OPEN MEETING ITEM

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RENZ D. JENNINGS
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ARIZONA CORPORATION COMMISSION

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June 3, 1998

Commissioner Carl J. Kunasek
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007

Arizona Corporation Commission
DOCKETED

JUN 03 1998

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Re: Stranded Cost Proceeding
Docket No. RE-00000C-94-0165

Dear Commissioner Kunasek:

At the morning session of today's Special Open Meeting, you noted that a memorandum prepared by Steven Dickerson had not been placed in the docket. A copy of that memorandum is attached and is being docketed with this letter.

I will note that the memorandum is a discussion of market structure in a competitive regime. Included in that discussion is a description of the fundamentals of various stranded cost calculation methodologies, including divestiture.

The Commission's ex parte rule, A.A.C. R14-3-113, prohibits communications not on the record between parties and the Commissioners concerning the substantive merits of a contested proceeding. The memorandum does not address the merits of positions in the stranded cost proceeding, and therefore, does not fall within the ex parte rule.

In addition, the ex parte rule explicitly does not prohibit communications between Staff and Commissioners on technical matters. In my opinion, the description of the calculation methodologies fits within this exception.

In short, my opinion is that there has been no violation of the Commission's ex parte rule resulting from the memorandum. I will be happy to discuss this matter with you if you have any questions.

Sincerely,

Paul A. Bullis
Chief Counsel
Legal Division

PAB:mi
Attachment

cc: Commissioner-Chairman Jim Irvin
Commissioner Renz D. Jennings
Docket Control

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JIM IRVIN
COMMISSIONER-CHAIRMAN
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ARIZONA CORPORATION COMMISSION

JACK ROSE
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MEMORANDUM - FOR INTERNAL DISTRIBUTION

To: Commissioner-Chairman Jim Irvin,
Commissioner Renz D. Jennings,
Commissioner Carl J. Kunasek
From: Steven S. Dickerson
Date: March 11, 1998
Subject: Electric Competition

The Electric Competition Rules accomplished the simplest part of the restructuring process - the destruction of the old regulatory regime. The Commission now faces the most difficult part of the restructuring process - building a market to replace it.

If the Commission does not take up this task, a market will evolve to fill the void. However, the evolution process may not provide the best possible solution for Arizona. In fact, I do not believe that the evolution process will provide benefits to residential customers, because the process is controlled by the incumbent utility companies, entering energy service providers, and the large industrials.

Therefore, if the benefits of restructuring are going to be reaped by the residential customers of Arizona, the Commission must be proactive in the designing of the market. Early and informed decisions on our part will prevent needless mucking through and ensure the greatest possible benefit for the electric power consumers.

Toward this end, I have attached three worksheets. The first worksheet describes different possible market mechanisms for the electric power industry. These are some of the possible answers to the question, "How will the market function?" The different approaches define the type of transactions that will be possible, where these transactions will take place, and what information will be seen (or not seen) in the new marketplace.

The second worksheet reviews market structure issues, or "Who will compete in the market, and what are their roles?" Prior to the rule changes, all utility activities were regulated. Now, some activities are competitive while others continue to be regulated. This creates incentive problems within the old vertically integrated utility companies: namely, cross-subsidization and access discrimination. Possible approaches to solving or mitigating these incentive problems are presented.

The third worksheet presents the different methods to calculate stranded costs. Although this is not directly related to the creation of a new market, this decision must be made to reconcile the past. During the stranded cost hearing, many variations of three basic approaches were proposed.

The three categories of approaches are: replacement value, net revenue lost, and divestiture. The outline briefly discusses the fundamentals of each approach.

Without further decisions by the Commission, a market will evolve on its own. However, it is unclear who would benefit from this evolution and whether regulators would need to continually revisit these issues during the evolution. If the Commission can guide the design of the market to benefit the public, I would strongly advocate the worthiness of the effort.

If you or your assistants would like to speech about these issues with me, please contact me at your convenience.

CC: Jack Rose

ENERGY MARKET ISSUES

The potential gains of restructuring lay in efficiency and innovation. Both are affected by the design of the market. Proponents of bilateral contracting claim that everyone can negotiate a better deal without a power exchange even though prices are not revealed. Proponents of a full-nodal price power exchange argue for the revelation of prices through the market. This ensures both efficiency in generation and efficiency in transmission pricing. In addition, under bilateral contracting residential consumers and other small users are disadvantaged in the negotiation of power contracts.

	Bilateral contracts	*ISO/PX California style*	*ISO/PX Pool*
How power is bought, sold, and dispatched.	Consumers contract for delivery of power from either Energy Service Providers or generators directly. Balanced schedules must be sent to the operator of the grid, presumably an ISO. Price information remains proprietary.	Power can be purchased directly from the PX or contracted from a Energy Service Provider. Each ESP sends a balanced schedule to the ISO for dispatch. The ISO must balance the entire system and redispatch any conflicting schedules. Only the PX price is revealed.	All power must be purchased from the pool. The market balances supply and demand at each node, and dispatches power at the market clearing price. Financial contracts based on the market price can emulate any possible bilateral contract, except prices are revealed.
Efficiency - Generation	Not guaranteed.	Not automatic. The ISO is under the requirement to dispatch generation at least cost. It is uncertain that the ISO can efficiently do this.	Guaranteed. All power is purchased from the pool. Lowest cost generation is dispatched first.
Efficiency - Transmission	Not guaranteed.	Not guaranteed. Rules must be developed to estimate, collect, and disperse loss charges. These rules would need to be gaming proof, since utilities could load individual nodes to increase revenue.	Guaranteed. All power is sold at the node. The prices at each node incorporate all physical system constrains. Transmission and congestion rents can then be allocated to infrastructure development.
Load pockets - ancillary services	The grid operator must control some generation for reliability and transmission.	The ISO has contracts with Must-Run generation facilities for reliability purposes as well as facilities in load pockets. This mitigates market power created by congestion.	The ISO would have Must-Run contracts with generation facilities for reliability purposes as well as facilities in load pockets. Markets for ancillary and other services may develop.
Markets for green power	Green-power is sold through contract. Individual consumers must choose from available ESPs offering green-power. The ESPs submit balanced schedules to the grid operator for dispatch.	Green-power is sold through contract. Individual consumers must choose from available ESPs offering green-power. The ESPs submit balanced schedules to the ISO for dispatch. Provisions for a secondary market for green-power could be incorporated into the PX.	A second market can easily be created for green power. Green-power consumers can purchase power generated with green technology at the market-clearing price. New technology can be immediately incorporated when cost effective.

MARKET STRUCTURE ISSUES

The Competitive Electric Rules the competitive generation of electricity while transmission and distribution services, essentially, remain regulated as before. Metering and billing activities are also to be opened up to competition. By creating competitive markets for some activities and continuing to regulate others, certain incentive problems are created. The two most critical incentive problems created are an incentive for the incumbent (or distribution company) to give preferential treatment to its competitive agent while discriminating against its competitors (access discrimination), and an incentive to pass costs to the regulated agent (cross-subsidization). Below is a summary of how these incentive problems can be regulated under several corporate forms.

	Vertically integrated utility	*Functionally separated affiliates*	*Separate corporate affiliates*
Description	All activities of the incumbent utility are retained in a single vertically integrated company.	All activities of the incumbent are retained in a single company, but the company reorganizes by activity.	All activities controlled through different companies under a single holding company.
Regulation - Vertical market power Access Discrimination	Rules need to be developed to prevent incumbent utilities from discriminating against other energy suppliers - open information rules and open access rules.	Affiliate rules must be developed to limit the favorable access to customers and information to the affiliated competitive energy provider.	Affiliate rules still necessary to ensure no preferential treatment is given to affiliate. Enforcement is easier, since all transactions are in the market.
Regulation - Vertical market power Cross-subsidization	Rules need to be developed to ensure that the competitive activities are not subsidized by regulated activities. Rules must be very specific.	Affiliate rules must be developed to ensure costs are not passed incorrectly between affiliates. Less specific rules are needed. However, this is difficult to monitor.	Affiliate rules still needed to prevent incorrect transfer pricing; however, the separate corporate form better aligns management's incentives to prevent cross-subsidization.
Stranded costs - Calculation Concerns	Stranded costs are recovered by the vertically integrated utility. If the incumbent is over-compensated for stranded cost, the incumbent will have a competitive advantage.	Assets must be correctly priced when transferred to each affiliate. If asset prices are not correct, one of the affiliates may have an advantage over its competitors.	Assets must be correctly priced when transferred to each affiliate. Massachusetts uses voluntary divestiture to ensure the assets are correctly priced.
Regulation - Horizontal market power - this issue is closely linked with the Energy Market Issues and Divestiture. See below.	If the incumbent utility retains control of all its generation assets, regulatory oversight is needed to prevent the firm from exercising market power. Coordination between generation and transmission assets can be used to game the system for higher profits. FERC is concerned whenever a single entity owns or controls both generation and the grid.	The separation of control between the generation assets and control of the grid reduces the potential for the exercise of market power, but regulatory oversight is still needed. FERC is concerned whenever a single entity owns or controls both generation and the grid.	Further separation of activities reduces the possibility of coordination of transmission and generation. If generation of assets are auctioned to several independent generators, the possibility of a single firm exercising market power is greatly reduced - see divestiture.
Consumer Protection	Supplier of last resort responsibilities remain with the incumbent utility. Rules need to be developed to ensure consumers are protected from unfair activities.	Supplier of last resort responsibilities are assigned to the affiliate providing regulated services. Rules need to be developed to ensure consumers are protected from unfair activities.	Supplier of last resort responsibilities are assigned to the regulated distribution affiliate. Rules need to be developed to ensure consumer are protected from unfair activities.
State Regulatory Requirement	IL, ME, MD, MI, NV, NH, NJ, PA	AZ,CA, MT, NY, OK, RI, VT	MA

STRANDED COST CALCULATION

The past must be reconciled, so the future can begin. Stranded costs must be calculated as accurately and immediately as possible. The recovery of these costs must be as competitively neutral as possible. Below are brief overviews of the various methods for calculating stranded costs. Many variations of each approach were proposed in written testimony for the stranded cost hearing.

	Replacement Value - Bottom-up	*Net Revenue Loss - Top-down*	*Divestiture*
Calculation method	Administratively determine a fair and reasonable value for each utility's generation assets, subtract the book value of the same assets.	Calculate the difference between the revenue, which the utility would have received under continued regulation, and the estimated revenue under competition.	Auction each utility's generation assets, subtract book value of the same assets from the proceeds. If negative, this is stranded costs.
What is being measured or operationalized definition	The difference between the appraised value of the generation assets and the book value of the assets.	The NPV of the difference between the revenue stream under regulation and an estimate of the revenue stream under competition.	The difference between the true market value and book value of the assets.
Administrative process	A fair and reasonable value for each generation asset must be determined.	Two series of numbers must be estimated: the revenue stream under continued regulation and the revenue stream under competition. The success of this method is imprudently dependent upon the accurate estimation of the future market price of electric power.	No estimation of any value is necessary. By definition, the winning bid for an asset is its market value of that asset. Thus, the process involves the two known values: market value and book value. Auctions have already been successfully completed in several states.
Mitigation	Mitigation is only a concern before and during the appraisal stage. It would be in a utility's interest to influence the appraised value downward.	Utilities are compensated for the difference between their revenue under regulation and their expected revenue under competition. Utilities are free to use their assets as they see fit.	The only mitigation concern with divestiture is during the period prior to the auction. Utilities may not have incentives to mitigate losses (e.g. maintenance). If utilities have some rights to the auction revenue above book value, this incentive problem is mitigated.
True-up	No true up is necessary. Under some versions of administrative valuation the calculation time period would be lengthened to incorporate future events.	A true-up process is necessary to link estimated competitive revenue streams with actual revenue streams. A potential problem is that stranded costs will then compensate for poor management during the calculation phase. APS's plan has no true-up.	No true-up is necessary.
Main Proponent	RUCO, AECC	APS, TEP	PG&E, Enron, Goldwater Institute