements Between Energy Service Providers and Utility Distribution Companies	January 1, 1998
Submission of Utility Cost Studies and Testimony Addressing the Separate Identification of Various Revenue Cycle Services Cost Components	November 3, 1997
Approval of Unbundled Rates for Various Revenue Cycles Services Cost Components	January 1, 1999
Commencing Competitive Meter and Meter Reading Services for the Largest Customers	January 1, 1998
Allow Competitive Meter and Meter Reading Services for All Customers	January 1, 1999

Findings of Fact

- It would be advantageous to customers and consistent with the Commission's efforts to promote retail competition for the provision of electric services if competing electric service providers were able to offer consolidated billing for all aspects of electric service.

- The option of offering consolidated bills may help encourage competing energy services providers to serve the residential and small commercial markets, where the lower volumes provide less of an opportunity to profit through sale of electric energy alone.

- Some competing electric service providers may choose to provide a bill for supplying energy that is separate from the charge for transmission

and distribution services or may choose to ask the distribution company to provide a consolidated bill.

- Energy providers, customers and representatives of some utilities have all stated that load profiles could be used to determine the billing patterns for customers that do not have time-differentiated metering capability.

- Where there is customer choice, there may be greater incentive for technological innovation, greater opportunity for providing value-added services, and a greater likelihood that competitive forces will help keep prices low.

- A proprietary, utility-owned, radio-based metering system could create barriers to entry.

- Many energy suppliers see an opportunity to add value to the products they sell if they can bill the customer directly and if they can offer a meter or metering communication service that provides the opportunity to exchange information and offer products in addition to retail electric service.

- It is consistent with this Commission's goal of promoting competition for retail electric services to offer competitors the opportunity to add value to their services in order to encourage those competitors to offer retail electric services to a wider range of customers.

- It is not necessary for a distribution company to maintain its own permanent, separate usage meter on the premises of a customer that is using an appropriate meter provided by a competing energy service provider.

- When a customer chooses to purchase retail service from a firm other than the utility, the energy supplier and the distribution utility each have a strong interest in receiving information about usage that is sufficient and appropriate and reliable in terms of quality and accuracy.

- If a customer obtains a meter that is not easily used by other energy suppliers, another barrier to competition has been erected.

- In order to avoid constructing a barrier to competition, those who plan to participate in the market place must agree upon standards for open architecture for meters and communication.

- There is no persuasive reason to cause customers to pay the distribution company for billing, metering and other related costs when those costs are not incurred because the services are provided by another firm.

- Concerns have been raised that without the protection of a universal uncollectibles pool, businesses may be motivated to avoid serving areas which are perceived to have customers who pose a higher credit risk.

- It is important to pursue the goals discussed in this order on a timely basis in order to promote the provision of competitive retail electric services to all classes of customers.

- Energy service providers that utilize consolidated supplier billing will be responsible for payment of the billed amounts regardless of their ability to collect from their customers.

Conclusions of Law

- The distribution utilities should be required to facilitate three billing options: Consolidated Energy Supplier Billing, Consolidated Distribution company Billing, and Dual Billing.

- It is not appropriate to direct the distribution utilities to install AMR or any other type of advanced metering systems throughout their service territories at ratepayer expense, or to require that customers purchasing retail service from a competing electric service provider maintain two meters on site.

- Utilities should be allowed to apply to install AMR if it meets the Commission's criteria for an AMR program specified in this order.

- Energy suppliers should be allowed to provide and customers should be allowed to choose the billing and metering systems that are best for their purposes, so long as the metering systems are consistent with the other requirements discussed in this order.

- The Commission should direct those energy suppliers that wish to offer their own metering services to enter into a service agreement with the distribution company specifying the nature of the information to be collected, the

means for sharing data, and a reasonable approach for ensuring that the metering equipment is installed, calibrated and maintained properly.

- The distribution utility should not unreasonably refuse to enter into the service agreements discussed in this order.

- Energy service providers, the distribution utilities and other interested parties should be directed to develop open architecture standards for meters and metering communication prior to the onset of competition for the provision of retail electric services.

- The Commission should require the distribution utilities to separately identify the cost savings resulting when billing, metering and related services are provided by another entity and should ensure that customers are not charged by the distribution utilities for those services in such circumstances.

- The Commission should explore concerns that without the protection of a universal uncollectibles pool, businesses may be motivated to avoid serving areas which are perceived to have customers who pose a higher credit risk.

- The Commission should establish a schedule for pursuing the goals discussed in this order.

- Because the energy service provider utilizing bill consolidation is responsible to make the payments for the services billed to customers, it is appropriate for the distribution company to be allowed to impose reasonable creditworthiness requirements on energy service providers utilizing bill consolidation.

ORDER

IT IS HEREBY ORDERED that:

- Beginning January 1, 1998, Pacific Gas and Electric Company (PG&E), San Diego Gas & Electric Company (SDG&E) and Southern California Edison Company (Edison) shall provide three billing options to competing retail energy services companies: Consolidated Energy Supplier Billing, Consolidated Distribution company Billing, and Dual

Billing. In our direct access proceeding, we will consider rules necessary to for implementation of this requirement.

- . Beginning January 1, 1998, competing retail energy service companies may provide the billing and related services for all customers and metering systems for their largest customers and beginning January 1, 1999, such firms may provide metering systems for all customers, so long as the services and systems are consistent with the other requirements discussed in this order.

- . Any energy service provider that wishes to offer its own metering services shall enter into a service agreement with the distribution company specifying the nature of the information to be collected, the means for sharing data, and a reasonable approach for ensuring that the metering equipment is installed, calibrated and maintained properly. The distribution utility shall not unreasonably refuse to enter into such an agreement. In our direct access proceeding, we will consider rules necessary to support this process, consistent with the discussion contained in this opinion.

- . No later than July 25, 1997, energy service providers, the distribution utilities and other interested parties shall confer and agree upon open architecture standards for meters and metering communication prior to the onset of competition for the provision of retail electric services. No later than that date, the participants shall file an Open Architecture Agreement in our direct access proceeding and serve the agreement on all parties.

- . No later than November 3, 1997, PG&E, SDG&E and Edison shall file, in our unbundling proceeding, cost studies and supporting testimony that separately identifies the cost savings resulting when billing, metering and related services are provided by another entity and proposes a means for ensuring that customers are not charged by the distribution utilities for those services in such circumstances. It is our goal to issue a decision approving unbundled charges for these services no later than January 1, 1999.

- . The administrative law judge assigned to our direct access proceeding shall establish a procedure for exploring concerns that without the protection of a universal uncollectibles pool, businesses may be motivated to avoid serving areas which are perceived to have customers who pose a higher credit risk.

- . Utilities shall file their credit requirements by advice letter within 60 days of

the effective date of this decision. These credit terms will further guard the revenue stream of the distribution company.

This order is effective today.

Dated _____, at San Francisco, California.

TABLE OF CONTENTS

OPINION ON THE UNBUNDLING OF REVENUE CYCLE SERVICES 2

Summary	2
Background	3
The PG&E Model.....	4
The SDG&E Model.....	6
The Edison Model.....	6
Models Offered by Other Energy Businesses	7
The Position of Ratepayer Groups	7
Discussion.....	8
Billing.....	9
Meters and Meter Reading.....	10
Cost Separation.....	17
Other Services	18
Impact of AB 1890.....	19
Conclusion.....	26
Findings of Fact	27
Conclusions of Law.....	29
ORDER	30