

RETAIL COMPETITION IN THE U.S. ELECTRICITY INDUSTRY

*Eight Principles for Achieving
Competitive, Efficient and Equitable
Retail Electricity Markets*



A Special Report by the
Electricity Consumers Resource Council

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Introduction

Today's increasingly competitive global marketplace requires change in the way the nation's electric power industry is planned and operated. New markets and technologies have rendered obsolete an industry structure that was developed in the 19th century. That structure met the needs of consumers and the economy for which it was designed: the promotion of universal electrical service and the exploitation of the scale economies in generation technologies. Those circumstances no longer prevail. It is time for the industry to take the next step in its evolution to better meet the challenges of the 21st century [1]. The new industry form must foster greater economic growth balanced with adequate environmental protection; enhance the competitiveness of the nation's business and industry; and increase new business opportunities. To achieve these objectives, the nation must place greater reliance on competitive -- not regulatory -- mechanisms as the preferred means to develop, market, and deliver electricity products and services throughout the United States and North America.

The Energy Policy Act of 1992 (EPAct) sets forth a long-term, comprehensive mandate to restructure the nation's electric power industry. That mandate has already greatly changed the expectations of major stakeholders, and states have begun to take bold new initiatives to advance the necessary reforms. For example, the California Public Utilities Commission (CPUC) has proposed the restructuring of that state's electric services industry and the reform of its complex regulatory apparatus [2]. Among the reasons stated by the CPUC in defense of its action are:

- *Electricity rates are too high. This distressing fact prompts the need to explore reasonable alternatives to the current regulatory and industry framework. The objective should be to establish a new framework that does a considerably better job of exerting downward pressure on rates consumers pay for electric services.*
- *Command-and-control regulation and government central planning are fundamentally at odds with, and ill-suited to, the increasingly competitive electric services industry.*
- *Market forces and the promotion of competition are appropriate mechanisms for solving regulatory problems.*

This special ELCON report presents eight guiding principles that lawmakers and regulators should adopt to establish competitive power markets in the United States.

Principle N°. 1

Market forces can do a better job than any government or regulatory agency in determining prices for a commodity such as electricity.

American business and industry increasingly compete in global markets. There is no question that the nation is in a profound economic transition needed to adapt to global competition. If U.S. business and industry are to effectively compete in domestic and international markets, the prices of all the goods and services needed to manufacture products must be competitively priced. Private firms procure all their raw materials and semi-finished goods in competitive markets. Electricity services provided by electric utilities cannot now be procured on a competitive basis.

The current industry structure has given vertically integrated utilities tremendous market power. Elimination of this market entry barrier is an essential condition for wholesale competition as envisioned by the EPAct. Utilities' market power is derived from their joint ownership of generation, transmission, distribution and system control (or dispatch) centers. This has resulted in a generally inefficient industry -- exceptions notwithstanding. Retail rates often greatly exceed the cost of new generation. Wide rate disparities exist within most states and all regions, resulting in sizeable bill impacts and a debilitating burden on domestic business, industry and residential consumers. Industrial consumers of electricity generally take service at transmission-level voltages and, in many cases, generate or cogenerate themselves. Thus, they understand very well what it takes to efficiently generate electricity.

The inefficiencies inherent to the current industry structure can be removed by substituting much of the current regulatory apparatus with competition. Greater competition in the industry can be facilitated by the physical nature of the product. The commodity that would be traded in competitive power markets -- electricity -- is more homogeneous and standardized than many other tradable commodities. This is necessary from a technical standpoint because power flows cannot easily be restricted. A nonstandard product could disrupt the interconnected grid resulting in power outages [3].

Competition in the U.S. electricity industry -- particularly *retail* competition -- will benefit all end users by: (a) providing a broader range of products and services with greater value at competitive prices, and (b) creating new business opportunities throughout the economy, with the potential for new jobs and income growth.

<i>Electricity Service</i>	<i>Requirements of a Competitive Power Market</i>
<input type="checkbox"/> <i>Generation</i>	<input type="checkbox"/> <i>Any supplier of generation services should be able to sell direct to any buyer including power marketers and end users.</i>
<input type="checkbox"/> <i>Transmission</i>	<input type="checkbox"/> <i>Transmission owners should provide access on a common-carrier basis to all users of the interconnected bulk power grid.</i>
<input type="checkbox"/> <i>Coordination and System Control</i>	<input type="checkbox"/> <i>Coordination and system control services should be provided on a nondiscriminatory basis to support the efficient and reliable operation of an electricity spot market.</i>
<input type="checkbox"/> <i>Distribution</i>	<input type="checkbox"/> <i>Owners and operators of distribution facilities should provide access on a common-carrier basis to all users of the local distribution system.</i> <input type="checkbox"/> <i>Access to distribution facilities should be provided to any new market entrants such as brokers, power marketers, energy service companies, and other utilities.</i> <input type="checkbox"/> <i>All end users should have access to alternate suppliers of basic electricity services as well as products and services that promote energy efficiency.</i>
<input type="checkbox"/> <i>Demand Side Management (DSM)</i>	<input type="checkbox"/> <i>Any supplier of energy efficiency products should have access to any end user.</i> <input type="checkbox"/> <i>Competing suppliers should be able to bundle these products with electricity services.</i>

Principle N°. 2

Laws and regulations which restrict the development of competitive electricity markets should be rescinded or amended. The need for burdensome regulation will be reduced where competitive electricity markets are allowed to flourish.

Laws, regulations and governing practices that evolved to serve different market conditions, technologies, and social environments must be changed to meet new circumstances. Competition is colliding with the regulated monopoly framework that was conceived in the 19th century to address conditions that no longer prevail.

The traditional regulatory compact generally gave utilities: (a) franchised monopoly rights, (b) an obligation to serve, and (c) the opportunity to earn a fair rate of return on prudent investment. These vestiges of the existing regulatory regime should be changed to promote more competitive power markets. Exclusive franchise laws should be amended, as appropriate, to exempt from regulation independent providers of generation and other electricity services (including brokers and marketers) who seek to market their products and services to retail consumers. In a truly competitive industry, retail consumers do not need to be captive to a regulated utility's obligation to serve. The profit earned by any supplier in a competitive market should be determined by that firm's ability to innovate and control costs -- not by a complex, often unwieldy, regulatory process. It is imperative that stakeholders and lawmakers immediately act to remove these obstacles to competition. There are no technical impediments to the creation of more competitive power markets [4].

Lawmakers and regulators should also reexamine the appropriateness of statutory and regulatory mandates that force regulated utilities to act as the principal agent of certain social programs. Utilities have been required to heavily subsidize the energy efficiency improvements of some end users at the expense of others. Thus, among industrial class end users, firms with the foresight to invest in energy efficiency improvements at their own expense are forced to subsidize the investments of their competitors [5]. Such programs result in inefficient price signals that can create greater social and economic distortions than the ones targeted for correction in the first place [6]. Clearly any program that attempts to reap broad social benefits for all citizens should rightfully be funded by all citizens, *i.e.*, by appropriations from federal or state general funds.

Principle N^o. 3

The benefits from competition will never fully materialize unless and until there is competition in both wholesale and retail electricity markets. But not all retail electric services are natural monopolies, and therefore, they should not be regulated as such.

The vertically integrated utility structure consists of the generation, transmission, distribution, and coordination and system control functions. The industry exists to provide retail services to ultimate consumers. Since enactment of the EPAct, few argue the fact that generation is no longer a natural monopoly or that certain transmission and distribution functions must remain natural monopolies. The debate now has shifted to the question: Is retail service a natural monopoly? But the term "retail service" is too broad in this context. The provision of retail service should be separated into: (a) the use of distribution facilities that are natural monopolies, and (b) end-user products and services that are not natural monopolies.

Distribution facilities, such as the wires, some transformers, some substations, and the control centers, are natural monopolies that should remain under rate regulation and be planned accordingly. Access to this infrastructure should be provided on a common-carrier basis to any market entrant. There probably will not be one model for the way the retail grid and control centers are institutionalized. Different regional or local market structures will naturally evolve to meet regional or local needs because the United States is a very large and diverse country. Government or regulatory bodies should not attempt to "design" or "manage" these markets beyond assuring nondiscriminatory access to all potential market entrants. Such actions would only hinder the efficient development of the appropriate market structures that can fully meet the needs of every buyer and seller in the marketplace.

Retail competition requires that any competing supplier or marketer have access to the distribution facilities on a nondiscriminatory basis in order to market their products and services to ultimate consumers. Retail suppliers (e.g., power marketers, brokers, energy service companies, or other utilities) will package unbundled products and services acquired in wholesale markets to meet the demands of ultimate consumers in the retail market. Where retail competition exists, consumers will vote with their dollars to decide which kinds of generation, DSM or other resource options are used. In these new markets, electricity is traded as a commodity; not as a regulated monopoly service [7].

System control and coordination of the wholesale and retail grids, *i.e.*, the need to instantaneously balance supply and demand over a specific geographical area, is a natural monopoly. New institutions should evolve to perform these tasks on a cost-of-service basis. These institutions must be independent from the owners of generation assets. By analogy, all airlines are subject to the independent control of air traffic controllers, and an airport generally needs only one control tower to provide services that benefit all users on a nondiscriminatory basis. At the bulk power level, such entities might be regional transmission groups (RTGs) which provide coordination and system control functions to a regional power market. RTGs also may have the additional responsibility of planning the high-voltage network.

There is no question that competitive procurement practices for some of a traditional utility's customer requirements would help utilities lower their costs. However, real efficiencies cannot be achieved unless the traditional utility supplier also confronts retail competition. This is the threshold issue. The planning process will significantly improve once suppliers and regulators know that ultimate customers can choose their source of power. The suppliers of generation services, including ancillary services such as voltage support, will make every effort to build only those plants that actually are needed and at costs that customers are willing to pay. Owners of those plants also will bear the risk associated with the technologies they own and operate, including future changes in environmental laws.

The need for rate regulation will continue to the extent natural monopolies exist. However, many utility functions that are now regulated, *e.g.*, generation, ancillary services, generation planning, and DSM, are not natural monopolies. These functions do not need to be regulated and therefore a strong argument can be made for spinning off those assets or programs and letting them be provided in unregulated, competitive markets. While the need for regulation will decline, the role of antitrust laws for providing consumer protection should increase in importance. The guiding principle should be to maximize the development of competitive markets and reduce the need for burdensome and inefficient regulation.

The model for a competitive electricity market will benefit all, not just a few, customers. There are no technical or conceptual impediments that would preclude participation in competitive markets by small end users. While simple in concept, competition is far from easy to implement. Nonetheless, the need for more efficient power markets is vital because economic pressure will require productivity improvements in all sectors of the economy if the U.S. is to continue being a competitive player in the global marketplace.

Principle N°. 4

The owners and operators of transmission and distribution facilities, and the providers of coordination and system control services, should be required to provide access to those facilities and services to any buyer or seller on a nondiscriminatory, common-carrier basis.

Electricity -- like all other forms of energy -- is a commodity and should be marketed and planned like any other commodity. A commodity market for electricity cannot be established unless access to essential facilities is provided on a common-carrier basis to all market entrants [8]. These services -- which are natural monopolies and therefore subject to vigilant regulatory oversight -- are transmission, distribution, and coordination and system control services. A truly competitive power market can evolve once these services are provided on a nondiscriminatory basis at rates based on the actual cost of service. A necessary requirement of competitive power markets is the need to separate the ownership of essential facilities from the use of the facilities. Any market entrant -- buyer, seller or trader -- must be able to freely access the wholesale and retail markets if competition is to work. In essence, the transition from the existing regulatory regime to a competitive regime replaces the utility's "obligation to serve" with an obligation to provide access to the market. The competitive power market should have the following characteristics:

- **Contracts** -- Long-term contracts should be the primary mechanisms for sending long-term price signals between buyers and sellers. Contracts assure buyers that the services they purchase meet their specific needs in terms of adequacy, reliability and price. Contracts give the buyer cost control, and give suppliers the security needed to finance their projects.
- **Spot Market** -- A short-term electricity spot market is needed to assure long-run competition. The spot market serves several purposes [9]. First, the spot market makes the contract market operate efficiently by providing a financial mechanism for reconciling differences in supply and demand in individual contracts. The spot market supplies and sets prices for replacement power for any generator that cannot fulfil its contractual obligations. Second, the spot market facilitates transactions that are not well suited to contractual arrangements, such as short-term supply. For example, end users can purchase power above contract levels, and generators can sell power that is available above their contract commitments. Third, the spot market provides the market signals for the need to build new capacity. Finally, the spot market allows the creation of secondary markets such as

futures trading. Futures trading creates price stability by shifting the risk of uncertain prices from those who are least willing to bear risk to those who are least concerned about price uncertainty.

- *Market Clearinghouse* -- Centralized market clearing processes -- analogous to those used in many commodity and financial exchanges -- should be used to collect offers to buy and sell at various prices, determine market clearing prices, give delivery instructions to the sellers whose offers have been accepted, and settle payments among the traders. The central dispatch, pooling and economy trading processes must be integrated with this market clearing function [10].
- *Capacity Trading* -- Capacity trading should be allowed to maximize the efficient utilization of the transmission and distribution networks. The unbundling of transmission and distribution (T&D) services and the creation of comparable rates and terms and conditions for service will enable transmission and distribution capacity holders to compete with each other, and with the utility, for buyers (and other traders) of these services. The introduction of capacity sellers to the T&D market will result in more competitive pricing for these services and the repackaging of capacity rights (including "rebundled" services) to meet the demands of the market [11].

<i>Regulated Utility Function</i>	<i>Electricity Spot Market Analogue</i>
□ <i>Collect availability and cost data from each generating unit</i>	□ <i>Take sell offers</i>
□ <i>Project future demands</i>	□ <i>Take buy offers, including offers from customers to take less or to "sell back" if price is high enough</i>
□ <i>Determine least-cost dispatch</i>	□ <i>Clear the market</i>
□ <i>Issue dispatch orders</i>	□ <i>Delivery</i>

Principle N°. 5

Rates for the use of transmission and distribution facilities should reflect the cost of providing the service. If the facility is a natural monopoly, those rates should be based on actual costs and the services provided on a nondiscriminatory and comparable basis to all users.

A competitive electricity market cannot be established unless all products and services offered in that market, or necessary to make the market work, are appropriately priced. Products and services offered in competitive markets are priced in those markets and sold for a profit. Firms that supply and market products and services in competitive markets will be price takers. The profit they earn will be in direct proportion to their abilities to innovate and control costs. The services of facilities that are natural monopolies should be priced based on cost of service. Owners of those facilities should be allowed the opportunity to earn a fair rate of return on only actual costs prudently incurred and in rate base. Efficient pricing of these regulated services requires that rates be comparable and fully unbundled.

Pricing comparability should be instituted for all transmission and distribution services that apply to the needs of any user. Only absolute pricing comparability will avoid the potential for price discrimination (and cross-subsidization) between different buyers and sellers. All suppliers of generation, transmission, and distribution services must offer those services on a fully unbundled basis. Pricing comparability cannot be achieved without adequate unbundling of costs and services. Unbundling will allow new services to develop that cannot be anticipated and encourage new market entrants. Users should be able to procure both repackaged "bundled" and unbundled services that meet their total power and service requirements.

Unbundling each service and its cost will provide consumers with the necessary information to evaluate alternate suppliers. Unbundling is essential if consumers are to be given accurate price signals. Unbundling promotes greater competition by allowing direct competition among a greater diversity of products and services. Unbundling the costs of each service will also help prevent the subsidization of some customers by others and thus mitigate the potential for uneconomic bypass.

Principle N^o. 6

Resource planning is not a natural monopoly. The types and market shares of generation and end-user technologies that will be supplied in wholesale and retail markets should be decided in the marketplace.

The planning function will not be compromised by competition. It can only be enhanced. The traditional command-and-control type of planning that is the basis of the monopoly integrated resource planning (or IRP) approach aggregates *system* planning and *market* planning. It is a planning paradigm directed by a cumbersome regulatory process. It is not customer-directed. This has produced two undesirable results: (a) inefficient generation has been built to the detriment of ratepayers, and (b) customers' needs are being dictated by the regulatory process, not by what customers actually want. As a result, electricity rates are too high in most parts of the country.

Generation planning is not a natural monopoly. With retail competition, only the most efficient producers sell their product and increase their market shares. If a generator's output cannot be sold, that risk is absorbed by the plant's owners, not captive ratepayers. The market will also decide the least-cost resource mix -- not in the highly litigious, adversarial environment of the regulators' hearing rooms. The market share of each viable technology will be a market outcome, not a planning variable. Only the most economically efficient generating technologies will be planned and allowed to operate. The new generating technologies employed by the independent power industry are among the cleanest generators from an environmental perspective [12]. Therefore, a competitive industry will meet environmental objectives more efficiently than the current command-and-control model.

Since the market sets the price for each different type of generation or ancillary service, there will be adequate incentive for firms to plan and supply those markets. Owners of transmission will continue to plan, and that planning will be more efficient because earning a fair return on the transmission assets that are used and useful will be the only way they make a profit. The owners of distribution facilities will continue to plan adequate facilities for the delivery of the types of services that meet customers' needs because the only way they will make money is to sell their services. Energy service companies, power marketers, brokers and other entities will perform the market planning function. These firms will flourish once they are able to deal directly with end users. They will package and bundle services that customers want. This will be determined in the marketplace and not in a hearing room or by a

"collaborative" process that often excludes the participation and views of ultimate consumers. The profit they earn will be based on their abilities to be innovative and to control costs. Customers that want traditional basic service can seek a supplier to provide that service. But like the products and services offered in other markets, choice will decentralize decision-making and give customers direct influence over the development, delivery, consumption and price of electricity services.

Clearly retail competition will no more endanger the efficient planning at the retail level than wholesale competition will harm planning at the wholesale level. The planner in a competitive business learns what their customers' needs are and plans accordingly. That planner also will seek ways to modify customer demand in order to achieve a larger market share for their products and services. The firm will only achieve that goal if it can be innovative and control its costs -- and there is a demand for the product!

In competitive markets, customer choice will determine the market shares of competing technologies, not a command-and-control form of planning. Wholesale competition will allow utility planners (including municipal and cooperative systems) to source their power requirements from many different generators (including EWGs and QFs). Real competition will force all suppliers to choose and offer only the most efficient, least-cost generation resources. The planning of transmission and distribution facilities -- which remain natural monopolies -- will be the focus of a top-down regional process that includes regulatory oversight. But there will be no integration of the monopoly planning functions with market planning.

<i>Traditional Electricity Suppliers</i>	<i>New Market Entrants</i>
<ul style="list-style-type: none"> <input type="checkbox"/> <i>Investor-Owned Utilities</i> <input type="checkbox"/> <i>Publicly-Owned Utilities:</i> <ul style="list-style-type: none"> <input type="checkbox"/> <i>Municipal Utilities</i> <input type="checkbox"/> <i>State Utilities</i> <input type="checkbox"/> <i>Power Districts</i> <input type="checkbox"/> <i>Joint-Action Agencies</i> <input type="checkbox"/> <i>Rural Cooperatives</i> <input type="checkbox"/> <i>Federal Power Agencies</i> <input type="checkbox"/> <i>Qualifying Facilities (QFs)</i> 	<ul style="list-style-type: none"> <input type="checkbox"/> <i>Exempt Wholesale Generators</i> <input type="checkbox"/> <i>Power Marketers</i> <input type="checkbox"/> <i>Power Brokers</i> <input type="checkbox"/> <i>Power Commodity Exchanges</i> <input type="checkbox"/> <i>Energy Service Companies</i> <input type="checkbox"/> <i>Entrepreneurs</i> <input type="checkbox"/> <i>End Users</i>

Principle N°. 7

Legitimate and verifiable transition costs that develop as a result of competition should be recovered by an equitable split among ratepayers, shareholders and taxpayers. The costs of assets that were uneconomical in the existing regulatory regime are not transition costs.

There is perhaps no issue more contentious or controversial than so-called "stranded" costs. Transition costs are the utilities' sunk or "stranded" costs associated with the deregulation of the industry. In the case of the electric utility industry, these costs may include uneconomic generating assets, purchased power or fuel contracts, and certain regulatory assets. True transition costs may be a minor problem for many utilities; but a major concern for a few. All stranded costs are not transition costs. Only legitimate and verifiable transition costs are recoverable from a utility's customers. The assets or deferred expenses of some utilities may have been "stranded" for reasons other than increased competition.

The "used and useful" test traditionally applies to the inclusion of a production plant in rate base upon completion of construction. In recent years, some commissions have declared that certain facilities no longer be included in rate base for one of many reasons. Thus, these assets are already uneconomical under existing rate regulation and therefore cannot become "stranded" because of competition. There is no law or regulation that requires the imposition of such stranded costs on ratepayers. In *Duquesne Light Co. vs. Barasch*, 488 U.S. 299 (1989), the U.S. Supreme Court found that the disallowance of prudent costs incurred in constructing a since-abandoned plant -- under the Pennsylvania law at issue -- was not unconstitutional. Other conditions of the existing regulatory regime also may legitimately preclude the recovery of stranded or transition costs from retail or wholesale ratepayers.

Utilities that attempt to recover sunk costs must balance this short-term revenue gain -- which will raise rates -- with its long-term earnings potential in a more competitive industry. Thus, utility shareholders may be at greater risk if the recovery of sunk costs results in a reduced market share.

Utility shareholders made their investments forewarned of the possibility that regulatory rules can change and arguably may already have been compensated for the risk of such change. For example, utility shares typically have sold for a multiple of their book value meaning that shareholders put a higher economic

value on the earnings potential of a utility's assets than is indicated by the book value of its depreciated investment [13].

An affirmative obligation should be placed on any utility with potential transition costs to begin mitigating the customer impact of those costs. A utility that faces the prospect of transition costs should, first, find a market for those assets, and second -- when it cannot dispose of the assets in the marketplace -- write down the remaining asset value.

It has been argued that any departing customer owes some amount of money to the host utility. Proposals to collect these charges include exit fees, special demand charges, and a fee on the "wires." If imposed on a discriminatory basis (e.g., to only large departing end users), such fees or charges will only encourage the adoption of other supplier arrangements that avoid the fees or charges.

Transition costs are primarily generation, not transmission costs. Therefore, they should not be collected in rates for transmission services.

Customers that leave the system because they have competitive alternatives should be treated the same as customers that leave for other reasons such as moving, going out of business, or shutting down a plant. This principle should be applied equally to all customers regardless of size. There should be consistent regulatory treatment for all forms of all load reduction, including the reductions that result from utility DSM programs. Industrial load reduction, primarily in the form of plant closings or departures, is simply the most conspicuous because of the magnitude of the loss. Utilities have been on notice for years that many customers have options and will exercise those options if they are cost effective. Thus, utilities should have planned for these circumstances and therefore an exit fee of any kind is unjustified whenever a customer reduces load -- for whatever reason.

If a utility continues to keep large amounts of excess generation capacity on its books -- while earning a return -- without any useful benefit, customers should be able to choose not to be subjected to such conditions, since their own business or welfare is not afforded any such protective guarantees. Indeed, when industrials face their own version of "stranded costs," they are forced by generally-accepted accounting principles (GAAP) to write down or write off the investments. But utilities are protected by regulatory grace periods, often lasting years beyond the actual need. Utility shareholders should not be protected from all the market consequences of any actions taken by the utility's own customers. It is discriminatory to require those customers to continue to shoulder the entire burden of unnecessary and surplus generating assets.

Principle N^o. 8

The potential for transition costs should not be used as an excuse to prevent or delay the onset of a competitive electricity market.

Transition costs cannot be dealt with on a generic basis. Certain legitimate and verifiable transition costs may need to be considered on a case-by-case basis. Generally, the disposition of potential transition costs will be a state concern because the states are the depositories of the legal records that originally authorized or adjudicated the investment or expense. The Federal Energy Regulatory Commission (FERC), for example, should not order recovery of transition costs for any transaction involving a municipal entity or other political subdivision of a state. States have adequate authority to deal with these situations.

Stranded costs associated with FERC-jurisdictional wholesale transactions should always be based on contract terms. It is FERC's responsibility to interpret those contracts. However, the Commission may not be able to presume anything in the absence of a contract.

Transition costs must not be a mechanism to preserve inefficient, preferential supplier relationships. These costs must not be a means to discriminate among competitors or used as an entry/exit barrier. The recovery of transition costs by shifting costs to consumers -- rather than utility shareholders -- must not be allowed to distort either the manner in which utilities competitively procure their new generation requirements or transmission prices.

Customers migrating from full to partial requirements status or altering a traditional relationship with a utility supplier should not be subject to transition costs if the change was not foreclosed by contract or specific tariff provisions. Contracts or tariff provisions should address these costs on a prospective basis.

Finally, state and federal regulatory authorities should avoid any action or policy that implies that the recovery of any "stranded" cost is an automatic entitlement. Regulatory authorities should apply consistent treatment to all assets currently in rate base which may deviate from a fair market value in a competitive industry. If utilities are allowed to recover from current or former customers the difference between the book value of an asset and that asset's lower market value, then customers should receive payments equal to the appreciated value of any asset whose current book value is below market value.

Endnotes

1. Vernon L. Smith, "Currents of Competition in Electricity Markets," *Regulation: AEI Journal on Government and Society*, Number 2, 1987.
2. California Public Utilities Commission, *Order Instituting Rulemaking and Order Instituting Investigation*, Docket Nos. R.94-04-031 & I.94-04-032, April 20, 1994.
3. B. Glenn Blackmon, Jr., "A Futures Market for Electricity - Benefits and Feasibility," Discussion Paper Series, Energy & Environmental Policy Center, JFK School of Government, Harvard University, E-85-07, July 1985.
4. U.S. Congress, Office of Technology Assessment, *Electric Power Wheeling and Dealing: Technological Considerations for Increasing Competition*, OTA-E-409 (Washington, DC: U.S. Government Printing Office, May 1989).
5. John P. Hughes, "The Anticompetitive Effects of Industrial DSM Programs," *Proceedings of the Fourth National Conference on Integrated Resource Planning*, (Washington, DC: National Association of Regulatory Utility Commissioners, 1992).
6. Douglas A. Houston, *Demand-Side Management: Ratepayers Beware!*, Studies in Market-Based Energy Policy #2, 2nd. Edition, (Houston, TX: Institute for Energy Research, May 1993).
7. Roger E. Bohn, Bennett W. Golub, Richard D. Tabors, and Fred C. Schweppe, "Deregulating the Generation of Electricity Through the Creation of Spot Markets for Bulk Power," *The Energy Journal*, Volume 5, Number 2, 1984.
8. Richard J. Pierce, "A Proposal to Deregulate the Market for Bulk Power," *Virginia Law Review* 72, October 1986.
9. Mark Drazen, "Sparks and Wires," Drazen-Brubaker & Associates, Inc., April 1994.
10. Larry E. Ruff, "Stop Wheeling and Start Dealing: Resolving the Transmission Dilemma," Putnam, Hayes & Bartlett, Inc., April 15, 1994.
11. Comments of Enron Power Marketing, Inc., Federal Energy Regulatory Commission, *Inquiry Concerning the Commission's Pricing Policy for Transmission Services Provided by Public Utilities Under the Federal Power Act*, Docket No. RM93-19-000, November 8, 1993.
12. National Independent Energy Producers, *Clean Energy Solutions: Independent Power and The Environment*, (Washington, DC: National Independent Energy Producers, November 1993).
13. Irwin M. Stelzer, "Stranded Investment: Who Pays the Bill?" Energy Policy Forum, American Enterprise Institute, March 1994.