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**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)

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OPINION

I. EXECUTIVE SUMMARY AND INTRODUCTION

Today's policy decision in context: On May 24 we advanced the policy deliberation phase of this proceeding by releasing for public comment two proposed sets of policy preferences enunciating views of a restructured electric services industry. Consistent with our unprecedented attempt to achieve the broadest base of public and stakeholder participation, we have held full panel hearings and received voluminous written comments on both sets of policy preferences. Most recently we used the vehicle of "Coordinating Commissioner Rulings" to pose questions and seek further clarification on critical points.¹ Having completed this deliberative phase of our proceeding we are now prepared to announce our policy decision.

¹ This Rulemaking and its companion Investigation have attracted an extraordinary degree of formal participation. At last count four hundred ninety-seven persons and entities have become formal parties. The views and opinions of our fellow Californians were sought in a series of public participation hearings held across the state; our full panel hearings were broadcast on public access channels and carried by many of California's cable television operators. As a result of heightened public awareness, we have received hundreds of letters from individuals and benefitted from the organized views of many of California's vital communities such as the Latino Issues Forum, California/Nevada Community Action Association (Cal/Neva), the Greenlining Institute, Senior Utility Ratepayers of California, Inc., and the American Association of Retired Persons. Realizing that we could benefit from an even more broadly cast effort to receive views and opinions we dispensed with the need for formal party status in the first Ruling by the Coordinating Commissioner.

We propose to complete the valuation of the CTC by 2003, after which time no further accumulation of transition costs will be allowed unless derived from existing generation contracts and related ongoing contractual payments. With this exception, we will complete the collection of the CTC by 2005. The CTC will include regulatory assets, existing contractual obligations for generation, including Qualifying Facilities, and the undepreciated book value of a utility's generation plant as reflected in rate base as of this decision date. Our methods for valuing the CTC will rely to the extent possible on market mechanisms and will seek to minimize the burden of regulatory proceedings and the economic cost to California's economy.

California's commitment to public purpose and social aspects of the provision of energy services to all of our citizens has been marked by legislative, commission inspired, industry based and community prompted initiatives in the past and we fully anticipate such aspirations and effort to mark our state's future. In today's decision we set the stage for these developments by speaking directly to the fate of renewable resources, demand-side management, and public purpose research, development and demonstration efforts. Low income assistance, Women, Minority, and Disabled Veteran Business Enterprises, baseline rate, economic development programs, special rate discounts, low-emission vehicle and under grounding are all implicated in the reforms which are now launched, and today's discussion furnishes those constituencies with vitally affected interests with a more fulsome statement of our vision.

former "ratepayer" can function as an intelligent, self-interested "customer." We will briefly summarize those choices before detailing the market structure which will support their availability.

Customers for electric services in California reflect the diversity of our economy and society. They range from large industrial and commercial users to the smallest householder. They include agricultural users of every variety of description and husbandry. These differences in circumstances produce radically different load profiles and usage patterns. What we have termed as an "electric services industry" includes a basic commodity---electric energy---as well as a host of services in their generation, transmission and distribution.² Over time Californians have achieved world class leadership in the development of conservation strategies aimed at cost containment as well as environmental concerns. But there has been one aspect of the industry in which we have conspicuously failed to maintain a competitive presence and that is in the cost of electric energy. Our debates have revealed the broadest consensus that our rates are too high and must be brought into alignment with regional averages if California is to sustain a competitive posture as we enter the twenty-first century. Equally strong is the consensus that if market mechanisms can be developed that

²Throughout our discussion a convention has arisen in which references are made to "electrons" or "electricity" as the commodity that it generated, transmitted, distributed and consumed. Those who are concerned that we acknowledge the basic teachings of physics or electrical engineering will point out that the electrons oscillate and it is power that moves and is consumed.

individual or entity willing to take the counter-part risk. A customer who has formed such a contract continues to receive a bill from the local utility which reflects both the cost of electric power and distribution services. Periodically such a customer totals the amount of these payments to the local utility and determines whether they exceed the price guarantee concluded in the hedging agreement. In that event a bill is submitted to the other party who reimburses the customer so as to bring the cost of electricity for the period to within the agreed maximum. In the event that excess outlays have not been experienced the party who sold the guarantee keeps the premium for taking a risk that was never realized.

In our view parties agree to accept the risk in a hedging contract may have generation facilities or contracted rights to generation but we see no need to restrict their qualification or to in any manner make hedging contracts, termed "contracts for differences" in much of the literature, the object of Commission concern. Both entry into and exit from such a business, as well as the terms of such contracts are left to the genius of the marketplace and the will of market participants.

3. Direct access through physical, bilateral contracts:

With today's decision we propose to advance the availability of a direct access customer option even as we seek to clarify its consequences. While some have contended that, in the final analysis, such contracts represent but a variant upon the purely financial transaction, this view is disputed by those who see in them a genuine advantage and a distinct choice. We need not settle this

an undifferentiated array of generators who are making common, simultaneous use of the transmission grid and distribution facilities.

The financial consequences of direct access contracts involve, at a minimum, four interests, three of which are readily identifiable: those of the customer who consumed a quantity of electricity, those of the generator who simultaneously supplied to the transmission grid a correlative quantity of electricity, and the local utility which delivered an equivalent amount to the customer's physical premises.³ So long as the expectation interests of both parties to the bilateral contract are realized, and a settlement is made with the utility for all costs incurred other than that associated with the generation of the electrons, we see no need for the Commission to take a proactive role in defining these settlement arrangements.

³The Independent System Operator is a fourth party with a financial stake in the bilateral transaction. As is the case with generation nomination from the spot market, a dispatch nomination originating from a bilateral contract must obtain transmission services and thereby incur a liability for these service costs. Transmission liabilities must be settled with the operator of the transmission grid irrespective of their origin. In the case of nominations from the spot market settlement will be made by the utilities which then distribute the electricity to their customers. Bilateral contract nominations may be settled by the generator, the end use customer, the broker or aggregator, or the distribution utility acting as an agent for any of the parties. Again, we note the obligation to be resolved without the felt need that the Commission dictate the resolution. By the same token we leave the issue of compensating the broker for aggregator to the contracting parties who have elected to utilize such an intermediary.

unlike the majority's proposed policy preferences of May 24, we are now persuaded to vest the spot market pool and transmission grid operations in two distinct entities. We also adopt the suggestion that the spot market pool be termed the "Power Exchange" and that we refer to the operator of the transmission grid as the "Independent System Operator." The basic structure and function of these two entities and their critical inter-relationship are defined in this opinion. They may be briefly outlined.

2. The Power Exchange:

The Power Exchange will foster and sustain the development of a transparent spot market for the generation of electricity. Under the terms of the policy decision we announce today, the Exchange will have no financial interest in any source of generation nor will it have any ownership ties to the Independent System Operator. It will determine on a forecast basis the needs of those California customers with loads that are not being met by generators under the terms of direct access contracts. As a market institution it will function as a clearinghouse by providing a transparent auction for generation with hourly or half-hourly price signals evident to immediate users and long-term investors. We anticipate that the performance of this function will provide critical assurances to generators, wholesale buyers, and consumers.

among generators, the impact of that competition on the price of electricity must gain the broadest customer awareness.

Compared to the present practice of receiving and paying a totally unexplained utility bill, those customers who elect to remain with their local utility for purposes of generation procurement and distribution services gain the most startling advantage. They will be direct beneficiaries of the wholesale competition among generators in that the local utility will simply pass through to its customers the prices which it has paid to procure power through the Exchange. Customers who have chosen to have their bills computed on the average cost of power times consumption receive the benefit of the average pool price. Those who are willing to consider shifting load in response to the hourly or half-hourly price signals will have a rationale basis for electing the virtual direct access billing option.

Revelation of pool prices is also the key to the intelligent use of hedging or contracts for differences. The market for such contracts will be premised on the revelation over time of the spot price for electricity. Only by assessing the risk of spot market volatility can a consumer make a rationale decision that the vagaries of the pool price warrant the formation of a contract with a counterpart party who will guarantee a price over an agreed span of time.

We anticipate that the maturing market for energy conservation will also benefit from the price revelation of the avoided cost of energy.

By the same token, knowledge of the cost of receiving energy from the spot market will provide both end users and generators will the

redispatch in order to balance the system and respect transmission constraints. Of necessity, the independent system operator must have the final responsibility for redispatch of the system needed to integrate the nominations from the Power Exchange and from direct access transactions. In executing these limited but fundamentally important responsibilities, we are dedicated to the view that the ISO must be indifferent to the status of generation or load as from the Exchange or from a bilateral transaction. Furthermore, the ISO must determine the rational economic prices to apply to all uses of the transmission grid to ensure that the associated incentives are consistent with the competitive market and least cost use of the transmission system. We have specified the elements of such an efficient pricing system that ensures that charges for transmission use avoid any bias for or against participation in bilateral transactions or in the Exchange. The essence of this pricing system stands on the well established foundation of the competitive market principles of marginal cost pricing. The ISO will determine the marginal cost prices, differentiated by location and time, that will apply to all uses of the transmission system. These locational, hourly prices will apply to purchases and sales through the Exchange and the equivalent differences in prices between locations will apply as the transmission prices for bilateral transmission. The implementation of this efficient, nondiscriminatory pricing system could be achieved simply through a so-called "hub and spoke" system that would organize transmission grid usage around a number of regional hubs that will be the focus of

States and in other countries. We are confident that California can capture and improve upon the best practice, and that Californians are fully capable of implementing here incremental improvements on what has been embraced elsewhere. Hence we direct the participating utilities to formulate a detailed proposal that adheres to the minimum requirements we have specified and to present such a proposal to FERC for its approval. We are confident that this system will meet and advance well beyond the FERC minimum standards by providing a package which is both a "conforming, open access" and an "innovative pricing" proposal.