MANIFESTO ON THE CALIFORNIA ELECTRICITY CRISIS

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PREAMBLE

We, the undersigned, an ad-hoc group of professionals with experience in regulatory and energy economics, share a common concern with the continuing turmoil facing the electricity industry ("the industry") in California. Most of us endorsed the first California Electricity Manifesto issued on January 25, 2001. Almost two years have passed since that first Manifesto. While wholesale electric prices have moderated and California no longer faces the risk of blackouts, in many ways the industry is in worse shape now than it was at the start of 2001. As a result, we continue to have a deep concern with the conflicting policy directions being pursued for the industry at both the State and Federal levels of government and the impact the uncertainties associated with these conflicting policies will have, long term, on the economy of California.

We have once again convened under the auspices of the Institute of Management, Innovation and Organization at the University of California, Berkeley, to put forward our own ideas on a basic set of necessary policies to move the industry forward for the benefit of all Californians and the nation. We again do not pretend to be "representative." We bring, however, a very diverse range of backgrounds and expertise.

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The Crisis and Its Shock Waves

The California electricity crisis sent shock waves felt far beyond the electricity markets in the western United States. Public officials, academic experts, and electricity customers across the nation and abroad reacted with incredulity to the sustained high prices, shortages and blackouts that afflicted California, and the rapid descent into insolvency of its two largest electric utilities. In response to the crisis, the State intervened in the market place, underwriting huge new obligations and encumbering the State with substantial costs for many years to come. Price fluctuations may have been amplified by the individual and sometimes dubious market strategies of some of the generators and marketers. Much of this behavior is now being investigated.

The electricity crisis engendered a financial crisis as a major utility went into bankruptcy and the electricity trading industry went into near collapse. As a result of the California crisis and its aftermath, the confidence of electricity reformers throughout the world has been shaken and initiatives to introduce competition in other jurisdictions have been delayed, which in some circumstances may be advisable.

The crisis began when California suffered a remarkable confluence of adverse circumstances that would have strained any electricity system. In 2000, summer heat waves, inadequate generation capacity and shortages of critical hydroelectric power, combined with flawed market rules and strategic behavior, led to unanticipated high wholesale spot prices during the peak summer months. This situation was followed by skyrocketing prices for natural gas, the fuel needed for the generating capacity the industry was relying on to make up the lost hydroelectric output. High natural gas prices combined with concerns regarding the solvency of the State's two largest utilities, and the issues identified above, drove wholesale prices even higher during the historically off-peak fall and winter months. With California's major utilities unable to pass these costs onto their retail customers, this long period of high spot prices was financially disastrous for them. This outcome would have been mitigated, however, if the California utilities were not relying on the spot market for over 50 percent of their electricity supplies.

By the fall of 2000, the resulting financial crisis facing the State's two largest electric utilities called for immediate and decisive governmental action. Because of regulation, the utilities were not allowed to raise prices to recoup their higher costs. Because no timely, or adequate action was forthcoming, at either the State or Federal levels, the State's two largest electric utilities became insolvent. With the utilities no longer financially able to purchase power for their customers, the State replaced them as the main buyer of electricity in the marketplace. Faced with extremely high spot market prices and insolvent utilities, and with limited experience in buying electricity, the Department of Water Resources (DWR) was ordered by the Governor to embark upon an immense, long-term commitment to electricity contracts to reduce the State's reliance on the spot market.

The First Manifesto strongly advised State officials not to follow this procurement strategy, given the volatile and high prices in the electricity markets at the time. A little more than a year after these contracts were signed, there is growing concern about the level of take or pay commitment made by DWR and the level of risk premium implicit in those contract prices. The end results are that California's major electric utilities consumers' rates now stand 40 percent higher compared to the level at the start of restructuring, the level of State regulation is increasing instead of decreasing, and utilities and independent power generators struggle for solvency amid a maelstrom of acrimonious litigation.

It did not have to be this way. Many experts and the first Manifesto warned of the critical dimensions of the crisis and offered useful prescriptions for reducing its damage. These warnings were largely ignored.

Irrespective of the policy errors of the past, California must move ahead to reassemble a functional set of electricity oversight rules and policies. To date, little has been accomplished. Litigation and recriminations about the crisis are absorbing a tremendous amount of attention and contributing little to forward-looking solutions. Wholesale market reforms are being actively resisted by some California regulators and other stakeholders, while only vestiges of the competitive retail market remain -- in the form of a few direct access customers.

Not all of the shortcomings belong with public officials. The facts may show that the trading strategies adopted by some of the participants in California's electricity and natural gas markets contributed to the increases in spot prices. These firms may have violated their fiduciary obligations to their shareholders and quite possibly broke the law. Lastly, their actions have contributed to delay in the important goal of market deregulation.

In the months ahead, critical public policy decisions will soon be made that will shape the future of California's electricity industry. We have come together again with the strong belief that the California crisis reflects the consequence of flawed regulatory design and of misguided decision making at the time of the crisis, rather than a result of any inherent inability of electricity markets to work. Therefore, our purpose is to affirm key principles and reform opportunities that we all agree must not be lost.

KEY PRINCIPLES AND REFORM OPPORTUNITIES

1. Rely on Markets Whenever Possible

There is a new conventional wisdom that blames the electricity crisis on "deregulation," and argues for comprehensive governmental control as the solution. That assertion draws a lesson from "facts" that aren't true. Most of the economic harm due to the crisis could have been avoided if laws and regulations had allowed utilities and customers to protect themselves from market risks. In particular, economic losses due to the crisis would have been greatly reduced if the utilities had not been required by regulation to rely on the spot markets for over 50 percent of their supplies. Regulations established by the State and the PUC discouraged the utilities from entering long-term power purchase contracts to cover their electricity needs, needs that were created by the power plant divestitures that the California Public Utilities Commission and other

market participants believed would assist in establishing wholesale market competition. However, when spot prices went through the roof, the utilities were not allowed to recover their costs from ratepayers due to concerns about the short-term political consequences.

What matters now is to distinguish between situations where regulation is necessary to control monopoly-type behavior from other situations where market decisions can be successfully delegated to investors and consumers, as is the case in countless other industries. Where market forces can be harnessed, private arrangements will advance consumer welfare in electricity. Where regulation is necessary, it should be limited only to those functions markets can't perform efficiently. We elaborate below on critical areas in which California's energy future desperately requires the discipline of market forces, while acknowledging that careful market design is very important (wholesale electricity markets cannot design themselves), and that transitional market protections such as bid caps may be desirable to address market power concerns and restore public confidence in reforms.

Thus, our first prescription is an affirmation. We believe that California will compound policy errors if it swings back to comprehensive governmental command and control of the electricity industry. Restructuring was an attempt to escape the past costs of such interventionist government policies and to harness competition for the public benefit. Despite the recent experience, we believe that the development of competitive markets should still be vigorously pursued.

2. Rely on Competitive Procurement to Meet California Electricity Needs

California will benefit if electricity generation is provided by unregulated producers. A competitive unregulated industry will minimize costs and bear investment risks more effectively than any regulated monopoly or government owned generating facilities.

The generation of electricity is not a natural monopoly. Generation is inherently competitive, and should be recognized as such by market rules governing the industry. Any sizeable electricity market can support dozens of individual power plants of efficient scale. Entry can also be facilitated with rules that encourage new investments while protecting consumer and environmental interests. The operation of these power plants can be coordinated over the electricity grid by an independent systems operator without requiring the control of a single owner. Technology is also expanding producers' options further through distributed generation and micro generation.

History has shown that the economic regulation of potentially competitive industries often raises costs and distorts the industry to the detriment of consumers and the economy. Government has no unique expertise in building and operating power plants to outweigh the inefficiencies associated with government ownership and operation. Assuming a reasonable set of market rules, reliance on investor owned generators, exposed to market discipline and private responsibility for errors and losses, is better than the alternative of cost-based regulation of generation.

Private participation and investment in the California electricity market will be more readily forthcoming if the existing uncertainties about market policies, State purchasing commitments and the protracted litigation revolving the 2000 California energy crisis are resolved. The State would benefit from rapidly resolving all those outstanding issues. Although litigation takes its time, the State should promptly signal to potential investors its determination to remove itself from intervening in a properly functioning marketplace. Agreements on new market rules, improved governance and organization for the dispatch center and the restoration of the financial health of the State major utilities would substantially improve the investment climate in California, and open the way for regenerating private sector participation in its energy sector.

3. Clarify Jurisdiction of State and Federal Agencies

Electricity knows no political boundaries. The need for coordination of state, regional and federal policies should be a paramount objective of all states in the nation. In a Federal nation such as ours, conflicting policies naturally occur. California, however, may be paying the price of lack of policy coordination driven by institutional jurisdictional divisions and political turf battles.

It is fundamental that the crucial issues be identified and resolved so as to move forward with restructuring the state's electricity sector. Two issues are fundamental here. First, the conflicting assertions of jurisdiction by Federal Energy Regulatory Commission (FERC), the California Public Utilities Commission (CPUC) are delaying the resolution of key aspects of reconfiguring the insolvent utilities and restructuring the electricity market in California. The financial health of California's major electrical utilities will have to be restored before wholesale energy providers will contract with them. This crucial step is necessary for the utilities to become once again viable energy providers to retail customers, thereby allowing the State to withdraw from that role.

The questions of who pays for the large sunk costs created by the crisis has to be separated from how to create viable energy providers, empowered to purchase energy for California's consumers. These issues are fundamental to the restructuring of the industry. The long run performance of California's electricity market is contingent on their speedy resolution. The group also sees a need to clarify the jurisdictional role of Federal Energy Regulatory Commission when it comes to publicly (mostly municipally) owned utilities on issues such as market refunds. Second, the group feels a strong need for California to integrate, if not to completely consolidate, its electricity market institutions with those of the region. Although the group does not take a position on each and every jurisdictional issue, we believe an early resolution of these claims will greatly facilitate finding solutions to California's electricity market problems.

4. Encourage the creation of true commodity market institutions and promote their use

California's electricity crisis was caused in part by the failure of the electricity commodity market. Promoters of electricity deregulation attempted to create markets in electricity. The California market collapsed before its deficiencies could be remedied. The failure of the California market should not doom the effort to rebuild. To the contrary, properly functioning electricity markets are required for deregulation to succeed. Indeed, economic research has demonstrated that the development of commodity markets and forward contracting promotes greater competition and reduces the leverage of existing suppliers.

The key to the success of an electricity market is the ability of consumers and suppliers to enter into bilateral long-term contracts. Successful markets involve such participation. This can be accomplished in electricity markets by allowing large and small consumers to contract directly for long-term supplies at negotiated prices.

Successful forward contracting will promote investment in new generating facilities and expansion of distribution infrastructure in an orderly fashion, thereby preventing the occurrence of a future crisis. The state should support forward contracting and resist efforts to frustrate such developments. Specifically, the state under most circumstances should not prevent current consumers from shifting from traditional suppliers to new suppliers.

5. Implement Real-Time Pricing

Any structural model for the industry should include a mechanism for charging consumers for the cost of the production and delivery of electricity at the time of its consumption. Electricity at midnight in April is completely different from electricity at noon on a hot August day. In California, the former is cheaply produced from excess rainfall spilled over hydroelectric dams whose reservoirs are too full to contain it. By contrast, the latter demand must be met by high-cost power plants whose annual service may include just those few peak days. Yet, most California customers, including large industrial customers, are still charged for electricity as if its cost varies little throughout the year. Prices to most end users don't signal when electricity is cheap or dear for the industry to produce. Nor are consumers offered the true economic benefit of their

conservation efforts at times of peak demand. Customers suffer further when unchecked peak demands grow too fast, pushing up costs for all. Wholesale electricity markets also become more volatile and subject to manipulation when rising prices have no impact on demand. Indeed, a functioning demand side to the electricity market in California would have greatly reduced the likely private benefits, and consequent social cost, of any strategic behavior engaged in during the crisis.

The answer to this problem lies in technology and policy. California has already installed real time meters for most if not all of its larger customers. What remains is to establish sound policies. The politics of electricity pricing are the greater problem, including concerns about creating potential winners and losers among customers when usage is finally priced at its true, real-time cost. Regardless of other reform efforts that are pursued in California, real-time pricing or other forms of flexible pricing is a key to enhanced conservation, more efficient use of electricity, and the avoidance of both unnecessary new power plants as well as concerns about the competitiveness of wholesale electricity markets.

In Sum

The First Manifesto concluded calling the attention to the fact that "electricity should not be a political commodity. The laws of supply and demand cannot be ignored except at great peril." Today we reaffirm that belief. We encourage the State to realize that the energy crisis was the consequence of a flawed regulatory design and of misguided decision-making at the time of the crisis, rather than the result of any inherent inability of electricity markets to work. California should not be burdened with inefficient electricity institutions simply because it got the design wrong the first time around. Now is the time to get it right. Failure to do so will compound our problems.

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