



Memo

To: APPA Legal Seminar
From: N. Beth Emery, Vice President & General Counsel
Date: November 9, 1998
Re: ***Transco's vs. ISO's – A Personal Perspective***

When the California Independent System Operator Corporation ("Cal-ISO") is faced with an important decision, we seek to organize our thoughts into a standard "decision template". I use that template here to explore for the seminar attendees some of my own observations about the structure of the electric industry, in particular, transmission, as we approach the new millennium. By my use of our template, I do not intend to suggest that my thoughts are shared with management or the Board of Cal-ISO. ***These are my personal views.***

EXECUTIVE SUMMARY

In industry forums, publications, and through regulatory proceedings, we have begun the process of asking what the structure of the transmission owners and/or operators should be to facilitate the most open and non-discriminatory access to the grid. Lately, a body of "conventional wisdom" has seemed to spring forth that the choice is "ISO vs. transco" or, as Messrs. Dunn and Williams,¹ ardent proponents of for-profit transcos's would say: "unaccountable, incentiveless multilaterals" acting as "allocators of existing capacity" vs. "independent, for-profit transmission providers who can only make money if they efficiently provide more and better non-discriminatory, open-access service." I submit that this is too narrow a focus. Rather, I would consider the choice to include, at least:

- for-profit transco's,
- not-for-profit ISO's,
- *not-for-profit* transco's, and
- *for-profit* ISO's.

At this stage, the jury is definitely still out on whether any alternative is clearly superior. As further explored below, there are a variety of considerations. But I take strongest issue with the implicit basis for much of the touting of for-profit transco's over not-for-profit ISO's – the assertion that for-profit institutions are more responsive to customers. That is certainly true when the customers can put the company out of business if they find competitors more appealing. Entities owning and/or controlling the grid, however, are still natural monopolies. It is not manifest to me that the combination of for-profit entities and the Federal Power Act regulation that must accompany that form of organization is the most efficient or effective means to open and expand the nation's

¹ Dunn and Williams, "Transcos: The Key to Open Access," *Public Power* (Sept.-Oct. 1998).

- *for-profit* ISO's.

CRITERIA FOR DECISION

Critics argue that whoever establishes the criteria for decisions can determine the outcome of the decision. Thus, I do not presume to list below all possible criteria. Rather, these are the questions I have identified so far as worth considering in deciding, if you are FERC, whether "one size fits all." For the rest of us, the question is probably which shoe best fits our own regional needs.

1. How will reliability be affected?
2. How successful will the structure be in meeting the "bigger is better" goal for control areas?
3. Can the entity benefit from streamlined or light-handed regulation?
4. Will the entity operate efficiently? (This includes whether it will result in market efficiency. Components of this analysis include whether optimum incentives for good management are possible, and whether entrepreneurial or market forces can discipline the entity. It could also include whether market participants will trust the entity with sensitive information.)
5. What are the implications for capital needs?
6. Are there structural biases in the entity regarding decisions it must make?
7. Is the structure inherently more costly?
8. Is the structure inherently more bureaucratic?

DISCUSSION OF THE OPTIONS AND *PROS* AND *CONS*

At this point, it seems clear that "one size does *not* fit all." The key for all of us is examining the *pros* and *cons* of the various structures, looking at our regional needs, considering that in the end "politics [is] the art of the possible,"⁴ and picking the structure that gets us moving toward full competition.

Reliability

I doubt that any structure would be acceptable that would not ensure reliability, so there seems little difference on this point, except as it relates to the next issue – size. Many believe that bigger is better not only for economics, but also for reliability.

Bigger is Better

California is fortunate (or perhaps unfortunate) enough to represent within a single state over 10% of the nation's electricity market and over 40% of the load within the Western Systems Coordinating Council ("WSCC"). Thus, a single state legislature could create critical mass for California by ordering state-regulated entities to act. Moreover, two of the three participating transmission owners in Cal-ISO are among the largest investor-owned utilities in the nation other than the registered holding companies. What worked here in California by legislative

⁴ Webber, *Evita*.

directive (*albeit* based on a broad stakeholder consensus leading up to unanimous passage of AB 1890) may not be optimum or even possible elsewhere.

A key issue, however, is how to establish region-wide ISO's (or other entities) as soon as possible, so that we can reduce pancaked rates and eliminate the "seams" issues that make trading difficult and expensive. Even in California, as big as we are, we see the need to work on the "seams." We already see possibly substantial efficiency gains at the borders once we can better match the scheduling rules and transmission rights marketers use throughout the WSCC.

Among the transactional challenges facing transco's are questions like whether they should retain distribution lines and the distribution franchise (which Oglethorpe did not have); the degree of difficulty and cost of divesting *all* generation (including nuclear units); and how transco's will deal with the "reliability must-run" or "RMR" issue.⁵ It took us almost 18 months, and several million dollars in transaction costs, to accomplish the Oglethorpe unbundling – creating Georgia Transmission Corporation, with approximately \$800 million in transmission assets, and Georgia System Operations Corporation, with fewer assets (the control center, energy management system, and personnel). We did it without having to deal with an indenture trustee with limited powers, no FERC Section 203 approval, no state commission oversight, and only minor requirements for additional debt financing – any one of which could have exponentially increased the time and/or expense of the transaction.

In other words, ISO's may take time, but would appear to be a faster way to accomplish region-wide transmission access and reliability markets. Whether the entity is for-profit or not-for-profit would not appear to affect the size issue for an ISO, but it is worth noting the difficulties of any *combination* of transmission assets of not-for-profits with investor-owned utilities. Asset sales may be the dominant structure, because many not-for-profit statutes do not allow those entities to merge with a for-profit corporation.

Regulatory Considerations

As we move from the "old ways" of regulation at FERC to Chairman Hoecker's "supervised competition", many of us have recognized that improvements can be made to the historical model of regulated entity and regulatory proceedings – particularly if we wish further to improve the industry's record on innovation and efficiency. Most of us are ready to allow the market to work where it can because we see that centralized planning and regulation do not necessarily work as well as good old capitalism and entrepreneurial spirit.

On the other hand, transmission is the quintessential natural monopoly. Given that, the issue is what kind of regulation is appropriate for an entity controlling and/or owning the grid. Messrs. Dunn and Williams (and several commentators at the FERC ISO Conference) have suggested that for-profit transco's deserve light-handed regulation, apparently because they see the evil of using wires to favor generation being eliminated with an "independent" transco. Messrs. Dunn and Williams also argue for "certain limited rate incentive mechanisms as a tool to attract investment."

⁵ The RMR issue is the result of transitioning from a system built to ensure reliability both through lines and generation. In California, as the Transmission Owners divest their generation, the ISO finds it necessary to have control over certain units needed to maintain voltage support or deal with other N-1 contingencies. These units at those times have locational market power. The ISO has the right under its Tariff to designate a unit an "RMR" unit and the owner is obligated to sell to us at FERC-regulated cost-of-service rates.

Without suggesting that conditions remain the same, it is useful to at least make note that the Federal Power Act and its regulation of investor-owned utilities grew out of a Federal Trade Commission report that "chronicled at length the venal conditions and iniquitous practices it had uncovered in the course of its investigation [of the investor-owned utility community]."⁶ The D.C. Circuit summarized the FTC's findings as including:

manipulative practices permitting maximum control of operating facilities with minimum investment, arbitrary or imaginative overstating of fixed capital accounts to support excessive utility rate charges and in consequence to encourage the sale of value-inflated securities, disregard of prudent financing practices, creation of fictitious profits by means of unreal inter-company transactions and other similar devices, use of deceptive or unsound method of accounting, manipulation of security markets, and exaction of excessive payments from operating companies for services rendered to them.

Id. Notably, the D.C. Circuit found that "of the 19 major abuses summarized, virtually none could be associated with the cooperative structure where ownership and control is vested in the consumer-owners." *Id.* In other words, the Federal Power is "focused on the sorts of evils associated exclusively with investor-owned utilities." *Id.* Proponents of light-handed regulation would, therefore, seem to bear a heavy burden in justifying why *transco's* as opposed to other investor-owned utility monopolies, would be in less need of regulation.

In contrast, not-for-profit entities eliminate a structural bias that is at the heart of regulation – the conflict between owner (shareholder) and customer. When coupled with stakeholder governance or processes for reaching stakeholder consensus prior to implementation of policy and rules, the not-for-profit structure with one master – the market participants – would appear the better candidate for light-handed regulation. Interestingly, a public power *transco* or ISO would be exempt from Federal Power Act regulation altogether absent legislative changes.

Efficient Operation

Clearly, policy makers and market participants must in all cases avoid "[v]esting unaccountable, incentiveless multilaterals with control over access to generation."⁷ I know from a year of personal experience that this is not the problem in California. The question, however, is whether any particular structure is manifestly superior for ensuring efficient operation. I believe it is not. For example, various commentators have suggested that without shareholders "on the hook" for fines, penalties, and rate refunds, management cannot be trusted to operate prudently.

There are plenty of examples of efficient and inefficient for-profit entities as well as not-for-profit entities. For example --

- ✓ Has the profit incentive made Burlington Northern offer more and less expensive coal transportation from the Power River Basin to Texas and Oklahoma? Western Farmers Electric Cooperative had to start its own railroad to find an alternative to Burlington Northern's high rates.

⁶ *Salt River Project Agric. & Improv. Dist. v. FPC*, 391 F. 2d 470, 475 (D.C. Cir. 1968).

⁷ Dunn and Williams, "Transcos: The Key to Open Access," *Public Power* (Sept.-Oct. 1998).

- ✓ Has the profit incentive given consumers lower rates and better service from Delta out of Atlanta or Northwest out of Minneapolis (where there are effectively monopolies) or are service and prices better only where there is competition?
- ✓ Has the profit incentive given us better and less expensive health care than what we had with a system once dominated by not-for-profit hospitals?
- ✓ Can one learn better math from the Sylvan Learning Institute than it can from the National Cathedral School for Girls in Washington?
- ✓ Did Commonwealth Edison do a better job in the 1980's managing its nuclear portfolio and power costs than the Sacramento Municipal Utility District?
- ✓ Has Microsoft's domination of software helped or hurt consumers and/or made prices higher or lower?
- ✓ Would NYMEX be more efficient or have more innovative products if it were a for-profit stock corporation rather than a not-for-profit membership organization?
- ✓ Would we have better medicine from Sloan-Kettering Cancer Institute or the Mayo Clinic if they had stockholders? Would we have better education and research from Harvard and Stanford if they were for-profit corporations rather than not-for-profit educational institutions?

A key for any entity is "getting the incentives right" for management and employees. Measuring management performance by the price of stock is a common and simple measure for management. Devising incentives for not-for-profits is more challenging, but not impossible.

Perhaps the more insidious deterrent is our human tendency to equate public benefit with vows of poverty. It seems acceptable for for-profit entities to reward management from profits, but more problematic to keep not-for-profit compensation on par with for-profits. Thus, cooperatives and munis lose top performers to higher-paying investor-owned utilities and *everyone* loses top performers to the marketers.

What do I conclude from the above? At a minimum, there are winners and losers in the efficiency and effectiveness categories whether management is loyal to shareholders or to the public benefit.

Capital Formation

Another consideration in selecting among our four options is the ease with which the entity can raise necessary capital (and, of course, its cost). The Cal-ISO and the California Power Exchange are § 501(c)(3) organizations. The Cal-ISO's \$300 million infrastructure investment was financed totally with tax-exempt debt. As a start-up, we faced additional credit costs; however, in our first year of operation both we and the California Power Exchange are finding even after only 9 months of operation, we have been able to increase our borrowing ability and lower the risk premium as lenders gain confidence in our management and regulatory status. Our overall cost of capital is, in fact, lower than a for-profit entity because of our ability to leverage to 100% debt financing and our tax exemption.

Would corporate form affect an entity's ability to finance new transmission? This is a question without much history to draw on for answers – but given the relatively low cost of transmission, its guaranteed return

through FERC rate regulation, and the analogy to post-Order 636 interstate pipeline projects, it would seem logical that any entity building necessary transmission could attract adequate capital.

Independence of Decisions

Both Jeffrey Tranen of the Cal-ISO and José Delgado of Wisconsin Electric, during the FERC ISO Conference, alerted FERC to the structural biases that transco's would have in planning decisions that will be faced by either ISO's, transco's, or any other entity. An exchange from the ISO Conference is illustrative:

COMMISSIONER BAILEY: Are you saying then that from the standpoint of an ISO, the fact the word, independence may mean more to an ISO than what we can envision in a gridco, that an ISO is independent from commercial interests, and there may be more interest in the grid from a reliability standpoint; is that where you're going with this?

..

MR. DELGADO: Yes, that independence is that it is solely focused on reliability and operations of the grid in a way that it's open to everybody else. Right now I'm talking reliability because that's our panel that can talk about grid in the market, too. But it is its focus, and it has the size, it has the confidence, it gets the information, it gets the collaboration. I have great concern when you have a transmission company that has an obligation to maximize income and the benefit of the stockholders, that it won't take much for the imagination to find ways in which somebody thinks that they're being disadvantaged by the operation of that entity. However, if that ITC is under an ISO, you overcome that issue so you can have both.

The Cal-ISO currently evaluates both transmission and generation in determining the least-cost and most reliable means to address grid reliability. This is much like the analysis utilities faced when asking whether to build or buy new capacity. Would a for-profit transco be biased toward increasing rate base? Utilities have certainly fallen victim to that bias in the past.

Relative Cost of Forms of Organization

Although much sand has been thrown in the air over the "high cost of ISO's" it is not clear what evidence exists to demonstrate that for-profit is less expensive than not-for-profit or that ISO's are less expensive than region-wide transco's. The Cal-ISO's recently completed a benchmarking study to begin the process of comparing costs and functionalities among the five most mature ISO's – Cal-ISO, New England ISO, PJM ISO, ERCOT, and the New York ISO. California is, as everyone assumed, the most expensive in terms of total investment and cost per MWh and per transaction. On the other hand, no other ISO has all of the functionalities California has – at least yet. This benchmarking study (which is a unilateral effort of the Cal-ISO, but which will be revised after the other ISO's have been able to review it) is available on our Website at www.caiso.com.

The *real* issue is value for investment. New computers will be required for any business form of entity to become control area operator for a wide region. As the Pool-to-ISO's have demonstrated, building on existing infrastructure will save costs. The "be totally independent" or "work through the utilities" is thus a big driver of cost. So is the "bring on full functionality and full retail competition in a year" vs. a staged approach. In fact, the biggest difference between the Cal-ISO's costs and other ISO's is its telecommunications system – a design decision made early and unconnected with the chosen corporate form.

Bureaucratic vs. Streamlined Decisionmaking

Finally, in a variety of forums, the charge has been made that "non-profit ISO's will prove difficult for regulators to police"⁸ and that ISO's are "unaccountable, incentiveless multilaterals".⁹ Others worry that companies like American Electric Power, with a "very forward looking view of transmission" and "one of the most flexible, creative transmission providers around" will "end up as an ISO where you have bureaucracy, lack of flexibility and 'the need to follow uniformity over common sense.'"¹⁰ This particular commentator added that "the idea of going through five ISO committees to fix something that's wrong is upsetting."¹¹

In contrast, consumers see faults with for-profit transco's. "They're monopolies," notes John Hughes of ELCON.¹² Hughes "favors [ISO's] but not the organizations that FERC has approved. He doesn't think any of the ones FERC has approved have the characteristics of a legitimate independent organization." Hughes sees ISO's as analogous to air traffic controllers. "Would you want GM directing traffic so that it would let GM cars go through and not Fords, he asked."¹³

Again, the jury is surely still out on whether any corporate form is the clear choice for good decisions. In fact, even among ISO's, the jury is out on whether the "for-profit" styled small, "independent" board makes better and faster decisions than the stakeholder board – principally because of all of those committees and advisory processes necessitated when the stakeholders are not the ultimate decisionmakers.

⁸ Dunn and Williams.

⁹ *Id.*

¹⁰ "PECO marketer praises AEP flexibility but not ISO committees," *Restructuring Today*, Oct. 22, 1998.

¹¹ *Id.*

¹² *Id.*

¹³ *Id.*

The Criteria Applied – A Summary

A comparison of the options and the criteria can be summarized by the following table:

	<u>TRANSCO's</u>		<u>ISO's</u>	
	<u>FOR PROFIT</u>	<u>NOT-FOR-PROFIT</u>	<u>FOR PROFIT</u>	<u>NOT-FOR-PROFIT</u>
Bigger is better	high transaction cost, long delays to implement	high transaction cost, long delays to implement	easier to implement regionally	easier to implement regionally
Regulatory considerations	likely fully	likely light-handed or exempt	?	so far light-handed
Efficient operations	can use stock incentives; shareholder is "master"	need other incentives; public benefit is "master"	can use stock incentives; shareholder is "master"	need other incentives; public benefit is "master"
Capital formation	equity and debt	debt; possibly tax-exempt	equity and debt	debt, possibly tax exempt
Independence of decisions	possible bias toward building rate base	arguably independent	arguably independent	arguably independent
Relative cost	?	?	?	?
Decisionmaking	small board, but lose stakeholder consensus	can vary	can vary	can vary

RECOMMENDATION

As people consider FERC rulemakings and regional solutions, I suggest a key question should be, "what drives excellence?" In the end, I submit that it is the definition of goals and establishment of adequate incentives to achieve those goals that drives excellence. For ISO's or transco's it is, in effect, management and the entire workforce, properly directed and motivated, who accomplish things. There are examples of people achieving excellence in not-for-profits as well as for-profits. So as between the two, the key appears to be how effective we are in setting the goals and motivating the people.

Can transco's be as efficient as ISO's? I see that as a lesser question than whether for-profit monopolies naturally excel over not-for-profit monopolies. There is no question that the goal setting and incentives for for-profits are tied to a core measurement – shareholder value. But we should ask whether that is the correct motivational direction for a transmission controller tasked to provide open and non-discriminatory access. In other words – which is superior:

- ✓ one master (the public benefit) with all the questions on how to set proper goals and motivate people; or
- ✓ two masters (shareholder value and public service) with all the inherent conflicts and need for close regulation that the divided loyalties require?

Only time will tell. Meanwhile, let a thousand flowers bloom. Some will be roses, but with very sharp thorns. Some will be dandelions. After the laboratory results are available, in a few years, we will better be able to answer whether there is an optimum form of organization. In the meantime – ELCON may be right to be uncomfortable with “regulators and policy wonks trying to come up with perfect regulation.”¹⁴

¹⁴ *Id.*