## 2005 Eastern RTO/ISO Conference Chairman Pat Wood, III Luncheon Speaker Washington, DC May 12, 2005

You are the trailblazers of open access and competitive markets. The three Eastern ISO/RTOs have led the charge to open the transmission grid and allow the competitive forces of suppliers to provide customers with the power they need, reliably and at the lowest cost.

Even before Order No. 2000, you understood the benefits to this approach. Y'all didn't need Washington to tell you that. In fact, like so much of what is good in this country, the vision of competitive markets that you have built has shown the country what an independently-operated transmission grid and market can do for customers. Your efforts and experience revealed the best practices and benefits of standard market design. Your work continues to guide the development of that vision across the country. You can see it in the CAISO, ERCOT, and MISO. We will also undoubtedly see it as SPP develops further and Energy's ICT takes shape. And, interestingly, this successful market design has become a template for the rest of the world, as many other countries move to modernize their electric power systems to enhance reliability and efficiency.

Four years ago, on my second say of work, after voting a West-wide must offer and price cap on my first day of work, we held a seams conference with many of you from the Eastern ISOs. It became very clear that we were looking at a real Tower of electrical Babel, and so we moved toward the single RTO concept, and then settled back with SMD. The goals of wholesale power market design were and continue to be threefold: capturing economic efficiency gains for customers, stimulating development of needed infrastructure and providing transparency enabling appropriate oversight.

Here in the East, we continue to see improvements on all of these fronts. The successes have been pronounced.

- In its fifth year of operation, fuel adjusted spot power prices in ISO-NE have dropped by 5.6%
- NYISO's RTS software introduced in February is improving day-ahead commitment decisions and should reduce uplift costs charged to customers.
- PJM continues its footprint expansion, now providing more supply options and efficient dispatch of over 165,000 MW of capacity, and reporting a 16% reduction on (fuel and demand) adjusted eastern power prices from 4Q03 to 4Q04.
- The new kid on the full-market block, MISO, is off to a firm start it pushes new frontiers in scope and size of markets while enhancing reliability and promising to reduce transaction costs for market participants.

I'd like to note that while getting neighboring systems under one RTO umbrella is a great goal, one that I supported in one of my first votes in 2001, improved coordination and information sharing across RTO's using a standardized set of rules and protocols just about gets us there as well. I'm very encouraged by the removal of rate pancakes between the ISO-NE and NYISO, and between PJM and MISO. I expect that a similar rate depancaking effort will emerge between NYISO and PJM, as well as between the US RTOs and Ontario to reach an even more seamless grid.

Just as New York and New England have taken the lead on the rate pancaking issue, I hope that the two successfully take the next step toward more coordinated dispatch. Looking at generation over a larger region and economically dispatching the cheapest units first can have tremendous benefits for the customers and those who serve them. I discussed this with market monitor David Patton at the last Commission meeting. Not taking that next step is just leaving money on the table. Let's squeeze every efficiency we can out of our available infrastructure. It's just a waste of customer dollars not to.

The work done over the past 5 years has truly advanced the cause by reducing barriers to efficient trades that in the end benefit customers. Just take a look at the interISO.com home page -- it features the Northeast Seams Project Report that Steve Whitley discussed yesterday. This report illustrates this very issue as clearly as I have seen. Taking a look at those documents really shows how much progress has been made here in the Northeast to coordinate between the markets.

The ability to coordinate across regions is a great step, but we also need to get the rules right. Here in the East, locational marginal pricing and the standard market design have proven to be just the right set of rules. These rules fundamentally marry up the reliability of the system with the price signals. It was reassuring to hear how much more reliable the MISO system became following the implementation of MISO's Day Two markets. This reliability benefit comes not just from the region-wide energy dispatch, but from the locational signals that LMP provides.

We've learned the hard way what happens when prices do not reflect the physics of the system. We get over-investment in low cost areas that do not need it and under investment in infrastructure where it is needed. New England comes to mind. We see the need for RMR contracts that keep inefficient units afloat while not encouraging the new efficient investment that can replace those old clunkers.

Recently we've heard some calls from customers to revisit some of the aspects of the markets. This is as it should be. Markets are there to serve customers, not the other way around. And if customers aren't getting the services they need (and are willing to pay for), then markets aren't doing their job.

We have to remember that the costs of failed investments in the past were dumped on the backs of ratepayers. All of the costs. The current base of new investment is coming to the market without those strings attached. Today, the risks of new investment primarily go to the investors in the power plants, not the end-use customers. Because this risk has been so dramatically shifted in the past decade, we went through the first recession since the Great Depression where average power prices didn't go up. In the non-competitive generation era, the costs of oversupply were fully borne by captive ratepayers. Now, in large part, the risk of over-investment is borne by those who can best manage that risk. This is a significant achievement of the competitive model – one that is too often ignored.

As I listen to the customers, I agree that we need to focus on three particular issues to continue the success -- and harness the benefits -- of competitive electricity markets going forward: Transmission Expansion, Resource Adequacy, and Stakeholder Accountability. I think that in these three areas lies the future agenda of the more mature electricity markets. Just as we seem to have settled many of the issues related to real-time markets over the past five years, I hope we settle these issues in the next 5.

The FERC is actively working to address these issues. And I call on all of you who work in these three marketplaces to focus your efforts on them and make them front-burner items.

First, we must continue to focus on upgrading the transmission system. While I agree that generation and transmission can serve as substitutes for some local needs, the transmission system is the backbone of a competitive market. In many ways PJM's strength and success was facilitated by the high voltage backbone of the original PJM system. We need adequate transmission for these markets to work and get the benefits to customers. Transmission expansion should facilitate our markets, not fragment them.

We held a transmission pricing conference last month to inform the Commission on policies that it can adopt to help bring about the needed transmission infrastructure. While the Commission is moving forward on this, pricing and incentives aren't going to be the sole answers. As the RTO markets have developed, there has been a reluctance for upgrading the system with more backbone transmission – the interutility, cross-region transmission that truly facilitates competitive markets. By allowing for regulated rate recovery of say, only those facilities needed to meet reliability needs in the next 5 years, we will likely miss the efficiencies available to the market if a broader, more realistic, longer-term view is not modeled. And all this fuss for only 7% of the end-use customer's bill.

The RTO planning process isn't solely to blame; it's only just begun to start working, as we heard yesterday. In fact, the enhancement of inter-utility transmission

that is lacking across the country. There are a number of reasons: unclear cost recovery mechanisms, siting difficulties, poor alignment of incentives for transmission owners to build. The lack of progress on these issues has really led me to look much more closely at the Independent Transmission Company (ITC) model, where the transmission-only companies appear to have a much stronger incentive to get needed transmission solutions in place. This model, which is what we have on the gas pipeline side, is pretty basic: the utility makes money off of keeping delivery customers happy, and customers are happiest when they can get all the service they desire for a fair price.

But we are not there yet, so we have to build upon the regional planning processes already in place at the ISO/RTOs. As an example, NYISO has just completed a study that indicates that there was no apparent need for some additional transmission investment in the East-West constraint point given the costs and that the market appeared to be working, particularly with more open flows with New England. The NYISO determined that the costs of relieving congestion outweighed the benefits. In other words, it made economic sense to continue to have this congestion. We need this information out there to test how the market is doing and be sure that barriers to efficient investment are removed. RTOs need to continue to develop this type of transmission analysis.

But it appears to me that there continues to be persistent non-economic congestion on the grid – leading me to ask, under what circumstances should the RTO take the lead and require additional transmission be built on an "economic" basis? If it can be demonstrated that an upgrade is in fact "economic" -- meaning that the benefits clearly outweigh the costs -- then the line should be built. However, if market isn't willing to do so due to a market failure, then it seems straightforward to me that the RTO should direct that line to be built. And, correspondingly, customers who receive benefits should pay for them. We shouldn't have to rely on merger concessions as the backstop to get economic transmission built.

Long-term contracts are the foundation for a stable and healthy market. California is still recovering from the hangover that can result from failing to support longer-term contracts in surplus periods, and then making poor contracting decisions in a shortage period. Long Term transmission rights are important for market participants willing to make long-term investments in the market. Thus far, these types of rights have not been attractive to customers. The NYISO, for example, has a 5 year product a few years ago, but there were no takers. Today, I'm not sure why that was so. But our staff has been actively looking into the development of long-term transmission rights in these markets to shed some informed light on this topic. We issued their staff paper just yesterday framing the issue for further development. I hope you take a serious look at it, think about the problem, and get back to us with your best ideas. We want to be sure that customers have the tools they need to make the appropriate investments in future generation supplies. And with the future prospect of more clean coal and, eventually, nuclear power plants — which are generally going to be larger plants farther away from

load – a full transmission product will be important to those financing these higher fixed-costs power plants.

The second main concern voiced by customers relates to Resource Adequacy and demand response. While often discussed separately, they really present a joint challenge. With sufficient demand response, we remove much of the need for capacity requirements on load serving entities. Incremental improvements have been made in capacity markets, but they continue to need further development.

This capacity market is a concern that is most pronounced in states that have unbundled at retail level. Where the historic bundled utilities exist, as in half of MISO, for example, a much simpler method of ensuring sufficient advance planning for power needs is typical – a state approved excess capacity margin, the costs of which the utility recovers through bundled retail rates. To the extent that a similar mechanism can be used in unbundled states, the problem is solved. But finding a workable solution there has proven difficult. I believe that an energy-only market is an admirable goal – it's one I supported in ERCOT before I came here to FERC -- but getting there has many challenges and obstacles that we need to overcome. I think we can get there, but scars from past mistakes make it difficult. Those entrusted to serve the public fear a repeat of the California crisis with customers without service. Investors see risks with potential litigation and political backlash that could come from a more volatile, albeit much smaller spot market. Our response to California, while necessary, did not reduce these investor fears.

It must be well understood in advance that for these energy markets to work in the long run and support needed investment, prices will have to, at times, reach very high levels. Customers and/or regulators will need to plan for these risks responsibly and cannot be given a "get out of jail free" card when they are guilty of inadequate risk management or shirked their responsibilities. Simply, concerns about a more unfettered energy market will drive load serving entities (and their customers) to procure under longer-term contracts, which then can support plant investments.

The capacity product provides a form of reliability insurance that, in fairness, all must have in order to ensure that no customers suffer involuntary load curtailment. If care is not taken in defining the capacity product, there may be a negative incentive to pursue effective demand response. (And demand response is the golden ring we seek for the end game in energy markets – the subject of a whole other speech I'll be giving next month). Since it has been difficult to give up on capacity products in the absence of sufficient Demand Response, a vicious cycle continues. Demand Response has been lagging due to the disincentives created from the capped energy market prices, even the \$1000 cap here in the East. The inability (and social undesirability) to target curtailment to those who failed to procure enough supply and lack of sufficient metering infrastructure also hinders

the ability to get to the energy-only paradigm. Even Texas is now looking at some form of capacity market as well.

Capacity markets are not the end game. They are a transition device that we may need to bridge the bundled-to-unbundled world transition. And this remains the last major issue fingered by our SMD rule in 2002 that we collectively haven't fully resolved. So I leave it on your front burner to nail down.

My third and final agenda item raised by customers regarding stakeholder accountability will not be new to any of you that have been listening to me over the past year or so. The ISO/RTO is a unique institution that was the pragmatic answer to squelching vertical market power in an industry that is largely privately-owned. Our nation did not pursue divestiture of transmission as other nations with state-owned electricity systems did. For the reasons I stated earlier, it would be a good outcome to have independent transmission only companies as an end state, we have to start from where we are, which is a patchwork of diverse transmission owning entities across the country. Having them transfer the operation of their transmission systems to a regionally-based, independent organization has been viewed as a doable, good way to address the market power issue, while also creating the necessary scale to realize the benefits that having a larger marketplace can bring to customers.

But these organizations haven't been free. And there have been customer concerns that the costs have not been adequately controlled and monitored in some regions. To put transparency on this process, and to also give state regulators and customers good data on which to evaluate cost-effectiveness, the Commission will be revising its public cost reporting requirements for both utilities and RTOs. We appreciated all of your comments in response to our September NOI. The Notice of Proposed Rulemaking will be out shortly and I think is a great step forward to putting the structures in place to facilitate cost control.

While costs are a concern, properly identifying the benefits of RTO is also critical to the expansion of competitive markets. While ISO/RTOs have justifiably been focusing on making improvements and serving their customers, I think they have not been as effective in highlighting the before and after situations that the facts bear out. The Department of Energy is currently evaluating existing RTO cost-benefit studies and is finding that many of the benefits of RTOs have been under-examined and under-appreciated. Among the focal points are the increased reliability of the system, improved generation and transmission investment efficiencies and facilitation and availability of risk management tools. I couldn't agree more. Calculating costs are easy, but estimating the benefits of risk management tools, evaluating the benefits from poor investment choices avoided, risks shifted away from customers to investors, and measuring the increased reliability are real challenges, but we need to try to get our hands around these added benefits.

And really that's the point of markets, to provide the customer benefits. I want to thank you all for your participation and leadership in these ISO/RTO markets that, in the end, I believe are the most efficient way to arrive at reliable, affordable service for customers

It's been quite a wild ride over these past 10 years in public service with you all in this evolving world of electricity restructuring. We've seen the good, the bad and the ugly, and we have a bit more work to do.

I'm heading home to the competitive oasis of Houston, where, as I checked on the PUC's webpage last night, I have the choice of 16 different retail power options, including one enticing 100% wind power option at a 11% discount to the local default rate and another regular one at a 16% discount. About a quarter of residential customers are already shopping around there.

Friends up here where competition first started, keep up your efforts at both the wholesale and retail levels to bring the benefits of market competition to customers. It's a fight worth fighting. I am confident that from the unforgiving but honest vantage point of history, we will all look back on this critical era of our nation's economic development and know that, by keeping our eye on the ball, we scored big-time for customers. Let freedom ring.