BEFORE THE
UNITED STATES SENATE

COMMITTEE ON ENERGY AND NATURAL RESOURCES

TESTIMONY OF JOSEPH L. WELCH
CHAIRMAN, PRESIDENT AND CEO OF ITC HOLDINGS CORP.

Full Committee Hearing: to receive testimony on pending legislation regarding electricity transmission lines

March 12, 2009

Good morning Chairman Bingaman, Ranking Member Murkowski, and Members of the Committee. My name is Joseph L. Welch, and I am chairman, president and CEO of ITC Holdings Corp. ("ITC"), the nation's first – and only – independent electric transmission company. I am honored by the opportunity to speak before you this morning to offer my perspective on legislation regarding transmission regulation.

Role of Independence

Before I begin I would like to provide some background as to the significance of the independent transmission company business model as I believe it is relevant to today's discussion. As an independent transmission company, ITC is singularly focused on ownership, operation, maintenance and construction of transmission facilities as its single line of business. ITC has never invested in generation. All of ITC's revenue is directed back to transmission rather than in any market activities. ITC is now the eighth largest transmission-owning company in the U.S., in terms of load served.

"Independence" means that there is de minimis or truly passive ownership by market participants and that there is minimal operating dependence on, and ongoing relationships or affiliation with, any market participant. To safeguard ITC's independence, the company and its employees do not hold any market participant investments.

Through its independence, ITC has been able to maintain its focus on improving transmission: making it more reliable, more efficient, lowering the cost and ensuring non-discriminatory access. To that end, in its five or so years in existence, ITC has invested more than $1.1 billion in transmission system upgrades. In essence, the independent model aligns the interests of the company and its shareholders with those of electricity consumers.

This is markedly different than a vertically integrated utility that owns generation and distribution in addition to transmission. In fact, this vertically integrated utility business model is at the very center for why there has been a 30-year trend of underinvestment in the grid. That is not to say, however, that lack of independence will always result in underinvestment. It is more accurate to say that the lack of independence of a vertically integrated utility may result in transmission being used as leverage to manipulate markets. As previously alluded to, this can be done by minimizing transmission system investment in order to maintain levels of congestion needed to protect high-cost generation.

Conversely, a vertically integrated utility with significant generation resources may want to build transmission as a means to bring its generation to market while perhaps not providing the same opportunity to other generators. It is for these very same reasons that the Federal Energy Regulatory Commission ("FERC") decided to form independent transmission companies in order to promote the provision of non-discriminatory access to the grid.

This independence is of particular importance as it relates to decision-making for field and control room operations, generator interconnections and both local and regional planning. A non-independent transmission owner faces competing interests. As such, independence from the energy market influence is critical in consideration to the electric transmission grid; however, the concept of independence should not be limited to the electric transmission companies. Equally essential is the independence of any regional planning organization with supporting governance and decision-making processes established in a manner that do not provide undue opportunity to thwart transmission development by stakeholders.

Overview of Legislative Issues

Today's full committee hearing gets at the very heart of the issues facing the electric utility industry, and specifically to the challenges impeding the construction of regional transmission. Right now, the outdated laws that govern our electricity grid are standing in the way of America's energy goals. If Congress is serious about making renewable resources available, reducing our dependence on foreign oil, meeting renewable energy standards, and addressing climate change and other environmental challenges, they need to start by modernizing the rules that govern the grid. In other words, due to the historical underinvestment in the nation's grid, transmission, which should be the enabler, today is the roadblock to renewable resources.

However, I would be remiss if I did not also stress the importance of developing a cost allocation methodology for regional transmission projects that would allow the costs to be allocated based on the benefits realized by individual entities within the region. In fact, cost allocation goes hand in hand with regional planning because without one, you cannot have the other. ITC believes that the costs for a regional transmission project should be harmonized across a broad geography in recognition of the multitude of

benefits as well as increased system optionality provided by having a robust and highly-interconnected transmission grid.

Many of the issues set forth in today's hearing are the symptoms of one fundamental problem: the lack of a national energy policy to guide planning. This national energy policy should clearly define national energy priorities such as the establishment of a federal renewable portfolio standard and federal regulation of greenhouse gas emissions. Having this information codified would greatly enhance our ability to plan for the regional transmission network that this country needs.

Regional Planning under Today's Regulatory Constructs

ITC's operating companies (Michigan Electric Transmission Company, LLC, ITC Midwest LLC and International Transmission Company ("ITC*Transmission*") are members of the Midwest Independent Transmission System Operator, Inc. ("Midwest ISO"), and in ITC's estimation the Midwest ISO has established a first rate technical staff and done a noble job working within the confines of the existing system that was thrust upon them to develop consensus around the Midwest ISO Transmission Expansion Plans. However, the Midwest ISO and its peers face significant challenges in their ability to develop truly regional transmission improvement plans under the current regulatory stakeholder framework. It is the endeavor for a transparent planning process that has ultimately led to the undue influence of market participants driven by voluntary membership and the subsequent derailment of true regional transmission plans.

The problems that prevent the development of truly regional transmission plans, however, can be solved by Congress or by the FERC. You may ask: how can it be said that there is no independent regional transmission planning given all the attention that the FERC has devoted to the creation and governance of Regional Transmission Organizations ("RTO") and Independent System Operators ("ISO")?

Voluntary Membership

The largest challenge that independent planning faces under the current model is that membership in RTOs, and thus participation in regional planning and cost sharing, is voluntary. If the regional/public interest and the interest of an individual member diverge, market participant stakeholders may endorse solutions that are not optimal for the region but rather satisfy the stakeholders' individual interests. If the RTO attempts to impose a solution that is in the regional interest, the stakeholder may threaten to leave the RTO potentially using membership fees as leverage. Additionally, individual states have the potential to leverage the voluntary membership to pressure its local utilities to leave the RTO if the state does not support a planned project and its associated cost. Another form of leverage that has been used by state regulators is the threat of not passing through the cost of a particular transmission project or the RTO membership fee.

Conflicts of Energy Markets and Transmission Planning

Additionally, another challenge faced by RTOs is related to their respective governance structures. Owning responsibility for both planning transmission and running the energy

market may present competing interests. While a utility may want to join an RTO as a means to participate in the energy market, it will seek ways to avoid having its transmission system encumbered by any regional planning efforts as shown in the recent FERC order in which the Midwest ISO had requested that FERC approve the ability of utilities neighboring the Midwest ISO to become a part of the Midwest ISO energy market without having to join the RTO as a full member. Ultimately and wisely, FERC denied this request, but the request in itself is a demonstration of the conflict of interest of having the RTO responsible for both transmission planning and energy markets.

This conflict of interest often results in RTOs relying on re-dispatch solutions instead of re-enforcing the transmission system. Indeed, one inadvertent byproduct of LMP markets is that the ability to purchase rights to "buy through" congestion effectively prevents building the transmission that would avoid the congestion in the first place. The consequences of doing business this way are evident. To begin, transmission and distribution losses nearly doubled between 1970 and 2001 (from 5 percent to 9.5 percent) due to heavier utilization and congestion. This is exacerbated by the belief that modeling can be done to such a level that all of the benefits of transmission additions can be accurately calculated.

Influence of Market Participants

The challenges inherent with the existing governance structure and stakeholder driven planning processes have one notable result – little to no true regional transmission has been planned or built. As alluded to earlier in the discussion of the voluntary nature of RTOs, the existing governance structures and stakeholder processes compromise the RTOs' ability to independently plan the transmission system due to the influence of market participants. The regulatory framework permitting voluntary membership and the ability of market participants to play critical roles in RTO decision-making, RTOs cannot plan the transmission system from a truly independent perspective.

The stakeholder processes to which RTOs are bound, and to which the Commission continues to defer in Order No. 890, for example, can never be independent because the "stakeholders," by definition are operating on behalf of their own needs and can "vote with their feet". In fact, several Midwest ISO TOs have submitted letters of potential withdrawal ostensibly as a means to keep pressure on the RTO to protect their interests. A truly independent planning entity, under which membership would be mandatory, would be able to effectively identify needed regional transmission infrastructure without the threat of incumbent transmission owners threatening to withdraw from the organization.

The existing stakeholder processes result in transmission planning and related cost allocation protocols focused on the least common denominator rather than on developing a robust regional plan with a well-developed regional cost allocation mechanism. As a result, transmission plans have a narrow scope rather than having a regional focus, and the corresponding cost allocation protocols are complex and generally do not promote development of regional transmission.

In addition to categorizing transmission investments in a somewhat arbitrary fashion (e.g., economic, reliability, transmission service request, generator interconnection, etc., each transmission upgrade is viewed as having winners and losers. Even stakeholders from the same sectors have varying interests. For example, generators in high cost areas have an incentive to frustrate transmission plans as a means to maintain existing constraints whereas generators in low cost areas want to remove existing constraints as a means to broaden their access to markets. Conversely, load regions with high costs want to remove the constraints in order to access more economic sources of energy while load regions with low costs are incented to maintain existing constraints as a means to insulate their area from market prices.

In these cases, some individual state regulators have had a parochial view and attempted to exert influence over the planning process as a means to optimize conditions for their individual state. This presents a case of competing interests because national policy issues such as climate change and a focus on environmental stewardship, energy security, regional reliability and market competitiveness cannot be addressed state-by-state.

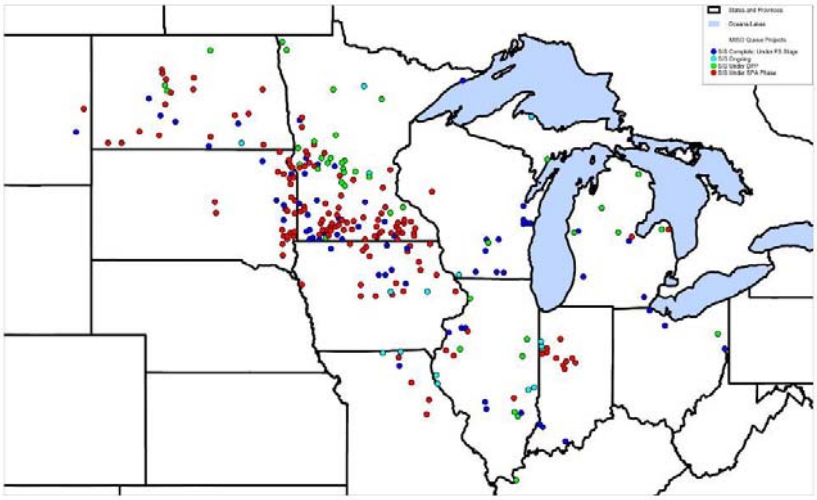
Another example in which individual interests come directly in conflict with regional planning is as it relates to how costs are allocated for a particular project. As I mentioned earlier in my testimony, regional planning goes hand in hand with cost allocation. The lack of a cost allocation mechanism can drive sub-optimal regional planning. Direct current ("DC") is a good technology solution if used in the proper allocation; however, to some extent it has been applied inappropriately due to the lack of a cost allocation methodology. DC is generally used to deliver energy from point A to point B with little opportunity for intermediate on-ramps and off-ramps. A DC line's single purpose is to bring power from one location and therefore, it does not unload the underlying system through the reduction of system congestion or reduce losses, nor does it not provide network flexibility. This limitation makes it such that the cost allocation issue is easily answered in this case because there are only two beneficiaries – the generator and the load. As a result, a difficult question is averted at the cost of a sub-optimal plan.

Generator Interconnection Queue

As the demand for the integration of wind and other renewable resources grows, the ability to effectively develop regional plans to interconnect these resources where the best source of wind is located is stifled. As shown in the map below, the current planning processes within the Midwest ISO do not support the level of demand for the integration of the wind resources in the Upper Midwest, a region with some of the most efficient wind resources in the United States. According to some estimates, a new generator would potentially have to wait up to 46 years in the generation interconnection queue before its project can be studied by the Midwest ISO. Clearly, reactive planning under the current configuration will not work as a means to build regional transmission.[1]

[1] The Midwest ISO has attempted to address this problem with its proposed Forward Looking Interconnection Project (FLIP) process. The link to the related Midwest ISO whitepaper can be found at http://www.midwestmarket.org/publish/Document/20b78d_11ef44fc9c0_-7bfb0a48324a/Midwest%20ISO%20Draft%20FLIP%20Whitepaper%20v2%20020609%20clean.pdf?action=download&_property=Attachment.

Graphic 1: Midwest ISO Generator Interconnection Queue[2]



In sum the fundamental issues facing transmission planning under the current RTO configuration are directly related to the voluntary nature of RTO membership and the stakeholder-driven planning process that promotes an undue influence of market participants in the development of regional plans.

Moving Forward on Regional Planning

The purpose of today's technical conference is to address regional system planning as a means to integrate renewable energy. Unfortunately, where we stand today will not serve as an effective enabler to get the necessary regional transmission built in support of the nation's vision of renewable energy.

ITC's experience as an independent transmission company has given us unique insight into the value of independence in transmission operations and planning. This independence should not be limited to the transmission owning entity but should be extended to regional planning by the RTOs. ITC is not calling for general mandatory RTO membership; we are calling for mandatory planning. Where RTOs exist, RTO membership should be mandatory for purposes of transmission planning and cost allocation. Where RTOs do not exist, FERC's existing authority under Order 890 should be strengthened. As such, all transmission owners would then be required to pay an assessment to cover the costs of planning that would be the same regardless of which RTO the utility participates in, or if they are outside an RTO, thereby mitigating the risk of utilities voting with their feet.

The regional planning conducted by RTOs is dictated by the scope of the market while it should be performed more broadly based on system considerations. RTOs should have the ability to plan a contiguous region. A broader planning region will facilitate the kinds

[2] http://www.midwestmarket.org/publish/Document/735a38_109988af51a_-7f5e0a48324a/MISO_Queue_Map.pdf?action=download&_property=Attachment

of multi-state projects that are needed to deliver renewable resources to load centers and to establish a strong backbone system for the grid. Only then when we have a robust and flexible regional electric transmission grid that does not provide discriminatory access to any one party will the U.S. be able to benefit from the vast energy resources available and achieve energy independence.

Federal Siting Authority

Currently, transmission rates are regulated on a federal level by the FERC, but siting is regulated by individual states that naturally are focused on benefits to their respective state, not the region or the nation. For this reason, the building of significant regional transmission lines is virtually impossible. In many cases, transmission projects are delayed for years through cumbersome state siting processes. The FERC should be given a more significant role in transmission siting so that infrastructure development that is needed for the good of the entire country can go forward expeditiously.

This can be accomplished in one of two ways. FERC can assume responsibility for issues a Certification of Need for projects that come through the new, robust planning process. Under this approach, states would continue to have authority to route project as they are best informed on zoning, land use and other local concerns. Such an approach also avoids potential delays in creating the federal staff needed to undertake routing decisions across the country. There would need to be a reasonable federal back stop in should a state fail to assume its responsibility to route the project.

The same result could be accomplished through expanding and strengthening FERC's existing backstop siting authority. Therefore, regional transmission projects approved by the regional planning entity would continue to subject to state review, but if a state fails to act on, or rejects, a project within a year, the federal government can step-in. This option has the potential of being more complex, could result in delays in siting, and will no doubt be subject to litigation.

Impact of Right of First Refusal / Competitive Bidding on Construction

ITC believes that incumbent transmission owners should have the right of first refusal, meaning the right to build the needed transmission within their respective service territories provided they are willing to make timely commitments to build the approved construction.

Right of first refusal without any limitation can impede needed development. In fact, such a "Right of First Refusal" as included in the SPP tariff, for example, is a formidable barrier to new entrants. Stakeholder processes on which RTOs depend, and to which the Commission continues to defer in Order No. 890, for example, can never be independent because the "stakeholders," by definition are operating under parochial constraints. ITC feels strongly that incumbent transmission owners should have a reasonable period of time during which to submit an application to construct and site new facilities. However, to the extent an incumbent fails to act within that timeframe, and then the project should

be open for other parties to undertake. To this end, FERC would be in the position of resolving any conflict arising from competing projects/developers. FERC should look at a variety of criteria to determine who is best suited to build a project including incumbent participation, public power, the ability to maintain facilities going forward, etc.

Some have expanded this concept to argue for competitive bidding for the construction of regional transmission projects. The typical American utility does not have a construction department, and as such, for each individual capital project, it must send the project out to bid based on detail engineering design. The two key components to determining the cost that the consumers will ultimately pay: 1) return on equity ("ROE") and 2) level of ongoing maintenance. As it relates to competitive bidding, ROE is the only area in which utilities may complete. This, in effect, creates negative incentive for utilities to reduce maintenance and operations costs in an effort to recapture profits, which ultimately results in the degradation of system reliability. This is the system we have today and has led us to underinvestment in transmission.

To address these inherent issues, the regional planning issue must first be resolved, and then, in the implementation phase, an independent transmission company should be responsible for the overall coordination with the affected utilities that would have the right of first refusal to build or participate in the building. This would allow the incumbent utility to participate in construction if so desired while ensuring that the independent transmission company takes responsibility for coordinating construction and ongoing maintenance across broad regions thereby ensuring that inventory requirements are met, that maintenance crews are trained and that the necessary capital is available with appropriate ownership so as to prevent the transmission system from being manipulated by market participants.

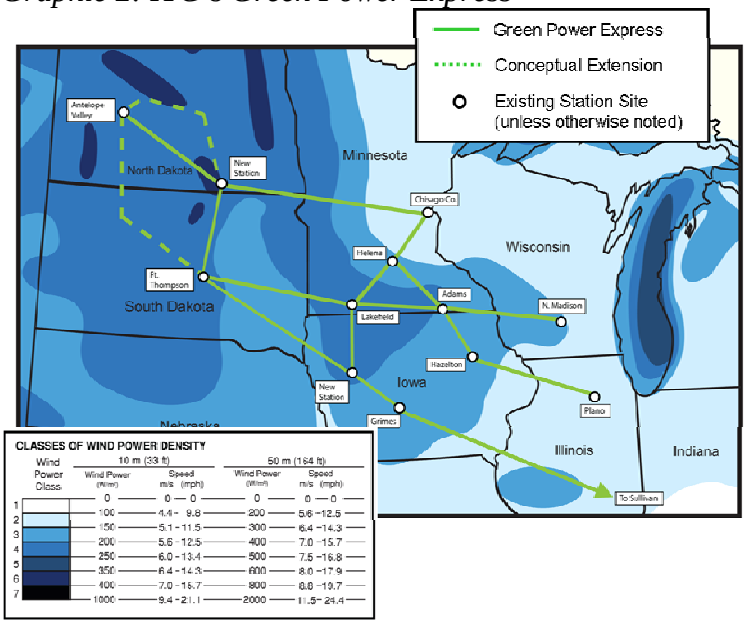
ITC's Green Power Express as Forcing Function on Policy Issues

A more tangible example of the value of independent regional planning can be found in ITC's recently announced "Green Power Express". While this project is still in its very early stages, the question of DC has already arisen. The Green Power Express is a broad network of 765 kV transmission facilities that has been designed to efficiently move vast amounts of renewable energy in wind-rich areas to major Midwest load centers. The Green Power Express is consistent with the vision outlined by President Obama in his national energy agenda. President Obama specifically mentioned his desire "to get wind power from North Dakota to population centers, like Chicago."[3]

The Green Power Express will allow this goal to be met as well as set the stage for the integration of off-shore wind in the Great Lakes in the future. By having a robust extra high voltage ("EHV") grid that serves as a transmission backbone in various regions, the geographically diverse wind becomes readily accessible and more economic thereby mitigating two of the major challenges with this naturally intermittent resource.

[3] Transcript from appearance on Rachael Maddow Show of October 28, 2008: http://www.msnbc.msn.com/id/27464980/.

Graphic 2: ITC's Green Power Express



We recently received the results of an independent study conducted by the Brattle Group, entitled "Transmission Super Highway: Benefits of Extra High Voltage Transmission Overlays," which demonstrates that wind power becomes economically competitive when it is generated from areas with the highest capacity levels. The study uses ITC's proposed Green Power Express development project as a model for examining the potential benefits of adding a high voltage overlay to our existing transmission system. It concludes that between 2010 and 2030, the Green Power Express alone could deliver up to approximately 12,000 MW of new wind energy, avoiding significant amount of carbon emissions.

The Green Power Express was designed to be an EHV backbone that would gather the wind from the disparate wind abundant areas and transport it eastward. In other words the Green Power Express as an alternating current ("AC") solution provides many on- and off-ramps to gather and distribute the wind power across a broad region. With DC there would be less flexibility for how wind would be integrated into the network. Additionally, DC presents some reliability concerns if used as the initial phase of an EHV backbone. Because it does not allow for easy redirection of power in the case of a line outage, at this point a DC solution would make the system reliability vulnerable.

In effect, through the development of the Green Power Express, ITC filled a gap that exists within the industry due the existing RTO governance that does not currently give the RTOs direction to do regional planning without undue influence of market participants. The absence of market participant influence and ITC's independence from undue market participant influence was critical in developing the right solution that improves electric reliability, effectively and efficiently integrates high capacity renewable energy to promote a cleaner environment, protects national security, and the environment. However, it should be recognized that while ITC was able to develop this plan free from undue market participant influence, the project will likely face the same challenges

related to pressure from stakeholders related to individual interests as ITC shepherds the Green Power Express through an Order No. 890 compliant process.

As envisioned the Green Power Express will touch seven states, or seven distinct siting jurisdictions. Under the current siting system, this could mean that the project could get held up in court siting procedures for an indefinite amount of time. In order to realize the vast economic, environmental and reliability benefits of the Green Power Express in a timely manner, it is imperative that there is some form of backstop siting authority to compel the project forward.

It is widely recognized that the Upper Midwest is a region that has great potential to develop wind energy facilities. There are other regions that have similar opportunities such as wind in the Great Plains region or solar energy in the Southwest. Generation from these potential resources is intermittent due to the variable nature of wind and solar "fuel". As such, regional diversity will provide significant benefits as a means to dampen the impact of this resource intermittency. Consequently, independent regional transmission planning is essential as a means to identify and capitalize on the vast amount of renewable resources economically while protecting the overall reliability of the grid.

Conclusion

Our country is trying to tackle 21st Century energy challenges with an electric transmission grid largely built more than 30 years ago while operating under an outdated regulatory system. To put it simply, we will not meet our goals if we don't change how we do business. We urgently need to reform how we plan, locate and pay for new transmission. This requires moving beyond the parochial interests and fractured regulatory structure that has led to decades of underinvestment in our electricity grid. Congress and federal regulators have the ability to modernize the rules to allow private companies such as ITC and others to make much-needed investments. These are solutions that don't require an infusion of taxpayer dollars, but will create new jobs and help address our looming energy and environmental crises.

A modern grid will solve our environmental and renewable energy challenges *and* improve reliability and associated costs to the economy. Now is the time for Congress to encourage private investment in America's energy infrastructure.

Again, thank you, Chairman Bingaman, Ranking Member Murkowski, and Members of the Committee. I sincerely appreciate the focus that you are providing to the critical issue of the impediments to building regional transmission as the facilitator of an energy policy vision for a brighter, cleaner tomorrow.