

**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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**Proposed Policy Decision
Adopting a Preferred Industry Structure**

I. Overview

A. The Role of This Proposed Policy Decision in Advancing the Rule-making and Investigation

On April 20 of last year we commenced this proceeding by releasing for public comment a proposal developed by our Division of Strategic Planning which articulated a plan to accommodate the evolved and evolving state of the electric services industry and set forth reformed regulation of utilities facing customer demand for choice and the presence of competition. On December 7, the co-assigned Commissioners issued a ruling which revised the procedural schedule for completing the receipt of public comment and accommodating the desire of the Legislative and Executive Branches of California's Government that they be afforded adequate opportunity to consider our conclusions and to react with any legislative initiatives deemed in the public interest. A central feature of that agenda called for the Commission to issue for comment "its proposed policy decision adopting its preferred industry structure." Today we achieve that milestone and enunciate the policy preferences of the Commission's majority to replace the "Bluebook" as the focus of further inquiry, hearings and comment. At the same time our colleague, Commissioner Knight, is issuing a written statement of policy preferences which, while affirming our common objectives, articulates a different market model.

We commenced this Rulemaking because of our unanimous belief that as the electric services industry moves toward embracing competition, command and control regulation is no longer an appropriate mechanism. We have concluded that two of the major proposals offered to the Commission, generally referred to as the "PoolCo model" and the "Direct Access model", reveal few true conceptual differences. Both proposals share a foundational premise of encouraging competition to flourish in the production of power. Mirrored in both is the proposed application of performance based ratemaking techniques where competition is absent. Both proposals also recognize the need for an entity independent of generation ownership charged with transmitting power. Furthermore, both plans recognize and address critical issues related to market power, jurisdictional ambiguity, transition costs and consumer choice. The significant difference between our two proposals lies with the manner in which the economic dispatch of power would be achieved.

As detailed in the ordering section of this decision, we invite a discussion of the alternative views of Commissioner Knight as well as those expressed in the Commission's proposed policy decision. Equally important is the sincerity of our invitation that we are open to the suggestion of alternate goals or alternative means to pursue the goals which we have advanced. In the final analysis, neither the Rulemaking nor the Investigation is an exercise in the quest for scientific certitude. We are grateful to the more than one hundred and forty persons and entities which have formally joined this process and look forward to reviewing the comments and holding full panel hearings on this proposed

policy.¹ An amended schedule of the steps we will follow to complete this vital process and which will supersede the Assigned Commissioners' Interim Opinion and Procedural Schedule of December 7, 1994 may be found in the ordering section.

B. Our Objectives

In the order which initiated this Rulemaking we stated our determination to reduce the price California consumers pay for electric services, both short-term and long-term. Today, we reaffirm that objective and outline our proposed means to achieve that end. The extensive public inquiry we have undertaken affirms our confidence in the basic foundation for reform: where competition exists, or can be fostered, replace command and control regulation with the discipline of market forces; in the absence of competition, supplant traditional cost-of-service regulation with alternatives better focused on performance. With few exceptions, all parties agree that this is the necessary foundation of reform to increase the efficiency and reduce the cost of electric services in California.

We are strongly committed to the goal that all customer classes should benefit from industry restructuring. Many of the proposals before us have been criticized because certain customer classes would be excluded from, or substantially delayed in, receiving the benefits of increased competition; today we address that concern. We are also committed to the continuation of energy service in California that is safe, reliable, environmentally sensitive, and available to all consumers. In addition, safety standards remain within our regulatory responsibilities in a restructured industry.

An important part of our regulatory responsibility has been to improve the environment and to encourage the diversity of energy sources which generate California's electricity. We will continue to adhere to the legislative goals and mandates in these areas throughout this restructuring effort. As the market becomes more competitive, we believe the methods by which these goals are implemented should be re-examined by all branches of government.

In the development of strategies to attain these goals we have not forgotten our responsibility to the jurisdictional utilities we regulate. In this time of increasing competition, we are committed to restructuring the industry in a manner that honors our past commitments, does not compromise the financial integrity of the utilities and continues to provide them with a reasonable opportunity to earn a fair profit.

C. The Importance of Cooperative Federalism

Throughout our Rulemaking and Investigation we have been reminded that jurisdictional assumptions have centered on a model of the industry that increasingly fails

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Since April 1994, the Commissioners have conducted six days of full panel hearings. We have also held 16 public participation hearings throughout the state of California.

to mirror reality. In this model vertically integrated utilities were vested by state governments with exclusive service territories. The federal government has asserted jurisdiction over the high voltage transmission grid contending that it had become an instrumentality of interstate commerce. The introduction of non-utility entrants into the generation sector and the articulation of federal policy with respect to an economy overly dependent on foreign sourced fuel stocks has added further jurisdictional complexity and created tension with the several states. The quest for economy has led to an increased incidence of wholesale transactions among utilities and created a dependence on the transmission grid which has functionally united many states and, in the west, spread to embrace the electric systems of Canadian Provinces and Mexican States. Now we add the ambition of many that retail competition be offered as a variant on or substitution for the traditional arrangement between utilities and end users. This non-exhaustive list of changes and calls for change is fraught with promise as well as peril.

The promise is of greater efficiency and enhanced levels of service and reliability. The peril was described by President Fessler in testimony before the United States House of Representatives' Subcommittee on Energy and Power :

... I would like to speak to the disturbing possibility that the several States and the Federal Government are possessed of an ability to frustrate and distort the development of market institutions, and in the course of that misguided effort, betray the public trust each of us diligently seeks to advance.

Such a disagreeable outcome is ensured if the private sector genius for innovation and reform is paralleled by a public sector penchant for jurisdictional debates and authority disputation. . . .²

We are determined to avoid that result and its inevitable invitation to thwart needed reforms with the uncertainty and cost of protracted litigation. Our strategy is to engage our colleagues on the Federal Energy Regulatory Commission and on the regulatory commissions in other western jurisdictions in an exercise in what we will term "cooperative federalism." Taking the first step, we outline today a scheme of shared responsibility in the context of an articulation of our goals on behalf of California's ratepayers and industry participants. In those numerous circumstances where we acknowledge our authority to be inadequate we direct our jurisdictional utilities to initiate proceedings at the Federal Energy Regulatory Commission while providing a clear indication of the steps we will take to follow up on any positive response which they provide.

D. Our Choice of Means to Attain These Objectives

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Hearings before the Subcommittee on Energy and Power of the Committee on Energy and Commerce, House of Representatives, One Hundred Third Congress, Serial No. 103-146, p. 264 (July 21, 1994).

We are convinced that our objectives are best pursued by a regulatory strategy that rests on two pillars of reform: (1) the creation of a transparent wholesale pool under the control and operation of an independent system operator who will ensure open transmission access, reveal to all ratepayers the cost of generation, and derive that cost from an economically efficient auction, and (2) the continued development of performance-based ratemaking techniques for utility monopoly functions on behalf of ratepayers, and for all other aspects of the utility operations. As we shall explain, the sheer size and holdings of our jurisdictional utilities as presently configured confront us with issues of both vertical and horizontal market power. Left unresolved, these attributes could distort the emerging markets and chill the entry of competitors. We are reasonably confident of the solution to the issue of vertical market power and address it with a specific solution. We are equally confident of our diagnosis of horizontal market power issues with respect to the concentration of generation holdings but less certain of a remedial strategy. We detail both a corporate reorganization and a divestiture strategy and seek comment on them while inviting the formulation of alternative proposals.

1. Disaggregation of the traditional vertically integrated utility:

We have determined that the vertically integrated electric utility is not a compatible model if we are to foster a competitive market for electric services. At a minimum we have concluded that it is necessary to disaggregate the vertical entity by separating the elements of generation, transmission and distribution. We believe that this action is wholly consistent with the principles expressed in the Federal Energy Regulatory Commission's Notice of Proposed Rulemaking (NOPR) on issues related to nondiscriminatory open access to the transmission system.³ We are also concerned with the present concentration of ownership of generation assets and the problems which we identify as those of horizontal market power.

a. All transmission assets controlled by an independent system operator: In our view the most effective step which we can promote to resolve the vertical market power issues focuses on the operation of the transmission assets which are currently owned by utilities in California. While some have called for the utilities to divest themselves of ownership, we have concluded that our objectives can likely be met by a less drastic alternative. We propose that, irrespective of the investor or public nature of their ownership, all participants in the pool transfer the operational control of all transmission assets to an independent system operator. Reflecting our conclusion that transmission retains the attributes of a natural monopoly, we envision that the independent system operator will be an entity subject to the jurisdiction of the Federal Energy Regulatory Commission which will fix its rates and terms of service. Once assured that the entity enjoys a mission and a governance structure which is independent of the control or influence of the owners of the beneficial interest in the combined assets, we have no objection to the owners enjoying a stream of income from the operation of the transmission

³Docket No. RM 95-7.

assets by the operator.

The dual reforms of disaggregating transmission and vesting that critical function in an independent system operator will confer three immediate and lasting advantages upon all users of electricity in California.

- (1) The state will achieve a permanent and functional resolution of the transmission access disputes which have raged for decades between facility owning and dependent utilities in California. The cessation of these hostilities will remove the most long-standing grievance which has tended to separate the investor owned from public entities.
- (2) There will be an immediate and lasting efficiency gain inherent in combining the now distinct control functions of many entities under the auspices of the independent system operator. Costs will be saved through the reduction of duplicative facilities and personnel.
- (3) There will be an operational efficiency inherent in a transmission network which has no economic interest other than fostering open access and the facilitation of the physical delivery of electricity from generators irrespective of their ownership. In short, transmission can no longer be gamed or suspected of gaming as we seek to create a competitive market for generation.

b. Generation:

If transmission continues to exhibit the traits of a natural monopoly, it is in the generation of electricity that we find evidence of current competition and the potential for even greater reliance upon the discipline of a competitive marketplace. Our objectives are to pave the way for the development of a fully competitive market, assure that the benefits of that market are made available to all classes of ratepayers, and redesign and reduce the burden of regulation to the extent that market forces discipline competitive entrants. Creation of the independent system operator with authority over both transmission and the dispatch of competitive generation units is, in our judgment, the superior strategy for facilitating the development of a fully competitive market. An allied step will be to monitor the evolving market for the presence of excessive concentration of ownership of these generation units and devising appropriate prophylactic or remedial strategies. Subject to the availability of time of use meters, virtual direct access will assure that ratepayers of all classes achieve an ability to take advantage of the enhanced efficiencies signaled by a transparent pricing of generation. Finally, performance based ratemaking will supplant cost of service recompense for ratepayers who find themselves either through choice or exclusion beyond the protection of competitive alternatives, and for all other aspects of the utility function which exhibit the characteristics of natural monopoly.

(1). An economically efficient dispatch of competing generation facilities predicated upon a transparent market clearing price. Once in place we would invest the independent operator with a second critical function: making a transparent market for generation with price signals evident to immediate users and long-

term investors. The performance of this dispatch function will provide critical assurances to generators, wholesale buyers and end users.⁴

(a). Owners of generation will benefit from competition on a level playing field. The pool operator will implement non-discriminatory rules which will permit rival generators to compete on common grounds using common rules for bidding into the pool and dispatch into the transmission system. Generation units outside of the State of California, including those operated by municipal utilities or public power entities, will be welcome to bid into the pool and will be assured non-discriminatory access to the operation of California's transmission facilities by the pool operator. Over time the ability to observe the price information will send the most reliable signals with respect to the need for additional generation as well as cost cutting steps required to keep existing units competitive.

(b). The benefit to wholesale purchasers of customer confidence and freedom from regulatory review. A utility which takes delivery of electricity from the pool and which pays the clearing price will be free of regulatory review for imprudence. By definition, the purchases will have been reasonable. In addition, customers of all classes will be able to observe the commodity cost for the generation of electricity carried forward from the pool postings to their utility bills.

(2). The concentration of generation ownership: As noted, our concern with concentrated market power extends to the generation sector. We deem the concentration of generation ownership as the inherent flaw in the restructuring of the electric services market in England and Wales. The placement of what had been state owned generation assets in the hands of two private entities created a duopoly structure with the hope that it would produce a competitive market.⁵ The market domination inherent in this arrangement has been charged with higher prices, pool price volatility and

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Here again we encounter the need for cooperative federalism. Vesting the independent system operator with this critical dispatch function involves operation of the pooling mechanism and will require FERC approval. This being said, we see no impediment in federal law to a state commission order requiring investor-owned utilities to use the federally approved pool as a market mechanism to dispatch all electricity generated from assets currently in retail rate base and subject to the exclusive jurisdiction of the state. Such an order would be well within our authority over the retail electric utility franchise and state electric resource planning.

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This statement is not literally accurate owing to the presence of the nuclear generating units which continue to be state owned, and the access to the English and Welsh grid of electricity generated in Scotland and, a limited capacity DC transmission link to France.

additional risks to suppliers and customers. We readily acknowledge that the pooling feature of our proposal draws on the experience in the United Kingdom. There are significant dissimilarities in the circumstances which set the stage for reform in California and the western region of North America and those encountered in England and Wales.

While it is evident that we do not begin with state ownership of the generation, transmission and distribution assets of the electric services industry, even more telling is the fact that current generation assets serving the California market are owned by three large investor owned utilities, numerous municipal utilities and public power entities, non-utility entrepreneurs—all within California—and an array of units with similar dispersion of ownership outside of the state having access to our markets through the interconnected transmission grid in the western region. Looking more deeply at this pattern of ownership we find occasion for concern as well as reason for hope. Excessive market power can distort market mechanisms to the disadvantage of consumers in two settings: (1) because it is sufficiently large to thwart competition in the bidding of generation into the pool, or (2) because transmission constraints provide opportunities for exploitation of customers isolated from the competitive presence of other potential suppliers.

We are in no position to assert with finality that either distortion will plague the dispatch and transmission functions of the independent system operator but we would be remiss in a failure to note our concern and our determination to prevent such an outcome. While we are in no danger of falling prey to a duopoly of sellers, we are concerned with the size of the current generation holdings of Pacific Gas & Electric and Southern California Edison. Whether they threaten the integrity of the pool auction can only be determined in reference to the market in which they are arrayed as competitors. At the present time, we have noted the multiplicity of other generators in California and the access to our consumers enjoyed by generating units located in other western states, the Canadian Provinces of British Columbia and Alberta, and the Mexican State of Baja California Norte. The functional disaggregation of transmission and the concentration of that function in the independent system operator, coupled with the open access policies enforced by the Federal Energy Regulatory Commission, should preserve and enhance the relevant market.

We invite comment on our perception of these horizontal market issues and, if they are deemed credible, whether they should be addressed by prophylactic or remedial strategies. The most draconian preventative would be to order PG&E and Edison to divest themselves of all or significant portions of their current generation holdings. In addition to creating additional market rivals in the form of these new owners, this strategy has the added advantage of assisting in the identification and quantification of what are claimed to be stranded generation assets.⁶ An alternative might be pursued in the context of

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To the extent that such a divestiture strategy involved the actual sale of such assets to third parties a market mechanism would have valued them in the context of the reformed industry structure and revealed a difference between the value assigned to such assets by current regulation and the figure they commanded in a transaction

corporate reorganization whereby the utilities would spin all or a portion of their generation assets off into corporate entities which would initially be owned by their existing shareholders.

C. Customer choice—Virtual Direct Access with Contracts for Differences:

(1). **Customer control over electricity costs—the promise of “virtual direct access:”** Two features of the current system have combined to reduce the efficient use of generation and transmission assets with a correlative forfeiture of a significant price advantage. Currently ratepayers are ignorant of and indifferent to the fundamental fact that over a twenty-four clock the demand for electricity varies dramatically. The consequence is that utilities invest in, and ratepayers defray the cost of, a system which must be built to meet peak demands that are generally experienced from two to six on any given afternoon. At all other times the system built to accommodate this peak load is underutilized and the investment under productive. Once the pool is in place and the true cost of electricity is revealed each half hour it only remains for the Commission to order the utilities to create customer optional rates which reflect the usage of electricity in real time by customers.⁷ The presence of these twin reforms: the revelation of the real time price of electricity coupled with a rate alternative which allows the customer to respond intelligently will produce savings for any customer who is able to shift demand from peak to off-peak hours. The potential that many customers will respond to this opportunity to take significant control over the cost of their consumption will produce a collective benefit in that demand will be redistributed away from the current peaks. Future generation demands will be forestalled even as existing investments in generation are made more productive. The result is a triple win embracing the individual consumer of any class who is able to reduce costs by shifting load, the society at large which defers the demand for new generation and investors in existing plant and equipment who see it put to more productive use.

(2). **The role of bilateral contracts:** Many of those who have identified themselves as “pool opponents” have taken the position that the creation of what amounts to an independent system operator with both transmission facilitation and

between buyer and seller.

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While a single minded pursuit of efficiency would dictate that these time of use rates be made mandatory, it is our present intention to make them optional. A customer would be given a choice of a rate scheme which reflected usage of electricity in real time or one which averaged the cost of electricity multiplied by the monthly consumption figure. We anticipate that a shortage of meters capable of measuring consumption in real time will initially delay the full implementation of our direct virtual access reform.

generation dispatch functions will inhibit the creation of a retail market for electricity. In our view that proposition is fundamentally wrong. The pool which we will seek is a tool for the creation of a market.⁸ Once that market is in place, we have no objection to its exploitation by private interests in any manner which is compatible with concepts of open access and fair competition. Here, again, we are not alone but build upon the positive experiences of the society in creating transparent markets to accommodate private trading in securities and commodities.⁹ Proponents of what is termed a "bilateral contract model" frequently use common terminology to discuss two fundamentally different types of transactions: financial settlements as opposed to physical transactions between generators and retail consumers. Under the model we propose the former are available immediately while the later will be accommodated in a time and under circumstances

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We are far from alone in reaching this critical conclusion. In its COMMENTS TO THE FEDERAL ENERGY REGULATORY COMMISSION'S INQUIRY CONCERNING ALTERNATIVE POWER POOLING INSTITUTIONS UNDER THE FEDERAL POWER Act, Docket No. RM 94-2, the United States Justice Department declared:

PoolCo proponents have charged that the effect of PoolCo would be to thwart the development of efficient, innovative, bilateral contracts to hedge risks and more efficiently allocate resources. The Department sees no basis for this concern, which appears to stem from a fundamental misconception about the role of PoolCo and its compatibility with other trading regimes. PoolCo is intended to dispatch plants, but not to supersede any short of long- or short-term bilateral contracting.

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We are unable to grasp the contention which is inherent in the most shrill detractors of a pool based market mechanism that the creation of such institutional arrangements as the New York, American, and Pacific Stock Exchanges, the NASDAQ, or the Chicago Board of Trade has inhibited private wealth transactions touching these vital aspects of our economy. On the contrary, we deem them indispensable to the development of market information which animates rationale choices to buy, sell or hold positions. Further, the integrity associated with these markets inspires confidence, the key to sustaining public participation in markets which must ultimately unite persons and individuals who not only deal at arm's length, but frequently anonymously through brokers and other intermediaries. Remove that information, and debase that confidence at peril of chilling any broad participation upon which a successful implementation of a retail competition regime would seem to depend.

Again, we find ourselves in agreement with the United States Department of Justice which has declared: "...PoolCo is a market, not a market participant. It acts much like (although not precisely like) the Chicago Board of Trade and the New York Stock Exchange." *Id.*, note 8.

certain.

(a). An immediate opportunity for risk adverse and risk tolerant traders to privately contract for financial settlements which are independent of the pool price. Our objective is to demystify the price for generating electricity. The advantages to California's economy which will flow from the realization of this goal are detailed in our discussion of what we term "virtual direct access." At this juncture we wish to clearly affirm our encouragement of any contractual arrangements which may prove congenial to consenting traders respecting the risks associated with the revelation and realization of this price. In England and Wales the term "contracts for differences" has evolved and has been utilized by a variety of parties to our rulemaking to describe the potential for private agreements which hedge the cost of electricity over time. We have no objection to this term so long as it is clearly understood that it has no fixed definition and that our tolerance of it is not intended to limit the genius of the marketplace in devising financial instruments or private treaties which aim to assure individual or groups of users that the economic consequences of their usage of electricity will not depend upon the vagaries of the clearing price revealed in the hour by hour, day by day efforts of the pool to match California's pattern of consumption with sufficient generation and transmission services.

(b). The accommodation of retail, physical bilateral contracts between specific generators and retail consumers of electricity. We are convinced that the combination of virtual direct access and contracts for differences will enable customers of all classes to simulate all of the financial aspects of a retail, physical bilateral contract. However, if experience disproves our assumption we have no desire to preclude recourse to such direct, retail transactions. For that reason, after a period of two years in which the efficiency potential of this arrangement can be tested, we define conditions which, if satisfied, would lead us to favor the use of this pool to facilitate retail, physical bilateral contracts between specific generators and retail consumers of electricity.

E. Transition

Participants in our proceedings have identified many aspects of the current regulatory structure and the patterns of business practices and investments which have grown up around it which cannot be instantly displaced and redeployed. We have been exposed to protracted discussion of "stranded assets," "stranded liabilities," and, most recently, "stranded benefits." We fully recognize that both time and process will pass before the market has evolved from where it is today to where we would wish it to be. Positioning the utility as the distribution provider for all customer classes enables the Commission to ensure that cost shifting does not occur. This leaves us with the responsibility to address all three aspects of the transition.

1. Stranded assets

The subject of transition costs associated with utility generation assets which would not be competitive under the pool dispatch mechanism is a most difficult and controversial matter. Attempts to fashion an equitable resolution to the dilemma of identification, definition and quantification of such costs, and their subsequent recovery, have been the focus of considerable debate due to the impacts on the financial health of the utility, our stated intention to honor past commitments, the ability for ratepayers to benefit from restructuring and the prospects for fair competition. We are confident that the manner in which we address these interests is even-handed. For utility assets subject to competition, we will allow compensation for market value below book value to shareholders and market value above book value to ratepayers. To avoid disruption of the competitive generation market, we will separate transition cost compensation from the pricing of energy through the pool mechanism. To avoid rate increases, we will propose a method to collect transition costs fairly and equitably over time.

2. Stranded liabilities:

Stranded liabilities refer to those utility obligations imposed by regulation which would not be voluntarily assumed or sustained in a competitive marketplace. The primary example may be found in power purchase contracts which investor owned utilities assumed with non-utility generators in response to statutory or regulatory commands. To honor our past commitments, we will not seek to disrupt utility contracts with Qualifying Facilities. We will, however, encourage parties to seek to lower ratepayer costs in these regards.

3. Stranded benefits—Our Recommendations Concerning Public Purpose Programs:

Stranded benefits are said to be those social, environmental features of California's approach to the provision and enjoyment of energy services which may be imperiled by the exposure of the traditional vertically integrated utility to the forces of competition. We reaffirm our commitment to adhere to the goals and mandates for ensuring continued delivery of affordable energy service to low income consumers, economic development programs, improving the environment and encouraging the diversity of California energy sources and similar programs identified by the Legislature.

We commit to working closely with the Legislature to explore alternative delivery and funding mechanisms to maximize efficiency and effectiveness for these programs. In the interim, we propose to continue the current mechanisms in place, however, we propose to unbundle the specific costs for identification on customer bills.

We believe that these measures have the best chance to facilitate our state's continued progress toward our environmental quality goals in the competitive marketplace that is advancing.

In December of last year, we affirmed our intention to determine the applicability of the California Environmental Quality Act (CEQA). CEQA is designed to ensure that state

and local agencies have evaluated the environmental impacts of their actions. To that end, CEQA specifies an environmental review process which agencies must follow before they approve or implement certain projects.

With this proposal, we ask parties for further comment on the applicability of CEQA.

G. Ratemaking Cases Affecting Rates Before Pool Implementation

All pending ratemaking cases that do not conflict with implementation of our proposal would proceed as they otherwise would have absent this proposal. Pending PBR cases will require examination to ensure that they do not interfere with an orderly transition to a wholesale pool starting in January, 1997. The rate case plan will continue in effect, unless modified or adjusted by ruling or order. We intend to reform that plan as we proceed to fit with our proposal.

II. Procedural History

In April 1992, we initiated a comprehensive review of current and future trends in the electric industry. This process produced a Rulemaking proceeding on restructuring California's electric services industry and reforming regulation, which was issued on April 20, 1994. The Rulemaking envisioned a future in which customers would have choice among competing generation providers, and in which traditional cost-of-service regulation would be replaced by performance-based regulation. We issued the Rulemaking for extensive public comment and solicited comprehensive alternatives to the vision described in that document.

Since April, we have sat together in San Francisco, Sacramento, San Diego, and Los Angeles for six days of public hearings on industry restructuring and regulatory reform. Over 140 individuals and organizations have presented comments on the Commission's Rulemaking, either in written form or as oral testimony at these full panel hearings.¹⁰ (See Attachment 1.) In addition, thousands of California citizens have voiced their opinions on industry restructuring, many of them at the 16 public participation hearings attended by the Commissioners and held throughout the state: Eureka, San Diego, South Lake Tahoe, Stockton, San Francisco, Martinez, San Jose, Fresno, Pasadena, Bakersfield, Ventura, Garden Grove, Carson, San Bernardino, and Huntington Park. Many more have participated via Internet with written comments, submitted videos, or watched the full panel hearings on public broadcasts over CAL-SPAN.

We also conducted a week of evidentiary hearings on issues related to uneconomic assets. In addition, we have engaged our western North America counterparts, federal agencies, and legislators in constructive dialogues on cooperative solutions to jurisdictional issues. On December 7, 1994, we invited a working group, comprised of interested

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Such public, recorded meetings where all Commissioners are present are generally called "full panel hearings." They are conducted in a legislative style.

parties, to prepare a written report on sustainability of public purpose programs and options for attaining our objective in a variety of restructured market models. On January 31, 1995, numerous parties filed briefs on legal issues. Attachment 2 presents a procedural history of our proceeding on electric industry restructuring and regulatory reform.

Our extensive public inquiry has produced a broad range of views on electric industry restructuring. With few exceptions, parties agree that current regulatory approaches are unsuitable to meet the challenging changes in the electric services market. While the general need to "fix the system" is a view shared by most participants, they express different opinions on how to fix it. We present an over- view of those opinions in Attachment 2.

III. Our Reform Proposal

We are convinced that our objectives to restructure the electric industry can best be attained by creating a voluntary wholesale pool with transparent pricing, increasing customer choice through virtual direct access and contracts for differences, and developing performance-based mechanisms for functions of the traditional utility not subject to competition. We are not confident that a reformed market consisting solely of retail, physical, bilateral contracts, with its jurisdictional uncertainties, will provide overall benefits of competition to all customers at this time. Instead, we prefer to take a measured approach which first introduces reform at the wholesale level, providing benefits of competition to all consumers, while providing increased choice to retail consumers who elect to participate by freely negotiating financial contracts outside of the regulatory arena. Our intention is that when specific goals have been achieved, this Commission would be prepared to embrace retail competition based on physical, bilateral contracts which complement the wholesale market reform we propose for this initial phase.

Undoubtedly, the most dynamic discussions within the electric services industry for the past year have revolved around what market structure should be advanced as we embark on restructuring such a critical industry. Participants in our restructuring proceeding have primarily engaged in discussions focusing on two market mechanisms: a pool model and direct access. Several terms have been bandied about to describe the concept of principal-to-principal contracts between a generator and retail consumers such as "retail wheeling", and "direct access". We find the term "retail, physical, bilateral contracts" to be a more accurate, as it denotes the physical dispatch and transmission of a supplier's generation to the end user for a contracted price, even though in most cases the actual electrons do not specifically flow from seller to buyer.

We have found the concepts associated with market structure to be highly fluid, and subject to a great many misunderstandings generated by new and changing terminology. However, we recognize that many of the sharp differences about pools and direct access soften substantially when parties focus upon the operational functions that each would provide. In fact, the financial outcome can often be the same, although accomplished in a different way. We find that it is therefore of greater importance to look at the entire

restructuring package. We hope parties with prior conceptions about market structure will take a fresh look at the pool we define, in the context of our overall goals and proposed policies.

A. Overview of The Pool with Virtual Direct Access

Ultimately, our goal in this first phase is a voluntary pool with virtual direct access. We invite participation by all power suppliers including municipal as well as investor-owned utilities, power marketing agencies, independent power producers and out-of-state utility and non-utility sources of generation. However, we believe that participation by at least the three investor-owned utilities with generation assets subject to our exclusive jurisdiction is necessary at the outset to ensure that all California ratepayers benefit as soon as possible from the economic dispatch features of the pool, as well as the risk-hedging benefits associated with contracts for differences. Therefore, we require that three investor-owned utilities participate in the pool. We ask for comment on whether Sierra Pacific and PacifiCorp should be subject to this rule, for purposes of serving their California loads.

Upon joining the pool, the participating investor owned utilities must conform to the rules set by the pool to facilitate generation transactions and ensure a level playing field for all participants. The most essential requirements for pool participants will be:

- 1- To place all their generation assets under the dispatch control of the pool's independent system operator.
- 2- To place all their transmission assets under the control of the pool's independent system operator.
- 3- To purchase all electricity only from the pool.

Municipal and out of state sellers will also be afforded the same transmission and dispatch services for any energy sales that they make to the investor owned utilities. We anticipate that California's municipal utilities will recognize the economic benefits of the pool and will commit to purchasing all of their energy needs from the pool as well.

The independent system operator will perform dispatch, system integration and coordination. All suppliers will have the opportunity to sell electricity supply through the pool according to established competitive bidding procedures with winning bids awarded to those suppliers who bid to supply electricity at the lowest price. Suppliers will be paid a disclosed, uniform, market clearing price. Utilities will buy electricity supply at the pool price for customers in their respective service territories. We add that our proposal would maintain existing wholesale contracts, and allow for their delivery either outside the pool or facilitated by the comparable transmission service provided by the pool.

An essential feature of our reform is that consumers will have the choice we envisioned in our initial proposal through virtual direct access to the competitive generation market. Our provision of consumer choice is twofold. First, time-of-use pricing will be phased-in to provide consumers with time-sensitive pricing information to be used to adjust energy consumption. Consumers will have an opportunity to use the pricing information from the pool through their real time metering equipment and adjust their

usage patterns accordingly. This will allow customers to take advantage of a real-time pool price. Consumers who have installed real time metering equipment will be able to make billing options that will enable them to save by shifting load to off peak periods of demand. Second, consumers of all classes can enter into contractual transactions as financial hedging instruments with generators to leverage against fluctuations in the pool price. This transaction will be independent of pool activities and unregulated. Through these contractual arrangements, long-term commitments to generation resources can be shifted from the regulatory arena to the market.

We are not persuaded that the consumer choices described above are inferior to those choices provided in a market of retail, physical, bilateral contracts. The physical properties of electricity dictate that it follow the path of least resistance. The transmission grid provides the physical path irrespective of contract specifications. Our proposal recognizes that the financial impacts of bilateral contracts represent accounting transactions which can be structured in a manner different from, but compatible with, the physical operation of the transmission system. More importantly, by establishing an independent system operator who would control, coordinate and dispatch the transmission system, operating efficiency will be optimized. Although our proposal, at this time, does not include retail, physical, bilateral contracts, when the first phase of this reform strategy has been successfully implemented, and when certain conditions have been satisfied (as outlined below), we are prepared to embrace the pool's accommodation of retail, physical, bilateral contracts. Until that time, suppliers that choose to participate in the pool and that wish to rely exclusively on financial, contractual arrangements with customers may adjust their bids to the pool so that they are more likely to be dispatched.

It is our belief that the Federal Energy Regulatory Commission (FERC) will work in a cooperative manner to foster a fully competitive wholesale market *before* moving to retail competition. FERC has very recently proposed sweeping changes in the wholesale electric industry by issuing an open access Notice of Proposed Rulemaking (NOPR) (RM95-7) and a supplemental stranded cost NOPR (RM95-8) (Supplemental NOPR). We believe that today's proposal complements FERC's proposals for wholesale competition and stranded cost recovery. This Commission has long been an advocate of open, non-discriminatory wholesale transmission access. By requiring all transmission-owning utilities to file tariffs for unbundled transmission and ancillary services (such as scheduling, load-balancing and dispatch), and requiring transmission-owning utilities to take service under those same tariffs, FERC is ensuring the open, nondiscriminatory access which is the necessary prerequisite for competition in wholesale generation.

1. *Structure of the Pool*

The pool will provide independent, open and nondiscriminatory access to the transmission grid, while maintaining frequency control, and complying with all existing standards to ensure continued reliability. The pool will have two distinct functions. First, it will function as the operator of the electric grid system by coordinating dispatch and delivery of energy; second, it will act as a clearing house for all electricity transactions.

The pool will implement uniform, efficient, and transparent pricing rules and publish a market price for electricity in specific time increments. The independent system operator will own no generation, transmission or distribution facilities and would have no affiliation with any companies that own those facilities. Ownership of transmission and distribution facilities will remain with the utilities, but the independent system operator will have control over the operation and maintenance of utility transmission facilities, which includes service reliability and integrity of the system, consistent with the standards of the North American Electric Reliability Council (NERC) and the Western Systems Coordinating Council (WSCC). The independent system operator will fulfill obligations under existing transmission contracts and new comparable transmission service tariffs.

The utility will purchase power from the pool on behalf of its customers and bid into the pool to sell its generation output. All suppliers of electricity or "sellers", except for existing QF and wholesale contracts, investor-owned utilities' nuclear and hydroelectric plants, will compete with one another by submitting bids to the pool in specific time increments. Existing wholesale and QF contracts, nuclear and hydroelectric supplies will nevertheless supply the pool. "Buyers" of electricity will submit demand bids to the pool according to those same time increments. Based on these two sets of data, the independent system operator will establish market clearing prices or spot prices. The pool will be responsible for revealing real-time spot prices on a periodic basis, expected to be an hourly or half hourly basis. In addition, all existing wholesale and QF contracts will be honored by the utility owning them, and will be dispatched according to contract terms. Nuclear and hydroelectric plants of the investor-owned utilities will be treated similarly to ensure our commitment to those past investment decisions we have found prudent, and to secure the financial integrity of the utilities. By combining nuclear and hydroelectric facilities we secure for ratepayers a more balanced combination of costs and operational benefits and burdens, for as long as a separate transition cost recovery mechanism is required.

a. *The Pool will function as an independent system operator*

We believe that separating responsibility for system reliability and control of transmission from the beneficial ownership interest in those assets will lead to more efficient operation of the system. We rely on our experience with other industries, such as natural gas, where development of competitive markets has not compromised system reliability, while acknowledging important differences.

The pool functioning as an independent system operator will ensure the most efficient, or "cheapest" mix of power plants and network facilities are in use at any given time. The pool will be in charge of coordination, planning and operating activities among electric suppliers and users. As the pool determines which bids would best match supply and demand, and informs traders if their bids have been accepted, it will control and ensure the physical delivery of the energy to the utilities providing distribution to end users.

The pool will be responsible for maintaining system reliability by arranging back up

and other FERC-defined ancillary services (load following, reactive power support and system protection services) for a fair price. In addition, the pool will manage emergency responses, reserves and grid congestion. Other support services, such as loss compensation service and spinning reserves will be purchased by the pool. The pool will also be responsible for providing back up services in case of a failure to deliver power by a seller, in order to avoid disruption of service throughout the network. System reliability will continue to be governed by NERC and WSCC standards.

b. The Pool Will Function as a Market Price Clearinghouse

The pool price will reflect the cost of electric supply at a specific time, based on balancing electric supply and demand at that time. The pool will schedule generation from QFs and other units covered by existing wholesale contracts according to contract terms. The investor-owned utilities' nuclear and hydroelectric facilities will be similarly scheduled, consistent with their existing priorities relative to existing QF and wholesale contracts. Existing QF and wholesale contracts, nuclear and hydroelectric facilities will be scheduled first, and not subject to dispatch on the same basis as other bids. The remaining load, if any, will then be served on an economic dispatch by generators who have bid the lowest price into the pool.¹¹ There could also be several market clearing prices due to technical considerations such as transmission constraints and grid congestion.

The pool's market clearing price will be determined by calculating where supply and demand are in equilibrium. There exist different methods to determine this equilibrium such as setting the market clearing price at the price bid by the last generator selected by the pool during any given period or at the price bid by the lowest losing bid. As the independent system operator, the pool will arrange for delivery of energy to utilities that provide distribution to end-use customers, consistent with the order of dispatch determined by the bid prices. All generators would receive a uniform, market clearing price from the pool for their generation. As explained further below, existing wholesale contracts and QF contracts will receive additional payment from the investor-owned utilities. Customers' bills will be unbundled into various components to show the price of energy delivered, appropriate transition cost charges and charges for public purpose programs. We ask for comment on the appropriate pricing methodology to determine the market clearing price and the need to account for transmission constraints in the pool price. Investor-owned utilities' nuclear and hydroelectric facilities' remaining revenue requirement will be resolved by a transition cost recovery mechanism.

2. Pool Participants

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If at times load is below the level of generation pre-scheduled for existing contracts, investor-owned nuclear and hydroelectric facilities, to the maximum extent practicable and determinable the pool will use existing contractual curtailment priorities, consistent with the course of conduct pre-dating pool operation.

Generators, including municipal utilities and independent power producers, who participate in the pool as sellers, will submit their bids and other price preferences and information to the system operator. For example, generators will indicate how much electricity they will be able to produce at different locations and for different prices. In addition, they will provide the system operator with information such as minimum or maximum price bids and related information that the pool may require to operate safely and reliably.

Buyers of electricity will provide the same type of information to the system operator such as minimum or maximum demand, variation in price and other related data. Based on the available information from suppliers and buyers, the pool will determine an economic merit order schedule that meets projected demand. The investor-owned utilities will participate in the pool as buyers of electricity on behalf of their customers and continue to administer energy efficiency programs and other public policy programs on behalf of their customers. Municipal utilities, independent power producers, and out-of-state generators will also be able to take advantage of the competitive market by participating in the pool through sales or purchases. These entities will have nondiscriminatory, open access to the transmission services. Out of state sellers will have the opportunity to submit bids into the pool, which, if successful, will be accommodated by the independent system operator with respect to transmission and financial settlements.

We are mindful that requiring utilities to participate in the pool raises a question of first impression and implicates the FERC's jurisdiction over transmission in interstate commerce and wholesale sales. The reforms which we seek can only be accomplished through an exercise in cooperative federalism on the part of both state and federal authority¹². In our view, the benefits of the pool for all California ratepayers are worth the risk of litigation on this issue, which we will seek to minimize by careful coordination with FERC. We therefore find that it is in the public interest for investor-owned utilities to participate in the pool and propose to require them to do so as the most efficient use of their assets currently in retail rate base. We propose that the investor-owned utilities will meet for the purpose of forming the pool and encourage representatives of other interested entities to attend these meetings so that the pool can begin operation not later than January 1, 1997.

3. *Eligibility for Real-Time Meters*

Our objective is to make competitive options available to all classes of customers and to avoid strategies that restrict or ration the benefits of the new market structure to the few. Realization of this goal is inhibited by existing technological barriers and the availability of enabling technology. Although optimally all customers should be able to

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Our views on cooperative federalism were outlined in testimony presented by President Daniel Wm. Fessler before the U.S. House Subcommittee on Energy and Power, July 21, 1994.

derive virtual direct access benefits by responding to real-time price signals, experience in England and Wales suggests that supplying each customer with an appropriate meter will be time consuming and may best be approached in a phased in manner. We thus propose that utilities install real-time price (RTP) meters in a phased-in manner, starting with large customers not already equipped with such meters, and reaching small customers in 6 years after the pool is formed. Our proposed schedule for installation of RTP meters is:

500 Kw	already installed for most customers in this class
400 Kw	one year after the pool begins - 1998
300 Kw	two years after the pool begins - 1999
200 Kw	three years after the pool begins - 2000
100 Kw	four years after the pool begins - 2001
50 Kw	five years after the pool begins - 2002
below 50 Kw	six years after the pool begins - 2003

Customers will be individually responsible for the cost of the meter installed, and can opt to pay for it on their bill in reasonable installments that avoid severe bill impacts or hardships. The above schedule is not intended to prevent certain customers from enjoying the benefits of real-time pricing but rather provides an orderly approach. Those customers who are not yet scheduled for utility meter installation may purchase and install such meters at their own expense.

We believe that our proposal will bring benefits to all classes of customers, including those without the RTP meters, on an aggregated level. Customer benefits will be greater once they have access to RTP meters and can rely on the pool's real-time pricing features.

4. *Planning New Generation and Transmission*

In the regulatory regime we propose to abandon, state sponsored forecasting sought to anticipate the need for future generation and utilities were burdened with the responsibility to meet that need in their individual service territories through a complex process featuring the heavy hand of regulation. Consistent with our view that generation is the aspect of the traditional utility function that best lends itself to competitive development, we believe that future decisions to augment the generation capacity available to the California market are best left to a market based response to long term price signals. It may be that traditional utilities, as owners of but a portion of the competing units, should be relieved of the obligation to plan for, construct or contract for future needs.¹³ We foresee unregulated financial contracts as a primary determinant for new generation resources.

The need for new transmission facilities can be revealed through congestion

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Such relief would require legislation and would have to observe statutory mandates for renewable resources

experienced by the pool. Based on the request and experience of the pool, it can build new transmission facilities when needed and receive compensation from the pool's collection of revenue for transmission services. Another possibility is to use performance-based ratemaking to encourage efficient investment in new transmission resources. We intend that the pool offer for FERC's consideration a transmission pricing methodology which embodies comparable transmission prices, and reflects sensitivity to transmission congestion in order to encourage efficient transmission investment.

5. *The Transmission Function*

We see numerous benefits in unbundling transmission and forming an independent system operator who will have control over all transmission facilities.

- (1) The state will achieve a permanent and functional resolution of the "transmission access wars" which have raged between facility owning and dependent utilities in California for decades. The cessation of these hostilities will remove the most longstanding grievance which has tended to separate the investor owned utilities from public entities.
- (2) There will be an immediate and lasting efficiency gain inherent in combining the now distinct control functions of many entities under auspices of the independent system operator. Costs will be saved through the reduction of duplicate facilities and personnel.
- (3) There will be an operational efficiency inherent in a transmission network which has no economic interest other than fostering open access and the facilitation of the physical delivery of electricity from generators irrespective of their ownership. In short, transmission can no longer be gamed or suspected of gaming as we seek to create a competitive market for generation.

Another issue is related to concentrated market power in transmission-sensitive locations. As evidenced in England and Wales, there is a potential for abusive market power in areas where there exist identifiable constraints on the transmission system specific to a certain geographical location. The National Grid Company, who functions as the Pool operator, required that certain generation plants, not chosen to operate under price-merit order, serve these areas and receive payment at their bid price. Those generators may be able to exploit their market power by unjustifiably increasing their bid price to the pool. Other generators strategically bid low enough to include those plant(s) intended to serve the transmission-constrained locations in the price merit-order. This caused the Grid Company to pay the plants not to operate. We seek additional comments on how to address this issue in the context of our overall proposal.

Finally, we note with interest FERC's statement in the Open Access NOPR that it recognizes that the unbundling of transmission for retail purposes would intrude upon

matters that state commissions have traditionally regulated. FERC states:

One possible approach that would unify service standards for wholesale and retail service would be for each vertically integrated utility to establish a distribution function that would be responsible for obtaining transmission services on behalf of retail customers. This distribution function then could be treated just as any other wholesale customer. The distribution function of the utility would take service under the single Commission filed tariff. This could change the traditional approach of state-federal allocation of transmission costs. ... How could the Commission cooperate with state commissions if it were to adopt such an approach? (NOPR at 99.)

We also note that FERC has suggested that corporate (or functional) unbundling of the vertically integrated monopoly could be a way to establish a workable bright line between state and federal authority without relying on the more qualitative, functional/technical test for transmission and distribution. In determining whether particular facilities are transmission or local distribution in the case of a distribution utility our federal counterparts declared:

In the case of a distribution-only utility, which is franchised by a State or local government and sells only at retail, all of the circuits (and related wires, transformers, towers, and rights of way) which it owns or operates (regardless of voltage) would be local distribution facilities. (NOPR at 285, n. 395).

We ask for comment on whether disaggregating the utility to form separate operating units, including a local distribution company, (1) makes sense in light of FERC's open access NOPR, (2) is technically feasible, and (3) would be an efficient structure to achieve greater wholesale competition while clarifying jurisdictional boundaries and working towards retail competition.

6. Federal and State Jurisdiction

As noted, we are fully cognizant that the design and operation of a pool is subject to exclusive control of the Federal Energy Regulatory Commission. In addition, FERC would have exclusive jurisdiction over the rates charged by the pool. *Mississippi Power & Light Co. v. Mississippi*, 487 U.S. 354, 371 (1988). Under the Federal Power Act (FPA), FERC has exclusive authority to approve, disapprove or modify the proposed terms, conditions and prices of pool wholesale sales and interstate transmission services.¹⁴ FERC has stated that all voluntary coordination and interconnection agreements (pooling

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See FERC Policy Statement Regarding Regional Transmission Groups, 58 Fed Reg. pp. 41626-41633, Aug. 5, 1993.

agreements) involving public utilities must be filed at FERC.¹⁵ It would appear fortuitous that Congress has anticipated the need for a cooperative effort on the part of both federal and state regulatory authorities. Evidence may be found in the proposition that FERC generally cannot order utilities to enter pooling arrangements.¹⁶

Section 202(b) of the FPA specifically authorizes FERC, at the request of state commissions, to require public utilities to sell and exchange power with other entities. Section 202(b) provides:

Whenever the Commission, upon application of any State commission ... finds such action necessary or appropriate in the public interest it may by order direct a public utility (if the Commission finds that no undue burden will be placed upon such public utility thereby) to establish physical connection of its transmission facilities with the facilities of one or more other persons engaged in the transmission or sale of electric energy, to sell energy to or exchange energy with such persons. 16 U.S.C. § 824a(b) (West 1985).

This section has been interpreted to authorize FERC to order sales and exchanges over existing interconnections, as well as to order new interconnections, sales and exchanges. Section 202(b) authorizes the Commission to "direct a public utility to establish a physical connection of its transmission facilities with the facilities of another entity engaged in the transmission or sale of electric energy, or to order the utility to sell energy to or exchange energy with such other entity, or to do both, as the public interest requires."¹⁷ Section 202(b) also permits FERC to "prescribe the terms and conditions of the arrangement to be made between the persons affected by any such order, including the apportionment of cost between them and the compensation or reimbursement reasonably due to any of them."¹⁸ It has been suggested that since Section 202(b) explicitly empowers FERC to act "Upon application of any State commission," the provision is an exclusive and preemptive federal mechanism for requiring public utilities

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See *Alternative Power Pooling Institutions Under the Federal Power Act*, Docket No. RM94-20.

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See *Mid-Continental Area Power Pool*, 58 F.P.C. 2622, 2637 (1977), aff'd sub nom. Central Iowa Power Coop. v. FERC, 606 F.2d 1156 (D.C. Cir. 1979), see also Otter Tail Power Co. v. United States, 410 U.S. 366, 374 (1972). (Congress rejected a pervasive regulatory scheme for controlling the interstate distribution of power in favor of voluntary commercial relationships.)

¹⁷*New England Power Co. v. FPA*, 349 F.2d 258, 263 (1st Cir. 1965).

¹⁸16 U.S.C.A. § 824 a (b).

to engage in wholesale sales or exchanges. Thus, Section 202(b) arguably preempts a state from directing regulated utilities to participate in a pool.¹⁹

In our view, a necessary corollary of finding Section 202(b) to be an exclusive, preemptive federal mechanism for requiring public utilities to engage in pooling arrangements is that Section 202(b) permits this Commission to apply to FERC to require utilities to participate in a pool. We ask for comment on whether Section 202(b) is broad enough to preempt our order to require utilities to participate in a pool. We also ask parties to comment on whether this Commission could apply to FERC under Section 202(b) to order establishment of the pool, and if not, why not. Assuming that we may apply under Section 202(b), FERC may order investor-owned utilities such as PacifiCorp and Sierra Pacific to participate in the pool without raising the commerce clause concerns that might be raised by a similar order of this Commission. Finally, we ask for comment on whether we can apply to FERC to require the independent system operator to perform the function of economically efficient dispatch of competing generation facilities to provide price revelation.

Some parties hold the view that this Commission is generally preempted from ordering utilities to participate in the pool which includes selling and purchasing all power through the pool because of exclusive federal jurisdiction over transmission and wholesale sales, aside from any specific preemption arguments raised by Section 202(b) of the FPA. We disagree. Congress did not intend to prohibit states from adopting innovative mechanisms for retail electric resource procurement, even if some of those mechanisms require federal approval. We are not attempting to usurp federal authority in these areas. Indeed, we explicitly recognize FERC's jurisdiction over the pool. Nor do we intend to disturb existing wholesale contracts.

It is our preliminary view that this Commission is not preempted under federal law from ordering investor-owned utilities to use the pool as a market mechanism to dispatch all electricity generated from those power sources currently in retail rate base (as well as power supplied under existing contracts with our jurisdictional utilities) and used to provide retail service through a pool and to take power at the posted pool price to serve retail load. Given the presumption against finding preemption, the longstanding tradition of state authority over the retail electric utility franchise and state electric resource planning, and lack of evidence of Congressional intent to preempt states as to retail power supply and resource procurement activities of utilities, we believe that we have ample authority to require utilities, if they do not do so voluntarily, to participate in a pool as a means to serve their retail electric load in an economical fashion.

B. The Establishment of a Pool and Development of Performance-Based Mechanisms as the First Step

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See comments filed by Pacific Gas and Electric Company, March 1, 1995, in Alternative Power Pooling Institutions Under the Federal Power Act; Docket No. RM94-20-000.

We believe our reform proposal to adopt and encourage a competitive generation market is the best approach to overcome barriers which would frustrate movement to direct access at this time. This initial phase of our reform strategy will extract unrealized efficiencies in this industry at the wholesale level. The first step in our reform of the wholesale market is to facilitate increased reliance on market mechanisms to allocate resources and develop performance-based mechanisms where competition is absent. We are not convinced that a market based on retail, physical, bilateral or multilateral contractual arrangements will ensure price visibility or transparent market information to the degree more immediately achieved by centralized pricing through the pool. For similar reasons, we do not see any benefits in allowing so-called buy/sell arrangements between utilities and their customers, and therefore, we reject those at this time as well. We see no dampening of benefits to consumers under a pool mechanism coupled with virtual direct access.

We believe that an initial concentration on wholesale reform will neither jeopardize nor unduly delay the realization of the benefits of a restructured electric services industry. To go beyond wholesale market reform at this time postpones the realization of these benefits for all market participants. Jurisdictional ambiguities, as clearly evidenced in many of the other proposed market structures require seemingly inescapable and numerous rounds of legal interpretation at great expense to all participants. We find appeal in a measured approach to restructuring the electric services industry that provides equitable benefits to all consumers and which can be accomplished in the near term. Furthermore, with this first step, there is no need to discriminate among customer classes: all consumers will realize the benefits of a reformed wholesale market.

We are convinced that the pool model brings benefits of competition to all consumers while avoiding the jurisdictional uncertainties raised by retail, physical direct access. Utilities will continue to make retail sales, and such sales will remain within this Commission's exclusive rate-setting jurisdiction. We are reluctant to implement a market structured on retail, physical, bilateral contracts, which FERC views as unbundling the traditional bundled retail sales rate into separate generation, transmission and distribution components, until it is clear where FERC will draw the line between transmission and distribution.²⁰ Until it is certain that states have a mechanism entirely within their jurisdiction to recover retail stranded costs, retail wheeling entails a great risk

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In the Supplemental Stranded Cost NOPR (Docket No. RM95-8), FERC found that while states have jurisdiction over local distribution facilities, a bright line between transmission and distribution was not required by the case law and would not be a workable approach in all cases. FERC proposed to adopt a functional / technical list of factors that it will use on a case-by-case basis. However, in the case of a distribution-only utility, FERC suggests that all circuits which it owns or operates would be local distribution facilities. (NOPR, p. 285, n. 395.)

of cost shifting among customer classes, which we do not intend to allow. The pool would maintain the well settled wholesale/retail division between state and federal authority.

We are convinced that wholesale competition offers the most immediate means to reduce rates for all consumers. Wholesale competition will bring increased efficiencies in generation to a central pool, to be dispersed by our jurisdictional utilities to all consumers through lower energy costs. Requiring the utilities to purchase generation resources from a competitive market will provide both lower prices and more transparent price signals to all market participants than the numerous individual contracts anticipated under direct access. In addition, market prices revealed in a central pool are a clear improvement over today's reliance on forecasts for determining future resource need. Unlike direct access, a central pool allows a utility to recognize increased efficiencies arising from the competitive market, on behalf of all its customers, not just those customers large or sophisticated enough to participate in the electric procurement market.

As discussed earlier, reform of the wholesale market will result in consumer choice in two ways. First, real time price signals, coupled with real time rates, will enable consumers to adjust their pattern of consumption and reduce both the costs on the system and their bills. Once customers have access to a real-time market price, they can make informed decisions on how best to manage their energy use, through shifting their load to lower priced time periods or improving their energy efficiency. Second, customers may also decide to enter into a financial contract to obtain virtually any pricing arrangement available under a bilateral agreement with a generator or broker and leverage against fluctuations in the market price. Based on price information from the pool, customers will have the opportunity to offset the price of their electricity over the short and long-term through the financial contractual agreements we refer to as virtual direct access. These contractual agreements will allow customers' financial decisions to be decoupled from the physical delivery of their electricity without compromising efficient and reliable electric service. Customers could engage in contracts that are tailored to meet their individual needs for unique pricing arrangements, or use the pool to hedge against market uncertainty. These contracts may facilitate new investments of generating companies over the long-term by decreasing the risk they would face in relying only on the pool price. Irrespective of whether customers choose to pay the pool price for electricity or arrange a contract in tandem with the pool price, all customer classes will benefit from having real time pricing information that would result in downward pressure on rates and increased efficiencies in the bulk power market.

We are persuaded that a pool will provide for increased economic use of electric supply. Through centralized dispatch of generation, the pool will provide for least-cost use of generating capacity and ensure that only the most cost efficient units run. It is not clear that dispatch based on a system with a multitude of retail, physical, contractual arrangements would immediately achieve efficient, economic dispatch. We agree with those parties who, with respect to market models, have stated that there are indisputable efficiencies gained through centralized control of dispatch. With this mutual understand-

ing, we believe that the centralization of pricing and dispatch can best be accomplished by an independent pooling entity.

C. Performance Based Ratemaking

We stated in our initial proposal under this Rulemaking that various reasons have led the electric industry to change over the past decade and the time is appropriate to consider a new regulatory framework. We note that traditional regulation has served our objectives well in the past years. Indeed, cost-of-service regulation is useful in achieving some regulatory goals and contains notable benefits. Yet, we have observed inefficiencies in cost of service regulation. In many ways these inefficiencies have resulted in high electric rates in California. For various reasons, the current regulatory scheme has failed to prevent electric rates from rising and has been unsuccessful in lowering rates after it became apparent that the rates California consumers pay for their electric service are much higher than the rest of the nation. For many years we have relied upon prudence reviews and threat of disallowances to encourage utility managers to make sound business decisions. As a result, utilities have focused their efforts on defending past expenses and justifying those decisions. We believe this regulatory approach is less effective and more administratively wasteful than our alternatives. It lacks flexibility, discourages utilities from focusing on current business decisions and fails to promote innovative, cost effective decisions. In our effort to streamline regulation, we look to new ways to reduce micromanagement and allow utilities more flexibility in their day to day operations.

Under PBR, we will provide a system of incentives that would focus on increased efficiency instead of reliance on reasonableness reviews. This system will be more effective in encouraging utility managers to reduce cost and improve rates and is intended to move away from increasing utility asset base to achieve increased earnings. We believe that success or failure of a utility's performance would be better judged against standards that are set in advance rather than retroactive evaluations, such as reasonableness reviews. From experience, we have learned that reasonableness reviews are costly, lengthy, burdensome and, by their nature, backward looking.

We believe significant productivity gains can be achieved in the utilities' systems by further optimizing the day-to-day operation and maintenance functions. We reaffirm our commitment to PBR and propose to apply PBR mechanisms to utility generation and distribution services. As we have stated previously, under our proposal, transmission rates will be subject to federal jurisdiction. However, for various reasons stated earlier, we encourage FERC and transmission owners to consider transmission PBR mechanisms.

We see numerous benefits in adopting incentives for utility generation. An appropriate incentive mechanism will encourage generators to bid properly and competitively into the pool. It will also prevent gaming of bids and market power problems and at the same time minimizes reliance on transition charges by separating operation from capital cost.

We previously stated our interest in considering the PBR applications filed by the utilities as a starting point for this process. We reaffirm our statement that we would consider each PBR individually and design a mechanism that is tailored appropriately to fit each utility's needs and its particular circumstances. Furthermore, we anticipate the need to apply different techniques to various types of generating plants. We ask the parties to comment on these various methods. Although we expect to have some similarities among our final mechanisms as a result of our adopted goals and objectives, we believe that PBR is not limited to one specific formula or methodology. In fact, the adopted PBR mechanisms that are now in place are varied in their breadth, scope and options. We therefore do not intend to apply a "one size-fits-all" approach to PBR and continue to examine the proposed PBR mechanisms filed by the utilities. We are aware that our proposal today would affect several of our PBR experimental programs that have been in place. We also anticipate that some pending PBR proposals would have to be modified to comply with our proposed policy. We ask the utilities to comment upon changes they may need to make to their pending PBR filings in order to comply with our proposed policy.

D. The Accommodation of Retail, Physical, Bilateral Contracts

We are persuaded as to the more immediate merits of a wholesale pool with virtual direct access, and believe that there will be significant benefits associated with the widespread availability of virtual direct access and the opportunity to form financial contracts which secure long term pricing structures for individual customers. At the same time, we cannot know with certitude that there will not be further advantages gained by facilitation of retail, physical, bilateral contracts between generators and retail consumers of electricity. As we have noted, retail, physical, bilateral contracts denote the actual physical dispatch and transmission of a supplier's generation, and the supply of electricity to the end user for a contracted price. This is distinguished from virtual direct access, which involves financial contracts between the end user and the supplier without the requirement for physical dispatch and transmission of a specific generator.

Our goal has been to select the means we believe are most likely to secure the greatest benefits to the greatest number of ratepayers of all classes. Notwithstanding, we have striven to close as few doors as possible to developments which may take place in the course of market evolution. Before the introduction of retail, physical, bilateral contracts, we wish to ensure that all jurisdictional issues are resolved and that such practices not become attractive as a means to escape responsibility for a fair share of transition cost recovery nor impose on the transmission and distribution systems costs which are not fully borne by the cost causers. We also wish to allow for the pool to operate unencumbered by externally-imposed contract provisions for a time in order to ensure that technical and economic expectations are satisfied.

Throughout this proceeding, we have been reminded that the electric grid system is integrated, and therefore highly complex. Such a complex system driven by numerous retail, physical, bilateral contracts would make operation, coordination, and planning of

electric services much more difficult to balance, because the pool dispatch function could no longer be based strictly on economic dispatch. It is clear that centralized control of the grid, in a single independent system operator instead of through several utility-run systems, would make such coordination efforts more efficient and better ensure system integrity and reliable electricity supply.

In this new regulatory environment we foresee that, soon after the commencement of a wholesale pool, retail, physical, bilateral contracts would be permitted. It is our expectation that two years after the pool is operating would be sufficient time to establish and refine the pool. Apart from the successful implementation of our proposal, we condition our willingness to accommodate retail, physical, bilateral contracts on the following: (1) establishment of a means to recover retail transition costs; (2) determination of the technical feasibility of retail, physical, bilateral contracts; (3) resolution of jurisdictional uncertainties; (4) establishment of a mechanism (which we foresee requires approval by FERC) by which customers choosing to negotiate retail, physical, bilateral contracts compensate utilities for imposition of costs on the transmission system associated with nonpool transfers; and (5) all horizontal market power issues have been resolved.

IV. Electric Industry Market Structure: Implications for the Exercise of Market Power

The electric services industry today is characterized by an industry structure dominated by vertically integrated utilities with a monopoly presence in transmission and distribution in their respective franchise service territories. At the same time, utility generation assets occupy a prominent position in this market segment. This industry structure raises two concerns over the ability of utilities to exercise both vertical and horizontal market power and thereby deviate from competitive pricing and output decisions.

A. Vertical Market Power

Control of transmission facilities by vertically integrated monopolies has the potential of foreclosing or impeding competition in the generation sector. Ownership and control of essential transmission facilities could confer a competitive advantage to utility generating assets to the disadvantage of rivals who require use of that infrastructure to deliver their output to the market. Recognizing this vulnerability our proposal includes an independent system operator subject to FERC jurisdiction whose operational control of the transmission system is functionally independent from the beneficial owners of transmission and generation. We regard as helpful the proposed changes at the federal level to establish open-access, comparable transmission tariffs. These two factors should substantially reduce, if not eliminate, the concerns of vertical market power arising from an integrated utility structure.

Some parties have argued for complete divestiture of transmission assets from the

owners of generation. We are not certain at this time if this is necessary. However, we will continue to monitor the situation as empirical evidence becomes available and consider further remedial actions that effectively separates the monopoly transmission facilities from the emerging competitive generation market we are attempting to foster by this proposal. We request comments from the parties on their view of whether separate legal entities are desirable or necessary.

B. Horizontal Market Power

Within the generation sector the investor-owned utilities' share of capacity represents a significant market concentration which may act to limit price competition. One of the central tenets of our proposal is that the market for the generation is potentially competitive. Our objective is to pave the way for the development of a fully competitive market where the benefits of that market are available to all customers. Any factor that may impede that development will have to be addressed.

We are in general agreement with the FERC and the Department of Justice concerns regarding the issue of market concentration and its potential impact on price competition. As noted in our overview, we are also aware of the circumstances that have arisen in the pool structure in England and Wales where evidence exists that the two largest generation companies have been able to coordinate pricing actions in order to increase bids into the pool. It should be emphasized that generation market concentration and the implications that may have on price competition threaten either a pool based or direct access regime. The threat to the integrity of the markets can arise in two distinct settings: (1) where the concentration is sufficiently large to thwart competition in the bidding of generation into the pool, and (2) where transmission constraints provide opportunities for exploitation of customers isolated from the competitive presence of other potential suppliers.

As we have previously noted, we are not yet in a position to assert with finality that either distortion will plague the dispatch and transmission functions which lie at the heart of our pool but we would be irresponsible if we did not voice our concern and our determination to prevent any such outcome. We expect the pool will receive bids from generation assets owned by independent power producers, municipal utilities, and both utility and non-utility out-of-state generators. However, we realize that the current concentration of ownership of generation capacity by Pacific Gas & Electric and Southern California Edison strongly implies market power. When exercised, market power distorts the competitive market by increasing prices above competitive levels. If this occurs, we must consider reorganization of the investor-owned utilities' generation assets.

Two strategies come readily to mind in seeking to preclude the threat of horizontal market power: divestiture and corporate reorganization. In a divestiture remedy we would order the sale of all or a significant portion of generation holdings found to be of a threatening concentration. In addition to creating additional market rivals in the form of these new owners, this strategy has the added advantage of reliance upon a market mechanism to both identify and quantify what are claimed to be stranded generation

assets. Less drastic is the alternative of ordering the spin of all or a portion of existing generation assets into corporate entities which would initially be owned by current utility shareholders. We invite comment on our perception of these horizontal market issues and whether remedial strategies should be considered after having obtained experience with the pool and its relevant market or addressed immediately.

V. Unbundling of Utility Transmission and Distribution Functions

Although FERC's Open Access NOPR²¹ does not require a corporate unbundling (selling off assets to a non-affiliate or establishing a separate corporate affiliate to manage transmission), it does provide for functional unbundling. A public utility must obtain transmission services (including ancillary services) for all of its new wholesale sales and purchases of electric energy under the same tariff with which it offers such services to others. Under FERC's proposed rule, transmission utilities would have to offer point-to-point and network transmission services, including ancillary services (scheduling and dispatch, load following, imbalance resolution, reactive power support and system protection), at separately stated rates. Functional unbundling will allow for competition among providers of ancillary services, increasing competitive options for generators, and removing incentives for the vertically integrated utility structure.

VI. Transition Costs

Our restructuring proposal moves from a regulatory structure in which utility generation assets are a part of the integrated monopoly to a pool structure in which many of these generation assets are disaggregated from the utility and subject to the competitive marketplace. In the new marketplace, some of these generation assets will be competitive and some will not. Other current utility generation assets – nuclear and hydroelectric facilities – will remain with the utility for now. It is impossible to know at this time whether the current utility generation assets are, as a group, more or less valuable now than after restructuring.

This broaches the issue of transition costs. To the extent that the set of utility assets are more or less valuable after restructuring of the market than under today's regulatory regime, how should utility shareholders or ratepayers be compensated for such changes in value due to that transition? Our philosophy is simple: We intend to honor past commitments with as little disruption to the competitiveness of the new market as possible, and consistent with avoidance of rate increases to any customer class.

To honor our past commitments, we will neither seek to abrogate settlements related to nuclear power plants nor to disrupt utility contracts with Qualifying Facilities. We will, however, encourage parties to seek to lower ratepayers costs in these regards. For utility assets subject to competition, we will allow compensation for the difference between market value and book value, either to shareholders or to ratepayers. To avoid

²¹Open Access NOPR RM95-8.

disruption of the competitive generation market, we will separate transition cost compensation from the pricing of energy through the pool mechanism. To avoid rate increases, we propose a method to collect transition costs fairly and equitably over time.

We propose that no transition cost compensation occur until the time the pool begins to operate, because that is the point when the effects of restructuring truly commence.

In order to compensate shareholders for transition costs related to uneconomic assets, it is necessary to develop a method to value the total uneconomic portion of these assets. There are three types of transition costs which need to be considered:

1. Generation assets:
 - Nuclear power plants
 - Other generating assets
2. Utility contracts with Qualifying Facilities
3. Regulatory obligations

We propose these three types of transition costs be added together for recovery through a competitive transition charge, as described below.

A. Generation Assets

Uneconomic asset costs comprise the largest component of transition costs, and are also the most difficult costs to estimate. Uneconomic asset costs are the difference between the book value associated with utility generation assets and the market value of that utility generation (assuming that the market value is less than the book value). Our hearings on transition costs revealed that the market value of utility generation assets is the most difficult component of the uneconomic cost equation for us to estimate. We have significant experience and accounting data pertaining to the book value of utility generation assets, but little experience or information on market valuation of these assets.

The market value of utility assets is, simply put, the net present value of the stream of market revenues resulting from electricity sales from utility generation assets. It appears to us that there are two fundamental approaches to determining the market value of utility generation assets. The first approach assumes that generation assets remain under ownership by the utility, in which case it would be incumbent on the Commission to determine market value through an administrative process. The second approach relies on divestiture of utility assets, in which case the market would provide an evaluation of market value through sale or spin-off of utility assets. Our chosen approach relies initially on the former approach, consistent with our proposal to ensure vertical disaggregation of utility generation assets. However, if these generation assets are eventually divested, we will be able to directly assess the market value of those assets.

Parties have suggested options for estimating market values through an administrative approach. One is to perform a one-time forecast of market electricity prices and determine the present value of market revenues for utility assets based on this price forecast. Another approach is to use an annual proceeding which uses actual pool

prices to determine actual market revenues of utility assets after the fact. While both approaches imply different distributions of risk and potential error, we believe that a blend of these approaches would provide the greatest benefit to all stakeholders.

Both approaches have advantages, but we conclude that the tremendous forecast risks associated with a one-time forecast of market prices involves intolerable risks for both electricity users and shareholders. We are also reluctant to use a single forecast because the outcome cannot be reconciled if the forecast proves to be inaccurate to the expense of any party. We note that estimates of transition costs provided in our transition cost hearings spanned a range of nearly \$40 billion, and that the breadth of this range hinged primarily on varying expectations as to the market price for power over a twenty five year time horizon. We further note that our hearings yielded no convergence among parties on which particular price forecast would be most appropriate. For these reason, we will not use a single forecast methodology for determining transition costs.

1. Nuclear and Hydroelectric Power Plants

As previously noted, under this proposal the investor owned utilities would retain ownership of their existing nuclear and hydroelectric facilities. In the case of Pacific Gas & Electric, this would include the utility keeping its purchase power obligation with its non-rate-based Diablo Canyon nuclear power plant. The utilities' retention of nuclear and hydroelectric assets is necessary due to the difficulty that would be entailed in trying to transfer the ownership and operation of these plants to another party because of the extensive and various licenses needed from federal and state authorities to operate these units.

Allowing the existing utilities to bundle their nuclear and hydroelectric generating units also provides a built-in revenue stream capable of meeting most if not all of the CTC obligations. There is a symmetry in bundling together the lower-priced hydroelectric resources with the higher-priced nuclear generating resources. It is hoped that the average rate of these two generating resources should be competitive with the prices expected to result in a pool, thereby minimizing or eliminating the need for any further CTC recovery from these resources.

This should be particularly true in the case of Pacific Gas & Electric, which has a significant amount of hydroelectric resources. Therefore our proposal asks for comment on if there is a need for any further CTC recovery for PG&E's purchase power obligations from its Diablo Canyon power and, if so, what is its potential magnitude. In its testimony, PG&E has offered to forego any CTC recovery if direct access is not completely phased in until the year 2008. With the combination of hydroelectric and nuclear assets, our proposal also asks for comments on whether there is any need for further CTC recovery for Diablo Canyon after the year 2004.

In the case of both Southern California Edison and San Diego Gas & Electric, the combination of their nuclear and hydroelectric facilities may still not be enough to obviate the need for transition costs (recognizing that SDG&E has no hydroelectric facilities). Therefore, any shortfalls would be classified as excess costs to be recovered through the

CTC charge. The Commission currently has before it an incentive ratemaking proposal for the San Onofre nuclear power plant (jointly owned by Edison and SDG&E). This proposal would alter the depreciation schedules, rate of return, energy pricing and allocation of operational risk for the plant between ratepayers and utility shareholders. There have also been discussions between interested parties to develop a similar proposal for Edison's share of the Palo Verde nuclear power plant. The Commission will resolve how these ratemaking proposals would affect the calculation and collection of the CTC charges when we decide other CTC issues. Once all CTC charges are collected from the nuclear power plants, the utility would continue to use its hydroelectric facilities as a low-cost source of power for its customer base. We request comment on the issue of the ratepayer benefit of low cost hydroelectric power being reserved solely for ratepayers after CTC charges end for nuclear facilities.

2. Non-Nuclear and Non-Hydroelectric Power Plants

In addition to their nuclear and hydroelectric power plants, utilities also own and operate a large number of fossil-fueled and geothermal power plants. In testimony before the Commission, many parties, including some of the utilities themselves, believe that these plants would be able to compete in a competitive marketplace for generation. These power plants also comprise a relatively small portion of each utility's current rate base. Therefore, it appears that there should not be any significant amount of uneconomic assets associated with these plants.

Additionally, it is possible that each utility may end up divesting, through a spin-off or sale, a sufficient portion of these power plants in order to mitigate any market power concerns. For those plants that the utility sells off, the sale price relative to book value would determine the level of the CTC. If the plant sold for less than book value, the shortfall would be recorded into the CTC account for collection. If these plants sold for above book value, the surplus would be credited against any amounts in the CTC.

Nonetheless, the proposal would still provide some CTC recovery for those non-nuclear and non-hydroelectric units that the utility still retains ownership. This helps to ensure financial integrity and an orderly transition to a competitive market. It also helps to reward ratepayers should these plants prove to be extremely profitable in the competitive marketplace. Just as utility ratepayers are incurring the costs of uneconomic assets, they should also enjoy the benefits of those utility assets that prove to be economic in the competitive marketplace.

The proposal would set a floor and a ceiling on the rate of return for the amount of rate base for any of the utility's generation assets (other than nuclear and hydroelectricity) for which the utility retains ownership. Our initial proposal is to set the floor at 150 basis points below the utility's authorized rate of return and the cap at 150 basis points above. Thus, if a utility's current rate of return is 10%, the utility would not receive a CTC, adjusted each year, unless the rate of return for its power plants was under 8.5%. Conversely, if the utility earned above 11.5% on its power plants, the surplus would be credited toward reducing the CTC. We request comments on the appropriateness of

these bands.

3. *Divestiture Calculation Methods*

When the utility divests its assets, the market price for those assets can be directly observed and used to determine transition cost charges.

If the utility chooses an auction approach to divest some or all of its generation assets, the market value for these assets would be readily apparent. The market value for each asset would simply be the amount of money paid for the asset by the highest bidder. Or, if the utility chooses to match the highest bidder and keep the asset in an affiliate, the matched price would be the proxy for the market value. Therefore, the change in value would be the difference between the total book value of all the auctioned assets and the cumulative bid total of all the auctioned assets.

This formula allows us to net the bids above book value against the bids below book value. Our one concern is that the utility would have an incentive to "game the process" and engineer a below-market bid. The impetus would be that there is a clear inverse relationship between the bid price and the transition cost level; the lower the bid, the greater the transition cost level. We invite comments on how a proper method for an auction should be designed to yield the highest reasonable bids.

If the utility chooses to spin off assets, generally speaking the market value can be determined by multiplying the stock price of the generation assets after the spinoff by the number of shares. The difference between this market value and the book value of the undepreciated generation assets would be the net difference in the value of the assets due to the spinoff.

The market value of the spun off generation assets can be directly identified by observing the stock price of the spun off companies. However, because of stock price fluctuations, it is appropriate to observe the stock prices not on any particular day, but over a period of time. A clearer sense of the market value might be to observe the average stock prices over, for example, the first 30 or 100 trading days after the completion of the spinoff. Parties should comment on an appropriate methodology.

As with a spinoff or an auction, if a plant is shut down because the utility believes it would be uneconomic in the new restructured electricity market, there are likely to be losses associated with this action. Generally speaking, the Commission has allowed the utility to amortize the remaining undepreciated book value of the plant in the revenue requirement over a Commission approved number of years (without a rate of return), minus any imputed salvage value. Other shutdown costs are also normally included in the revenue requirement, and would be netted against the salvage value. Simply put, the level of uneconomic assets in this situation would be the difference between the book value and the net salvage value of the plant.

B. *Utility Contracts With Qualifying Facilities*

Under our proposal, all existing QF contracts will continue to be honored by the

remaining electric distribution utility. The utility will retain its obligation to administer its contracts with QFs in the best interests of its customers for whom it provides generation procurement services. We propose that the utility continue to purchase power pursuant to the existing contracts and pass on in the wholesale portion of its rates only that portion of the purchase power costs which is at market value. This would be accomplished by imputing the pool price as the market price for QF power. Costs above market will be collected as part of the transition cost calculation. The amounts collected will be calculated as the difference between the sum of contract revenues and the actual imputed market revenues computed by applying the pool price times the energy purchases.

Utilities and QFs may already have some incentive to restructure contracts to more closely match the operational demands of either party. We believe that given the trading element of our proposal on statewide renewable targets, both QFs and utilities will find added value in contract restructuring. However, we propose allowing the utility to keep 20% of any renegotiations of capacity payments as an appropriate incentive to further encourage the utility to renegotiate the QF contracts in the ratepayers' interest. Eventually, after some experience with the pool is gained, we intend to revise our short run avoided cost methodology for QF energy payments in a manner based upon the pool's price.

We propose to allocate 50% of the future benefits associated with declining QF contract expenses to finance acceleration of the uneconomic cost collection of QF contracts. We seek comments on the proper allocation.

C. Regulatory Obligations

Regulatory obligations include those costs related to generation which the utility is required to incur under the current regulatory system, but which would not be appropriate to impose in the new competitive generation marketplace. Other similar obligations include outstanding ECAC and ERAM balancing account balances.

Utilities have proposed that various other regulatory obligations currently in rates be considered for compensation, such as post-retirement benefits other than pensions (PBOPs). Costs related to PBOPs are not directly identifiable as generation-related. We will not allow these or any other costs which are not directly related to generation to be included in transition costs. We do not include any costs related to public purpose programs in this transition cost; we describe our methodology for collection of such costs below.

For those regulatory obligations we do allow as transition costs, we will allow full recovery of such obligations. These obligations have already been approved as reasonable in rates. It is thus appropriate that shareholders be compensated for those costs required under Commission regulation. We seek comments regarding which specific regulatory obligations should be allowed in transition costs, identifying each by FERC account.

VII. The Competitive Transition Charge

Our objective is to collect transition costs in a competitively-neutral manner, in a way that is fair to various classes of ratepayers, and in a manner that does not increase rates for any customer class solely due to the existence of transition costs. The charge to collect transition costs has been referred to as the competitive transition charge.

The objective of competitive neutrality can best be achieved by separating the transition cost charges from the charges related to energy generation and delivery. In the future competitive energy generation market, the customer will be able to choose an energy supplier for financial or physical contracts. A major factor in making this choice will be the prices of the various competitors. Customers will need to be able to compare their current energy charges with prices offered by other firms. In a pool environment, knowledge of unbundled energy costs promotes efficient use of resources. Therefore, it is appropriate both now and for the future to avoid combining a non-energy charge such as the transition cost charges with the energy charge.

A. Allocation of Transition Cost Charges

Fairness to ratepayers means both a fair allocation among ratepayer classes, and that those customers who use more utility services should pay more in transition cost charges. Allocation among ratepayer classes can most simply and fairly be accomplished through adherence to the equal percentage of marginal cost (EPMC) cost allocation methodology currently used for revenue requirement allocation between classes. We propose to impose the transition cost charges as an equal percentage surcharge on the bill of each customer of the utility providing electric distribution. We believe that these are retail costs fully subject to our jurisdiction. We ask for comment on whether, in light of our overall proposal, this collection mechanism is appropriate and within our jurisdiction.

B. Time Period for Collection of Transition Cost Charges

It is neither practical, nor equitable, to impose the transition cost charges only in one year. The total level of compensation each year would include transition costs derived from all of the methods discussed above. Some of these methods produce dollar amounts which reflect only a single year, while other methods produce dollar amounts that represent the full future effects of the transition. Therefore, it is necessary to determine a method to combine these amounts so that a fair competitive transition charge can be assessed.

Since a major objective of this proceeding is to lower energy rates, we want to avoid excessive transition cost charge levels in the short term. At the same time, we are confident that our new industry structure will lead to lower rates, independent of the transition cost charge level. Therefore, we propose that the transition cost charges be imposed through a method consistent with the current rate level, but which allows

ratepayers the opportunity to reap the benefits of lower generation costs from the pool.

The transition cost charges would be collected for the number of years required to fully collect all transition costs. An account would be established for each electric distribution utility to track remaining transition costs. Some transition costs would be front-loaded and include the total net present value of the transition costs, such as with auctioned assets (either transferred to another firm or re-established in a utility affiliate). Other transition costs would accrue yearly, such as with QFs. The total level of the transition cost account would fluctuate over time, until all costs are recovered.

We request comments from parties on specific suggestions for implementation consistent with these principles.

VIII. Public Purpose Programs And The State's Resource Investment Goals

Traditionally, the Commission's job has been to set rates for utilities based on reasonable costs to provide service, plus an opportunity to earn a fair rate of return on the non-depreciated investment. Since the 1970s, the California Legislature has enacted various laws which require or allow the Commission to approve certain reasonable costs incurred by electric and/or gas utilities, beyond just the traditional costs of providing service, in order to promote certain public policies. Other laws have also been enacted which require the Commission to reallocate rate responsibilities among customer classes in specified ways. Under the traditional monopoly utility structure, this approach allowed the Legislature and the Commission to implement certain public policies, with the funding coming from utility customers. The utilities carried out these public purpose programs. All utility customers contributed to funding these programs.

As a first step, we propose the establishment of separate line items on customer bills for the programs discussed below which have clearly identifiable costs. Customers will therefore be able to determine the amount their bills contribute to these efforts.

In this proposal, we propose a two track approach to sustaining these programs. First, we present interim strategies designed to continue implementation of legislated programs. Based on the information received to date, this interim approach likely may not be able to sustain all of these public purpose programs over the long run, as the provision of electric services becomes more competitive. Therefore, as a second track, this proposal presents some long term strategies for the Legislature's consideration which have the potential to better accomplish the goals set forth in the Public Utilities Code than continued reliance on utilities for funding and implementation. These approaches also respond to issues raised in ACR 143.²²

A. Public Purpose Programs

Programs which are in the public interest have a continuing role in the future. In

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Assembly Concurrent Resolution 143, Sections (b)(5), (c)(4), (c)(7), and (c)(8).

the near term, the utilities which have traditionally implemented these programs will continue to do so in accordance with relevant Public Utilities Code Sections. While these programs continue to be important, some may be more appropriately delivered by entities other than utilities. Both short and long-term approaches for sustaining these programs in a more competitive market are discussed below. Where it is recommended that responsibility for implementing programs be modified, the Commission will work with the Legislature to initiate necessary legislation to modify Public Utilities Code sections and propose alternative mechanisms for achieving the public policy goals of these programs.

1. *Economic Development Programs*

Section 740.4 of the Public Utilities Code allows recovery of costs for programs and incentives related to economic development. Section 740.7 allows recovery of costs for discount energy rates for federal military bases facing closure. In implementation, these provide that utilities may charge lower rates in certain geographic areas in the state, as directed by the Legislature. Revenue shortfalls created by the utility because of these special rates for certain areas currently must be recovered from other customer classes. This proposal does not recommend any change to the statute at this time, as economic development is vital to California's well-being. The Legislature may want to keep these programs in mind, however, as it considers this and other electric restructuring proposals. For example, the Legislature may find that supplemental economic development activities are warranted for certain development zones, but that these efforts would be funded by taxpayers.

a. *Special Rate Programs*

Various Code sections allow the utilities to provide special services, rate discounts, or special rate provisions for specific customer classes (for example, interruptible rates). These programs must legally be maintained for the near future at current levels. We believe that wholesale competition will provide the necessary impetus to lower rates to all customers, minimizing the need to pursue special rates for certain customers or customer classes. We are concerned about the cost-shifting inherent in these special rates and believe that their need should be reexamined in light of the more competitive environment. We propose that implementation of load retention activities would be at the discretion of the utility and funded by utility shareholders or by any other entity interested in conducting these types of activities using their own funding.

2. *Residential Customer Assistance Programs*

There are two categories of assistance programs for residential customers. One is the baseline usage program, which is intended to send a price signal to consumers about how much energy they are consuming, encouraging them to use less and avoid the higher per unit charges that ensue when a baseline allowance is exceeded. The second

are of residential customer assistance is directed at low income ratepayers and consists of the CARE (California Alternative Rates for Energy) program and low income weatherization services.

a. Baseline Programs

Public Utilities Code § 739 requires the Commission to designate a baseline quantity of gas and electricity which is necessary to supply a significant portion of the reasonable energy needs of the average residential customer. Section 739 also requires higher baseline levels for residential consumers with special requirements (such as medical support). Baseline rates are determined by how much energy one consumes, measured in kilowatt hours for electricity, and therms for gas. Baseline rates therefore are directly related to the energy procurement function of the utility.

Under a pool model, the utility will remain the procurement agent for all customers. The Commission can continue to require the utility to offer baseline rates to residential customers in the near term. If the future allows for retail choice and more customers move away from the utility as their energy provider, fewer customers will be eligible for baseline rates unless there is a specific requirement for suppliers to offer them. At that time, we would need to reconsider how to implement this program.

b. Low Income Ratepayer Assistance

Section 739.1 provides that the Commission establish a "program of assistance to low-income electric and gas customers, the cost of which shall not be borne solely by any single class of customer." This program is called CARE (California Alternative Rates for Energy) and is currently implemented by the Commission as a 15 percent discount on energy rates for qualified low income customers.

Costs for the CARE program currently are recovered from all customer classes except streetlighting. Under a pool model, the Commission can continue to require the utility to provide this discount; collection of the costs for these programs from all customer classes would be similar to today. A cents per kWh component of each customer's rate currently goes to fund CARE discounts. The funds collected could be directed to an organization similar to the Universal Lifeline Trust Fund that is currently used for telephone service. For the near term, this cost can be identified as a line item on all customers' bills.

Section 2790 directs the Commission to require utilities to perform weatherization services for low-income customers. Like the CARE program, these low income weatherization programs should be identified as a separate line item on the utility bill. These programs have a clearly identified funding authorization which is currently determined in each utility's General Rate Case. This charge can be collected from all customer classes as part of the distribution charges. In the near term, the Commission will continue to authorize these programs and require the utilities to provide these services in a least-cost manner to low income customers. Over the long run, there may

be existing state agencies or private entities specifically charged with providing a variety of services to low income customers that might be more appropriate to administer these programs, along the lines suggested by the Working Group under the statewide agency/consortium option. The Legislature should consider shifting these responsibilities to entities other than the utility in order to assure that low income citizens have the same opportunity to receive these services, regardless of who provides them with energy service. The Commission could continue to utilize the utility as a collector of this charge, but instead recommends that the funding levels for these programs eventually be determined by the Legislature.

3. Utility Procurement Practices

Implementing Public Utilities Code Section 8281 et seq., General Order (GO) 156 initiated the Women, Minorities, and Disabled Veterans Business Enterprises (WMDVBE) program in 1987, and established goals for regulated utilities governing procurement practices. The goals encourage awards of not less than 15% of all contracts for goods and services to minority-owned businesses and not less than 5% to women-owned businesses. The General Order has been expanded to include disabled veteran-owned businesses. By the end of 1993, utilities had made significant progress toward these goals, and in some cases, had exceeded them.

The Commission will continue its WMDVBE policies in the restructured electric services industry as they apply to regulated utilities. The utility will continue to be held to the goals established in GO 156, and to the extent that it is involved in generation procurement services, GO 156 will apply as it does today. To minimize unfair competitive advantages, the Legislature may wish to consider the additional options (i.e., expand the WMDVBE requirements to all providers to the pool or eliminate them altogether) that were identified by the Working Group.

4. Low Emission Vehicle Programs

Public Utilities Code Section 740.2 requires the Commission to encourage energy utilities to conduct research on electric and natural gas vehicles, and Section 740.3 requires the Commission to implement policies to promote and facilitate development of low emission vehicles. Section 740.3 also provides for the recovery in rates of costs which are determined to be in the ratepayers' interest. The Commission has fulfilled the requirements of these Sections. In D.93-07-054, the Commission established funding guidelines, and the Commission is currently evaluating proposals of the four large energy utilities for funding through the year 2000. Electric utility involvement in LEV programs is primarily focused on building an infrastructure which supports widespread use of alternate fuel vehicles (e.g., refueling and recharging stations).

In compliance with the existing Public Utilities Code Sections, the Commission will continue implementing its adopted policy on LEV programs. The scope of utility involvement in LEV development, an issue raised by the Working Group, will be

addressed in the Commission's pending proceeding. The Commission must be sure to provide comparable treatment of these costs for both electric and gas utilities. It is also appropriate for the Legislature to review whether LEV funding should continue, and if so, whether it should be derived from a charge on all utility customers or from some other source or mechanism.

5. Research, Development, and Demonstration

The rules and policies governing conduct of ratepayer funded research by regulated electric utilities are present in Public Utilities Code Section 740.1 and Commission Decisions 82-12-005 and 90-09-045. The Public Utilities Code governs the aspects of research programs the Commission should consider when evaluating such programs for funding and the types of research which the Legislature finds appropriate for the utilities to pursue. The Commission decisions augment the Code provisions with guidelines that further articulate the goals of utility research programs.

In a more competitive market, individual firms will have a vested interest in pursuing research which improves their strategic position. This will be true for both utility and non-utility entities. This proposal allows continued ratepayer funding for research that is related to continuing monopoly functions, but not other competitive interests. In anticipation of full competition in the generation sector, the research functions of the utility should be reduced and tailored to support regulated functions. Research that has traditionally been conducted by utilities and which serves a broader public interest (public goods research), should not be lost in the transition to a more competitive environment.

We propose using the Consortium/Public Authority option identified by the Working Group as the way to collect and administer these funds. The utility should collect funds from all customers in the form of a surcharge separately identified on each customer's bill, and such funds would be directed to an independent agency, new or existing, identified by the Legislature for dissemination to research providers. The surcharge would be calculated to generate funding at current or historic levels. The surcharge amount and duration also could be reviewed by the Legislature in the near future, perhaps after three years of being in place.

Any remaining research conducted by utilities, i.e., not including public goods and generation, should continue to be funded at current or historic levels and should be accounted for in rates. In light of recent efforts to reduce operating costs through reductions in research budgets, it may be appropriate to revisit the appropriate level of funding in the relevant PBR proceeding. In addition, the utility may have strategic reasons for conducting research, as would any competitive business; this proposal is not intended to foreclose or inhibit the shareholders from pursuing such research.

In order to implement this proposal, Public Utilities Code sections 740.1, 740.2, and 740.3 must be modified to reflect the changing function of the regulated utility. Similarly, existing policies as expressed in various Commission decisions will have to be modified or eliminated.

B. Resource Investment Goals

Of the Public Utilities Code provisions governing utility resource and energy efficiency investment goals, the only Code section which remains an ongoing consideration under any market structure is section 701.1. Other Code sections have already been implemented or are applicable only in certain situations which will not endure under a pool approach. We also recognize that there are several bills before the Legislature which may affect the Commission's oversight of utility resource planning activities. The short-term strategy presented here is consistent with section 701.1 which states, "The Legislature finds and declares that...a principal goal of electric and natural gas utilities' resource planning and investment shall be to minimize the cost to society of reliable energy services...and to improve the environment and to encourage the diversity of energy sources through improvements in energy efficiency and the development of renewable energy sources...." In addition, "The Legislature further finds and declares that...electrical and natural gas utilities should seek to exploit all practicable and cost-effective conservation and improvements in the efficiency of energy use and distribution that offer equivalent or better system reliability, and which are not being exploited by any other entity."

1. Renewable Generation

Absent legislative changes, renewable generation requirements should be met for the near term as follows. The utility will continue to serve a procurement role for all customers through purchases from the pool. The Commission does not intend to undertake future cycles of the Biennial Resource Plan Update. Given our proposal to address QF contracts, and the fact that a significant portion of the QF capacity is renewable, it is not necessary to impose interim targets for renewable purchases on the utility. Alternatively, the Commission could establish minimum resource diversity targets (for example, based on the current resource mix) for utility procurement from the pool.

For the long term, this proposal suggests an alternate strategy to ensure the sustainability of state resource diversity and energy efficiency efforts. The appropriate level of resource diversity for California should be determined by the Legislature, taking cost, environmental benefits, and fuel diversity into account. The Legislature should consider establishing targets for renewable resources, expressed as a percentage of total generation purchases throughout the state. This approach was identified by the Working Group. This target could be imposed on either purchasers from the pool or on suppliers of electricity. The renewable requirement could be traded among customers or suppliers, as long as the requirement is met in aggregate. In this respect, the renewable requirement would be similar to tradeable permits programs, for example the acid rain program adopted by Congress in the Clean Air Act Amendments of 1990, and the Regional Clean Air Incentive Market adopted recently by the South Coast Air Quality Management District. This requirement may be best implemented as a supplier

requirement. We encourage parties' comment on this point.

2. Energy Efficiency

In the near term, the Commission should continue to authorize funds to implement energy efficiency programs, at levels comparable to current or historical funding. The Commission should retain a modified Electric Revenue Adjustment Mechanism (ERAM) to account for energy efficiency impacts, as long as the utility continues to provide energy efficiency services. These costs should be identified as a line item on each customer's bill.

With respect to implementation of energy efficiency efforts, existing utility programs can be divided into two types: those that are customer service in nature and those that are designed to transform the market. One of those customer services is assistance with managing energy use. Recently, the utilities have begun to offer these types of services as a separate for-profit business function using shareholder funding (e.g., ENvestSCE or TEEM). While the Commission has not yet determined the impacts of these programs on the development of a competitive energy efficiency marketplace, these efforts are likely to continue as a means of retaining customer loyalty. These types of for-profit services should not require continued ratepayer involvement in the future.

However, programs which transform the market for energy efficient products, for example by increasing building or appliance standards or educating customers about ratepayer funded programs, are unlikely to be naturally provided in a competitive market. It is still appropriate to provide funding for these types of energy efficiency efforts which serve the broader public interest.

For these reasons, the two-track approach outlined in the Working Group report is an attractive one, with consideration of alternate funding sources for market transformation activities. Ideally, the Legislature could establish the appropriate statewide level of funding for these programs and incorporate them into the General Fund requirements or develop a tax credit program for participants. This would ensure that consumers throughout the state receive consistent signals. The funds allocated for these programs could be administered by expanding the role of an existing state agency or developing a task force or trust fund to oversee distribution of the funds. Alternately, costs for these programs could be collected as a fee on electric consumer bills, similar to the way the CEC fee is collected. The Commission should reexamine the funding of energy efficiency programs of the gas utilities in light of this proposal for electric utilities. This two track approach best balances the legislative intent expressed in § 701.1 with the intent of this proposal to minimize government interaction in business decision-making.

C. Public Health and Safety

Public health and safety programs relate to utility workers and customers and the general public. Public Utilities Code section 451 generally embodies the Legislature's policy. The California Occupational Safety and Health Administration (Cal-OSHA) and

the efforts of the U.S. and California EPA also contribute to protecting public health and safety. As noted in the Working Group Report, health and safety issues cover generation and transmission and distribution systems. The utility should continue to be responsible for meeting all relevant codes and regulations as they relate to the regulated monopoly functions of the transmission and distribution or any utility owned generation assets. To the extent that the Public Utilities Code does not reflect the modified functions of the utility, the Legislature should consider modifying the Code. To the extent that current Commission General Orders relate to transmission and distribution facilities, some modifications may be necessary to reflect possible shifts in jurisdiction between the Commission and the FERC.

IX. Environmental Protection

Throughout our deliberations, we have sought to maintain environmental protection and have found common purpose with several environmental groups who also see the power of competition to expand the markets for "green" energy sources and services. We acknowledge that some environmental groups are concerned about the potential for increased energy consumption, intended and unintended in a competitive marketplace, to reverse the gains the state has made in energy efficiency and environmental quality. The constructive and thoughtful suggestions made by these groups and by the Working Group to achieve our goals of competition and choice in the electricity marketplace have been very useful to us in refining our proposal.

We also wish to point out that by making real-time meters and time-of-use rates available to all end users, we expand the customer's ability to manage consumption to maximum advantage including the environmental benefits of flattening system demand peaks. Further, the divestment of generation which we suggest will benefit the marketplace for "green" energy sources and services by severing the tie between the utility's profit potential and investment in its own generation.²³ The Working Group Report's review of the environmental protection issues which need to be considered under different reform scenarios helped to focus our analysis of this important goal which is affected by so many components of our undertaking. Option 3 in the Working Group Report comes closest to embodying our resulting vision in this proposal, although we do not view our approach as an assumption of responsibility for environmental protection policies and programs by non-energy agencies. Rather, these agencies already possess effective responsibility and powers to which this Commission will continue to honor and defer. As suggested by the Working Group, changes in statute, regulations and planning strategies may be required in order to more effectively focus the current regulatory framework for environmental protection. Such efforts have been ongoing at all levels of government, which can be harnessed to address the specific needs resulting from this

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Center for Energy Efficiency and Renewable Technologies, Comments of June 24, 1994, at p. 11.

Rulemaking. We will continue to work with the Legislature and other agencies to support these efforts.

A. Compliance with the California Environmental Quality Act (CEQA)

In December of last year, we committed to determining the applicability of CEQA when we adopt a policy for restructuring. Therefore, in this Proposed Policy Decision, we ask for input into our decision-making on this issue. Parties are asked to respond to the following questions:

1. Do any of the policies proposed herein constitute a "project" subject to CEQA, as defined in Public Resources Code §21065 and interpreted by the courts? Comments should specify which policy elements, if any, are believed to trigger definition as a CEQA "project," as well as cite authority for the party's analysis and conclusions.
2. Do any changes proposed by the party to this Proposed Policy either trigger definition as a CEQA project OR remove such definition? Again, comments should specify which changes, if any, are believed to affect definition as a CEQA "project," as well as cite authority for this conclusion.

Parties will have the opportunity to respond to these comments in their Reply Comments and are urged to do so.

Parties are also referred to our discussion of this issue in D.94-12-027, at pp. 20-22 for a recap of our overall concerns and considerations relative to this determination. As stated therein, "... any policy statement offered by the Commission prior to CEQA review is tentative in nature. The Commission will make no irrevocable decisions regarding the nature of the electric restructuring effort without first having completed the CEQA process." The first step in this process is a preliminary review to determine whether CEQA is applicable, which we are initiating in this Proposed Policy Decision and intend to complete in our Final Policy Decision. Should we determine therein that CEQA is applicable, we will undertake the second step in the CEQA process: the decision whether to prepare an Environmental Impact Report or Negative Declaration, which is based on an "initial study" as prescribed in the CEQA Guidelines. Thus, any milestones proposed or adopted for this electric restructuring proceeding are tentative, pending our determination of CEQA applicability and the completion of any further review prescribed by law.

X. Implementation of Our Restructure Proposal

We envision three phases for the implementation of our restructuring proposal. For clarity we have outlined these phases in attachment 1. The preliminary phase focuses on the steps and procedures to establish a wholesale pool and independent system operator, as well as the disaggregation of the utility's generation, transmission and distribution assets. In this phase, we would also begin the steps related to transition costs, public purpose programs, real time pricing, and incentive mechanisms. A more

detailed description on these issues and how we propose to address them is presented elsewhere in this document.

In Phase I, the wholesale pool would begin operation, along with the development of virtual direct access. There may also be further disaggregation of generation assets. We anticipate the emergence of new generation companies, ancillary service companies, and utility affiliates, as described in our proposal. We also expect completion or further progress on issues from the preliminary phase. In Phase II we expect continued market development, and permit physical, bilateral contracts to occur, provided that certain conditions have been met.

In Attachment 1 we have identified and grouped items into eight categories which we regard as essential requirements for implementing our proposal. The items listed in the different categories must be implemented sequentially or may be implemented simultaneously. We also note that we are not specifying a time element for each item in this outline, but simply providing an outline of what we believe to be the necessary steps for implementing our proposal. We ask parties to comment on our outline for implementation.