Buying and Selling Electric Power in the West

Remarks by
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I. Introduction

Good morning. It is indeed my pleasure to address the fifth annual conference on buying and selling electric power in the West.

In the five years since this conference first started, the industry has made great strides in moving toward competitive markets and in trading electricity. Indeed, in Order 888, the FERC determined that competitive markets are the preferred way of protecting consumers and furthering the public interest. We issued Order 888 primarily to ensure non-discriminatory grid access, a necessary prerequisite to efficient trade.

Although Order 888 was a big step forward, it is clear that there are still problems in grid management that impede competitive electricity markets. Because the grid is still controlled in many regions by entities with merchant interests, discrimination is still a problem. This hurts current competitors, and I believe the perception of unfairness keeps some potential players from entering the market.

The grid also remains balkanized among scores of grid operators. This increases the direct and indirect costs of grid operation, and creates seams that affect grid reliability.

Current grid pricing, based on a contract path approach involving a separate access fee each time a transaction crosses a corporate boundary, is anachronistic

and mired in inefficiency. Such pricing, which we call pancaked rates, artificially limits the size and scope of power markets.

And congestion management is splintered and bureaucratic, and handling loop flows continues to be a vexing problem. Necessary transmission facilities in some regions are not being built, and all of these problems are contributing to growing concerns about whether the current balkanized system of grid management can maintain reliability in a competitive era.

These problems are standing in the way of the Commission's goal of competitive electricity markets. The Commission issued Order No. 2000 in December as a comprehensive approach to resolve these grid management problems through the formation of Regional Transmission Organizations. An RTO is an organization of grid owners that meets standards related to independence from market participants, scope and configuration, and operational authority, and that carries out functions such as congestion management, calculating Available Transfer Capability, and administering the grid tariff. An RTO can be an ISO, an independent transmission company, or some appropriate combination of entities. As one can glean from the Commission's order on the Alliance proposal, issued contemporaneously with Order 2000, the Commission is serious about our standards related to independence, large scope and configuration, and eliminating pancaked transmission pricing.

Now don't worry - - I am not going to launch into a detailed summary of the 750-page Order 2000. I would hope that most of you are familiar with the broad outline of that order. I do, however, want to spend time this morning discussing issues related to RTO formation, and in particular RTO formation in the West. In addition, I will discuss the pro-competitive benefits that RTOs will bring to the marketplace, including reliability benefits.

II. Reliability Benefits of RTOs

First, let me discuss the considerable pro-competitive benefits of RTOs. For example, a well-designed RTO can take a real bite out of vertical market power by separating the control of transmission from merchant functions. This is critical to ensuring competitive power markets. But an RTO also holds promise for resolving a number of grid management. For example, because it approaches grid

management on a regional basis, an RTO can eliminate balkanization through improved congestion and loop flow management, it can price transmission more efficiently and thereby expand the scope of power markets, and it accurately calculate Available Transmission Capability, thereby improving trade.

I am also convinced that RTOs can make a substantial contribution to improving the reliability of the grid. According to the Electric Power Research Institute, electricity will account for nearly 70% of total energy use in the U.S. by 2050, and an upgraded power delivery system capable of supporting a digital economy will be key to our economic growth. Grid reliability is thus of critical importance. Yet there are more and more signs recently that grid reliability is worsening. For example, a recent DOE report on last summer's power outages in certain regions found a number of factors contributing to those outages. Among the factors, two are noteworthy in our discussion of RTOs.

One factor the report cited is that the transition to competition has left reliability management in the hands of a number of disaggregated institutions. RTOs will definitely help here. A single RTO will be responsible for the reliability of the grid over a large area. The following aspects of RTOs will clearly enhance reliability compared to the current regime: centralized responsibility for loop flow, redispatch, congestion management, coordination during system emergencies and restorations, conducting comprehensive and objective reliability studies, coordinating generation and transmission outage schedules, and sharing ancillary service responsibilities. Also, Order 2000 requires an RTO to operate under the standards set by NERC or a successor organization.

Another factor that the DOE report cited as contributing to outages is that regulatory policies are not providing adequate incentives to maintain and upgrade facilities. EPRI has also cited the lack of adequate cost-recovery mechanisms for transmission investment as preventing the introduction of new power delivery technologies. Again, RTOs can be a key part of the solution. Order 2000 expressed the Commission's willingness to consider performance-based pricing and risk-based returns on equity for RTOs. These pricing treatments, especially PBR, should help provide the needed incentives for grid maintenance and upgrades. I know that designing a good PBR program is not easy. It's critical that the performance targets are carefully designed to reward improvements in congestion management, reliability, cost minimization, and the like. But once those targets are set, I think

better operation and the adoption of promising new technologies, such as FACTs controllers and superconducting transmission cables, will provide the opportunity for RTOs to reduce costs and make money by improving grid performance.

All the incentives to upgrade and expand transmission capacity, however, will be ineffective if new facilities cannot get siting approval. Siting is a major problem in getting new facilities in place. Here, again, RTOs will be helpful. Under Order 2000, an RTO must be responsible for planning, and directing or arranging, transmission expansions, additions and upgrades, and the RTO must coordinate such efforts with the appropriate state authorities. Thus, with an RTO present, there will be a comprehensive regional planning process that will serve as a single point of focus for all participants. It is my hope that this will allow the various state authorities involved in siting approval to talk with each other, find common ground, and approve facilities that are needed for regional commerce. In other words, the RTO's comprehensive regional solution, formulated through a process that involves a broad array of market participants, should have more political appeal to siting authorities.

Another problem associated with grid expansion is determining the rights to new capacity. Why pay for new capacity needed for reliability if you're not going to get the rights to actually schedule it? Defining those rights is no doubt tricky, but one thing is for sure - - they can best be addressed on a regional basis. An RTO will be able to standardize the terms of transmission service over a wide region and this will help the market define transmission rights and result in their tradeablility, which is essential to well functioning congestion markets.

I would hope, however, that getting new transmission facilities built is not the only resource decision that is improved by RTOs. Instead, it is my hope that RTOs will facilitate the most efficient means of dealing with resource decisions, including those that are environmentally friendly. That could mean transmission, generation, or load reduction. In the transmission area, new lines are not the only way of increasing transmission capacity. Alternatives include upgrading breakers and other network components as well as better monitoring, communications and control capability. Hopefully, a well-designed PBR scheme will provide the right incentives for RTOs to choose the most efficient ways to increase grid capacity.

I would also expect that the RTO's market-based congestion management regimes will provide the price signals to indicate the location and cost of congestion

and enable the market to determine whether that congestion is best relieved by new transmission capacity, new generation or demand reduction alternatives. And tradeable transmission capacity rights, and short-term markets for trading such rights, that are needed for an effective congestion management regime will also help facilitate the entry of environmentally friendly but intermittent generation resources. The ability to trade transmission rights will enable these new resources to manage the risk and reduce the cost of holding the transmission rights needed to bring those resources to market. Again, the improved price signals, enabled by a regional approach to congestion management should result in more efficient resource decisions and help ensure that needed resources are realized.

Finally, I think RTOs will help reliability by attracting new generation participants. As the sole provider of transmission service, which includes administering an open access tariff and evaluating and approving requests for interconnection, an RTO will provide one-stop shopping for new generators over a broad market area. Perhaps more important, tariff administration and interconnection evaluation by an RTO will be perceived as focused, fair and unbiased. The current scattered administration of the grid, and the perception that the rules of the road are not applied fairly, may be keeping some players, and needed resources, out of the market. RTOs will facilitate their entry.

III. Need For an Interconnection Policy

While I'm on the topic of entry of new generation resources, let me digress to mention a policy concern that the Commission must address soon. I'm talking about the need for FERC to articulate an interconnection policy. In order to serve the market, new generating resources must get interconnected to the grid. But marketers and generators tell us that vertically integrated transmission owners sometime try to impose barriers to interconnection. These barriers can be in the form of a protracted, gamed process for securing an interconnection, or they can be in the form of a requirement that generators purchase long term transmission service in order to secure interconnection.

Both practices are wrong. The way I see it, securing an interconnection is part and parcel of securing transmission service, and there should be a structured process for interconnection, with reasonable response times, study requirements, and payment requirements. Similar process specifications for arranging

transmission services are part of our Open Access Transmission Tariff. I also think that generators should be able to secure access to the grid through an interconnection without having to pay for long term transmission service. Merchant plants may not have long term sales contracts and thus do not need long term transmission service. But they do need a secure long term right to inject power into the grid at their point of interconnection. Generators should be assured of a long-term right to do so independent of transmission service. In other words, we should unbundle "access to the grid" from "access across the grid." Such a policy is pro-market and I will urge the Commission to address interconnection policy generically as soon as possible.

But back to the subject of grid reliability. I've been talking about why I firmly believe that RTOs will be able to make a significant contribution to the reliability of the Nations' transmission grid. This is an important rationale for RTOs, and one that is often overlooked in the debate on the competitive benefits of RTOs.

IV. The RTO Formation Process

Given their significant benefits, the task before the industry, across the Nation and here in the West, is to get RTOs formed. As you may know, it is a source of some frustration to me that the Commission chose a program that professes to be voluntary. Real problems demand real solutions now. I would have preferred a somewhat more direct way for FERC to get RTOs formed. Nevertheless, I remain optimistic that the industry will get the job done, and that we will have RTOs in all regions by the end of next year. Why am I optimistic?

First, the industry should accurately perceive that the Commission is resolute and determined to get RTOs formed. The texture and tone of Order No. 2000 could not be clearer. The Commission spilled 750 pages of ink finding serious impediments to competition and to efficient and reliable grid management, and then finding that RTOs can resolve those serious problems. It is also important to note that the Commission is prepared to devote a very significant amount of its scarce staff resources to an unprecedented collaborative process across the Nation directed at RTO formation.

Let me take a moment here to describe this collaborative process. The initial phase of this process is a series of five workshops to be held across the country. I

must emphasize the word "workshops." These will not be the traditional technical conferences you may be used to. Instead, the workshops are intended to be real working sessions, designed to make substantial progress toward RTO formation. The Commission staff will endeavor to tailor the nature and agenda of each workshop to the RTO formation situation and issues in each reason. Our staff will also be proactive in the workshops, attempting to forge consensus where possible, provide guidance where appropriate, and then taking the appropriate follow-up action to move forward. That follow-up may mean arranging additional meetings. It may also mean that the staff steps aside while the principals in the region hammer out agreements. It will be whatever it takes to get RTOs formed. I would like to mention that the Commission now has an RTO collaborative process link on its web-site. Posted there is a copy of Order 2000, and soon there will be the all of the most up to date information on the regional workshops, such as dates, hotel information, and agendas. And as we move through the collaborative process, additional information will be added.

My point here is that the collaborative process the Commission has committed to is like nothing we have done in the past, both in nature and scope. I think that speaks volumes on the Commission's commitment to the our express objective: for an RTO to form in every regions of the country. The message should be clear: the Commission expects utilities to form RTOs.

A second reason for optimism that RTOs will form is that the Commission has offered some "carrots" in the form of innovative rate treatments if RTO applicants show that those rates help achieve efficient grid use and investment and produce reliability benefits to customers. These financial incentives may motivate some wavering entities to join RTOs.

Third, in addition to "carrots," the Commission, in Order 2000, has also indicated its ability and willingness to use some "sticks" to get this job done. We underscore that we have conditioning authority over market based rates and mergers that we can use to ensure that the grid is not used to exercise market power in electricity markets. Order 2000 says that requiring RTO participation through our conditioning authority, or even mandating that a utility participate in an RTO, is an obvious way of ensuring this.

And finally, I think there is an emerging recognition in the industry of the benefits of RTOs, both as a way of making competition work and a way of dealing with the growing concern over grid reliability. Given this recognition, I believe that most participants in the electric power industry will come together in good faith and find ways to form RTOs in all regions.

I am aware that there may be some hesitations to RTO formation, and some of these concerns may have contributed to the earlier failure of the IndeGo effort. I would like to address two of these hesitations. First, RTOs will not cause the export of cheap power out of low-cost states. I know that this may be a concern in the Northwest with its abundant hydro and low-cost coal resources. The major factor affecting the export of low-cost power is the decision to allow retail competition and the accompanying decision to relieve utilities of the obligation to serve an area with their lowest cost resources. This decision can be made with or without an RTO in a region. I would argue that an RTO will actually help a region to stay low cost by expanding the market area over which the region acquires new generation resources, giving the it access to the best new resources.

Second, introducing an RTO in the area need not result in transmission cost shifting. Order 2000 announced a policy of providing flexibility to RTOs for the allocation of fixed transmission cost recovery, including the use of so-called license plate rates. All ISOs that we have approved to date requested that they be allowed to use license plate rates. Thus, our flexible policy should allow regions to avoid the problem of transmission cost shifting.

V. Western Interconnection-wide RTO

This leads me naturally to a topic that I am sure is important to this group: getting an RTO formed in the West. I am confident that our RTO rule will bear fruit here in the West because this region has, in the past, shown strong leadership in the area of grid regionalization. The West was the first region to form Regional Transmission Groups, and I understand that the Western Regional Transmission Association, the Northwestern Regional Transmission Association, and the Southwestern Regional Transmission Association are now active groups working toward rationalizing grid operation. I also understand that these groups are actively discussing the formation of a West-wide umbrella RTO - - the Western

Interconnection Organization, or WIO - - that would share RTO functions with the regional entities. Let me say two things on this topic.

First, I am sure that I speak for the entire Commission in saying that I am heartened that the region is already moving ahead. We want nothing more than for regions to come together, address their region-specific issues, and create their own RTO proposals. I understand that the WIO effort has the support of WRTA, SWRTA, NWRTA, the WSCC, and the Committee on Regional Electric Power Cooperation (CREPC). I also understand that there is a meeting in Portland next week to discuss RTO issues in the Northwest. All of this is impressive, and I encourage you to keep on with these efforts. But I also strongly encourage the participants in these discussions to attend the Commission's Las Vegas meetings. Please share your thoughts and experience with the larger Western community there. To the extent you have made progress, it would be helpful to report the good news to the large regional gathering, especially to those that may not be involved in your discussions. Perhaps they can take lessons from your successes, and learn from your unresolved issues as well.

And second, I would very much like to see a Western Interconnection-wide RTO. That would be the ideal, and I strongly encourage efforts in that direction. I am aware, however, that it may prove difficult for a single Western Interconnection-wide entity to take on all of the RTO functions, at least at the outset. Participants may decide to pursue a West-wide umbrella RTO that would share or delegate functions or authority in some way with smaller sub-regional entities. This may be a good approach, but I would ask market participants to be sensitive to a concern arising from the tension between two of the required characteristics of RTOs: full operational authority, and adequate scope and configuration.

A. Operational Authority v. Scope and Configuration

Both of these characteristics are critical. The RTO rule requires that an RTO be of sufficient scope and configuration to permit it to perform its functions well. This means an RTO should cover a large area, and be configured in a way that is consistent with market and electrical realities. This is important to enable the RTO to perform certain of its functions that are best carried out over large areas, such as one-stop shopping for transmission service, efficient transmission pricing,

congestion management, parallel path flow management, and imbalance market operation, to name a few.

The ideal RTO scope to accomplish these goals would be a west-wide RTO, as the WIO idea seems to be. And, by the way, BPA and WAPA, with their extensive transmission resources, must be included in such an organization to give it adequate scope. I urge market participants to find a way to include these entities in a Western RTO.

In addition to large scope and configuration, Order 2000 requires an RTO to have operational authority for all transmission facilities under its control. The need for this should be obvious. An RTO is responsible for grid management consistent with the requirements of Order 2000 and thus absolutely must have the capability to direct facility operations in order to carry out its required functions. It must have the authority to meet its grid management responsibilities. Otherwise, the regional grid will remain balkanized.

However, it may prove difficult for a number of reasons to get a single organization that possesses both sufficient operational authority and adequate scope and configuration. While it would be ideal to start out with a single west-wide RTO that performs all RTO functions, that may not be possible. The WIO discussions have recognized this and are instead pursuing an umbrella organization that will share authority with smaller sub-regional bodies. I understand that discussions will first address the functions that each entity will perform.

I heartily endorse this concept. I am concerned, however, about how to define the operational relationship between the umbrella RTO and the sub-regional bodies that are part of it. There are a number of options: direct control by the RTO, hierarchical control by the RTO over sub-regional entities, and shared authority between an RTO and other entities. I am particularly concerned with the shared control option. My concern is that a sharing of operational authority between the RTO and another entity may decrease the effectiveness of the RTO and fail to eliminate grid balkanization. For example, the umbrella RTO might propose to delegate the congestion management function to its several sub-regional entities. My concern is whether each of those sub-regions is of sufficient scope and adequate configuration that their separate congestion management functions are efficient. If not, and they are too small, the current balkanized grid will be perpetuated.

Thus, I perceive a palpable tension between the scope and the operational control characteristics. Order 2000 says that the Commission will permit RTO proposals flexibility in deciding the particular division of operational responsibilities. But the question is how flexible? When does flexibility really mean continued balkanization? When does it undercut one-stop shopping? How much of a trade-off is acceptable in order to get RTOs off the ground?

B. Buck Stops With the RTO

I do not have a firm answer, and I am not here today to draw bright lines regarding how functions may be divided between an umbrella RTO and sub-regional entities. The RTO rule explicitly states that the RTO must have operational authority for all transmission facilities under its control, and that the RTO must have exclusive authority for maintaining the short-term reliability of the grid that it operates. The RTO is responsible for all RTO functions. These are clear requirements. The rule also says that if any operational functions are delegated to entities other than the RTO, the RTO must ensure that this delegation will not adversely affect reliability or provide any market participant with an unfair competitive advantage.

The way I interpret this, the buck stops with the RTO on all functions. It has the responsibility for grid management and it must have the authority to ensure that the RTO functions are appropriately performed.

C. Eliminate Balkanization

If participants in the West consider an interconnection-wide umbrella RTO with sub-regional entities, let me offer some guidance as you work through the appropriate functions to be performed at the West-wide level and those to be performed at subregional level. First, whatever division you adopt should not perpetuate or increase any pre-existing balkanization. We should be moving toward a large regional grid management entity. Regional grid efficiency and reliability, expanding power markets, and one-stop shopping for grid services are basic objectives of Order 2000 that cannot be compromised.

D. Independence

And second, if a subregional entity is to perform an RTO function specified in the rule, I would argue that such entity itself meet the independence standards for an RTO; that is, it should not be a market participant or affiliated with a market participant as that term is defined in Order 2000. Order 2000 already requires that an entity that performs the congestion management function, or that administers a real time balancing market, may not be affiliated with a market participant. While Order 2000 does not explicitly require that entities that perform the other RTO functions as part of a hierarchical arrangement satisfy the independence standard, it seems implicit to me and I think it makes good sense for such entities to do so. Independence is the bedrock objective of Order 2000. The RTO arrangements that we create going forward should be free of mistrust. That mistrust can be eliminated if all entities in the RTO chain of command meet the independence standards.

VI. Conclusion

There are many topics important to competition and trade in the West that will be addressed during today's conference. RTOs are not the only issue. But RTOs will provide the platform for competition, and thus their formation is essential. We are finally standing at the gates of an enormous opportunity to improve the fairness, efficiency and reliability of our transmission grid. And such improvements will help foster the competitive electricity markets that we have talked about for so long. The Commission's RTO program will facilitate those improvements, and I ask your vigorous support for our RTO formation efforts.

Thank you.