BEFORE

THE UNITED STATES SENATE

SUBCOMMITTEE ON OVERSIGHT OF GOVERNMENT MANAGEMENT, THE FEDERAL WORKFORCE AND THE DISTRICT OF COLUMBIA

TESTIMONY OF JAMES Y. KERR, II

NORTH CAROLINA UTILITIES COMMISSION

The 2003 Blackouts: The Federal Role and Response

September 10, 2003
Mr. Chairman, my name is Jim Kerr. I am a member of the North Carolina Utilities Commission (NCUC), having served on that body for a little more than two years. I am also a member of the Electricity Committee of the National Association of Regulatory Utility Commissioners (NARUC), the Immediate Past President of the Southeastern Association of Regulatory Utility Commissioners (SEARUC) and currently serve, along with Marilyn Showalter, Chair of the Washington Utilities and Transportation Commission, as the Co-Chair of the Alliance of State Leaders Protecting Electricity Consumers (Alliance).

Please note that in submitting this testimony, I am speaking for myself, not the NCUC, NARUC, the Alliance, or SEARUC. Although my comments are informed by my discussions and exchanges with fellow regulators and industry stakeholders, these are my views, not those of the aforementioned organizations or their members.

I very much appreciate the opportunity to appear before the Senate Subcommittee on Oversight of Government Management, the Federal Workforce and the District of Columbia and to assist in your consideration of the cause of the August 2003 Northeast blackouts and the appropriate response of the federal government to ensure that similar events are not a part of our nation’s future. Specifically, I have been asked to discuss the causes of the blackouts, as well as the current federal role in managing and regulating the generation and the transmission of electricity. The discreet issues that you are addressing today are of great national importance; they also are relevant to broader, equally important, subjects facing this Congress in the context of pending federal energy legislation.

As you consider these matters, I encourage you to carefully consider the impact of any proposed electricity legislation on each region of the country, including the Southeast, because of the significantly different manner in which electric service is provided to retail customers in each
part of the country. Thus far in its consideration of the recent blackout, Congress has heard only from federal officials or from representatives of the regions of the country that were affected directly by the blackouts. I hope to provide you with a broader perspective from which to consider both the recent events and the appropriate federal responses. To this end, I would like to describe for you the structure of the electric system in North Carolina and the Southeast, our approach to reliability, and my thoughts on appropriate federal responses to the recent blackouts.

At the outset I want to make clear that my purpose is not to tout the electric system in North Carolina (or the Southeast) as perfect or the only acceptable system design. Nor do I advocate congressional action that would prevent a region of the country from pursuing the electric market structure that best suits that region’s needs. My message is that Congress must be careful that, in responding to recent events, it does not pursue perceived solutions that will adversely affect electric systems that are, in fact, working well.

**OVERVIEW OF THE ELECTRIC SYSTEM IN THE SOUTHEAST**

*Regulatory Jurisdiction*

The NCUC, like other similar bodies across the country, is an agency of state government responsible for regulating the rates charged and terms and conditions of retail electric service provided by the entities defined by our General Assembly as “public utilities.” Under North Carolina law, our electric jurisdiction extends to “persons” owning and operating equipment and facilities for the production, generation, transmission, distribution, and furnishing of electricity. Our statutory authority, where it applies, is broad and plenary, encompassing all aspects of the retail service provided by the utilities under our jurisdiction. ¹

¹ The NCUC’s jurisdiction does not, however, extend to rural electric cooperatives and municipal distribution systems, subject to certain limited exceptions.
While the NCUC’s jurisdiction is focused on the provision of retail electric service, the Federal Energy Regulatory Commission (FERC) also plays a role. In 1935, in response to the United States Supreme Court’s *Attleboro*\(^2\) decision, Congress enacted Title II of the Federal Power Act, which created FERC (then the Federal Power Commission). Congress’ intent was to establish a body that could regulate certain interstate activities of utilities that the Court in *Attleboro* suggested were beyond the reach of state regulators. Accordingly, FERC was given authority over wholesale power sales and the transmission of electricity in interstate commerce.\(^3\) This combination of the states’ plenary authority over retail electric service and FERC’s interstitial jurisdiction over specific matters that might evade state regulation has been the cornerstone of the regulatory framework in the Southeast for almost 80 years.

*The Provision of Electric Service in the Southeast*

Electric service in the Southeast continues to be provided, in large part, by vertically-integrated utilities subject to the regulatory oversight of state commissions. These utilities own and operate generation, transmission and distribution facilities, which they use to serve their customers, including hospitals, schools, churches, and homes. Although I have not made a comprehensive study of the laws in other Southeastern states, North Carolina law clearly contemplates the continued existence of such vertical integration. The only common exceptions to this model in most of the Southeast are rural cooperatives or municipal electric systems, some of which own electric distribution systems, but not generation or transmission facilities.


\(^3\) 16 USC §824, *et seq.* (2003).
The Role of the Wholesale Power Market in the Southeast

The continued existence of the traditional industry structure throughout most of the Southeast does not mean that we are indifferent to the potential benefits of a properly-functioning wholesale market. On the contrary, the NCUC recognizes that a properly-functioning wholesale market can benefit the retail customers of our vertically-integrated utilities in a number of ways. First, the wholesale market can provide enhanced opportunities for our utilities to procure competitive generation from independent power producers as an alternative to utility-built options. Secondly, the wholesale market can provide opportunities for additional short-term economy purchases, allowing our utilities to reduce their costs by purchasing power instead of operating more expensive units on their own systems. Finally, the wholesale market can allow vertically-integrated utilities to share reserves, effectively reducing the costs of maintaining system reliability. As a result, I do not believe that any of my colleagues disputes the benefits of a properly-functioning wholesale market to retail customers despite the continued presence of traditional, vertically-integrated utilities.

The NCUC, and the utilities we regulate, have taken steps to take advantage of the potential benefits of the wholesale market in recent years. When the utilities procure additional capacity to meet anticipated future load, they typically issue a request for proposals to solicit wholesale power offers that are compared with the cost of self-build options prior to making a final resource procurement decision. Also, the records in our fuel adjustment cases demonstrate that our jurisdictional utilities purchase substantial amounts of power from marketers and brokers in lieu of generating power from their own facilities when it is economic to do so. The NCUC adopted procedures to facilitate the recovery of the costs associated with such purchases in order to encourage our utilities to make the best economic decisions for retail customers and we have
revised our generating plant certification rules to make it easier to site and construct merchant generating facilities in our state. To date, we have not rejected any application for the issuance of a merchant plant certificate. Thus, North Carolina Utilities Commission has embraced the opportunities for cost savings and reliability improvements available on the wholesale market and I feel confident that the rest of the states in the Southeast have taken steps to do the same.

However, the potential benefits of wholesale market improvements for the retail markets in North Carolina and most other Southeastern states are not unlimited. The ultimate purpose of the wholesale electric market is the same as most wholesale markets—supporting the retail market. As noted above, the vast majority of the power sold at retail in the Southeast is generated by utility-owned facilities. Although certain municipal and cooperative electric systems rely more heavily on the wholesale market, the simple fact of the matter is that, for the foreseeable future, the impact of wholesale market improvements in the Southeast is likely to be relatively limited. While the importance of the wholesale market in the Southeast may increase over time, the potential benefits of an improved regional wholesale market in the near term should not be oversold. As a result, any attempt to redesign wholesale electric markets should include a careful weighing of the costs and benefits for the retail markets, including the costs of implementation.

Conclusion

With the exception of Virginia, retail competition is not authorized anywhere in the Southeast, and it appears that our neighbors in Virginia are reconsidering their movement toward retail competition. Arkansas recently repealed the retail competition statute that it enacted a number of years ago. It is my impression from talking with colleagues throughout the region
that none of the other Southeastern states are likely to move to retail competition in the near future.

At this point, the general perception among Southeastern regulators is that the regional system for providing electric service is, on balance, working well. Our rates are among the lowest in the country. We have not experienced any significant reliability problems in recent years. Our reserve margins generally are adequate. A study of the regional transmission infrastructure performed by SEARUC found no material transmission bottlenecks. While our electric system is not perfect, the available evidence has not led our state legislatures to support radical restructuring of the type adopted in certain other parts of the country. Unquestionably, the decision of whether, when, or how to restructure retail markets is a decision for each state to make instead of a matter to be decided at the federal level. As a result, the existing industry structure in the Southeast is likely to remain in place for the foreseeable future.

THE SOUTHEAST’S APPROACH TO RELIABILITY

The states and electric utilities in the Southeast were not directly affected by the August 14, 2003, blackouts. Therefore, we do not have any firsthand knowledge of the specific causes or contributing events which led to the blackouts. Nevertheless, even with limited and imperfect knowledge at this time, we have an obligation to try to assess this series of events and learn from them. Thorough reviews are underway by the affected states, Congress, United States Department of Energy, the North American Electric Reliability Council (NERC), and others that should shed more light on this event. Utilities and state commissions in the Southeast are closely analyzing and studying the results of these and other investigations to determine what

---

4 See Letter from James Y. Kerr II to Chairman Pat Wood, Federal Energy Regulatory Commission, dated August 22, 2002, attached hereto as Exhibit A.
“lessons can be learned” and whether new measures should be adopted in our jurisdictions to further reduce the possibility of similar events affecting our region in the future. I would add that both North Carolina and South Carolina utility regulators have already met with the Southeastern Electric Reliability Council (SERC), PJM, and the utilities that we regulate in order to begin this process.⁵

Although we do not yet have clear answers, we as regulators must be able to answer the questions of what happened on August 14th and how we prevent a reoccurrence. Indeed, those questions are the reason we are all gathered in this room today. While the exact causes of the blackouts are still unknown, numerous industry experts have narrowed their focus to at least three general factors as potential causes:

1. **Accountability for Reliability**;
2. **Transmission Planning and Investment; and,**
3. **Operational Coordination and Communication.**

I would like to take the next few moments to describe how the Southeast and, in particular, my state of North Carolina addresses each of these factors.

**Accountability for Reliability**

In the aftermath of the blackouts, all of our utilities were asked whether similar problems could occur in the Southeast. For the utilities that are in unrestructured systems, the answer was easy. We know who has the statutory responsibility for both generation and transmission adequacy. Accidents can happen, but there is political and regulatory accountability in the utilities and in their regulators. In restructured systems, it is harder to find both the technical and political accountability. A large fraction of the grid is used for strictly commercial transactions, rather than bundled sales to native load. Utilities, and by extension their state and local

---

⁵ See Exhibit D for the presentation made by North Carolina utilities to the NCUC.
regulators, have a smaller role in the building of both new generation and new transmission which makes accountability divided and unclear.

Accountability and responsibility are clear for North Carolina and much of the Southeast. North Carolina law requires public utilities to provide reliable and adequate electric service to all customers in their assigned territories at reasonable rates. Annually, these utilities provide reports and resource plans to the NCUC in order to demonstrate the steps they are taking to fulfill those obligations in the near term and in the long term. These reports and plans are subject to public scrutiny by customers and regulators. Each exhibit is exposed to public debate and the results are resource plans that are responsive to the needs of customers while meeting the utilities’ statutory obligations. Further, utilities in North Carolina are subject to answering for service deficiencies in the form of formal and informal customer complaints lodged with the NCUC. Even on its own motion, our Commission can inquire into any aspect of the utilities’ operations and take steps to require improvements to transmission, distribution and generation service or take definitive rate-making action if circumstances so require. In short, there is never any question what party has responsibility for reliability in resources and planning. Nor is there any doubt about the process by which those goals are achieved.

**Transmission Planning and Investment**

The planning process in the Southeast is a bottom up approach that has been in place for many years. Each utility in North Carolina and many other utilities in the Southeast are mandated to engage in integrated resource planning, which involves the joint planning of generation, transmission and demand management. The utilities are then required to file these integrated resource plans with the state commissions in order to assure them that reliability will be
maintained. The process begins with long term (typically 10 year) plans developed by the individual utility using NERC, SERC and system reliability criteria. These plans are then combined at the sub-regional level (for North Carolina it is called VACAR – Virginia, North Carolina and South Carolina) and are tested using computer models against NERC reliability criteria and for the ability to transfer power between systems. The plans from each sub-region are further combined to develop a SERC regional plan (which encompasses VACAR, Southern, Entergy and TVA). Again, the plans are tested using computer models for compliance with NERC and SERC reliability criteria. Finally the plans are combined at the multi-regional level where they again are tested for reliability compliance. This process has worked very well and continues to keep the lights on in the Southeast.\(^6\)

The overall success of the integrated and regional planning processes in the Southeast stands in sharp contrast to the claims of some who say that America has a “third world transmission grid.” I would agree with my colleague Dr. Schriber of the Ohio Public Utilities Commission that these statements are simply untrue, at least for the Southeast. I do not doubt that some areas of the country need more transmission construction. The Southeast, however, is not lacking in transmission investment. In 2002, the utilities in the Southeast invested over $1 Billion in the transmission grid and over the next five years the utilities plan to invest more than $6 Billion in the Southeast transmission grid.

More importantly, the Southeast transmission grid is operating well for the specific purpose for which it was designed – to serve local load with adequate reserves for reliability and wholesale transactions. We have not experienced the blackouts, market meltdowns, price spikes,

---

\(^6\) For a more detailed description of the SERC planning process, see Letter to Representative Tauzin from SERC Executive Director William Reinke, dated August 28, 2003, and the SERC presentation to the North Carolina Utilities Commission, dated August 26, 2003, attached hereto as Exhibits B and C respectively.
and various problems that have plagued other regions. Even more minor transmission problems, which are referred to by the industry as Transmission Loading Relief measures (TLR), have not cropped up as often in the Southeast as they have elsewhere. For example, throughout North and South Carolina, only 3 TLRs were called in 2002. Whereas, PJM called 95 TLRs and the Midwest ISO called 950 TLRs in 2002.\footnote{See \url{www.nerc.com/pub/sys/all_updl/oc/scs/logs/trends.htm} for a more detailed description of TLRs throughout the nation.} Can the system planning processes used in the Southeast be improved? Certainly, there is always room for improvement. However, the planning, construction and operation of the transmission grid in the Southeast has served the region well to date.

**Operational Coordination and Communication**

The now well-publicized transcripts of conversations between RTO and utility personnel leading up to the blackouts suggests that lack of clear, prompt communication may have contributed to the problems. On this point, it is worth reiterating that whatever theoretical value there might be in disaggregating utility operations, there is always going to be the practical concern that too much disaggregation is going to require lightning fast communication AND reaction by multiple parties, each with their own limited perspectives and interests. Can this be accomplished seamlessly? Perhaps. But what we know for sure is that the structure of vertical integration, coupled with regional coordination, allows utilities in the Southeast to respond to unforeseen events quickly and efficiently. The ability of utilities that operate transmission and generation facilities to coordinate and adjust those operations instantaneously in real time unquestionably enhances their ability to react to emergencies such as the events of August 14th.
In my opinion this approach is responsible for the consistent reliability the Southeast enjoys in normal and extraordinary conditions.

**APPROPRIATE FEDERAL RESPONSE**

In your consideration of the appropriate federal response to the events of August 14th, I would encourage you to first consider a few very basic principles. First, acknowledge the one lesson from the events of August 14th that is beyond question - - the provision of reliable electricity to the nation is of vital importance to the lives of its citizens and to its economy and security. Second, until more is known about the actual cause or causes of the blackouts, you should be very careful about either jumping to conclusions or using those events as the basis for any legislative action. Finally, any potential solution you might consider must “do no harm” to the existing industry structure as it might exist throughout the country. With these basic principles in mind, I would like to comment first on some of the broader policy initiatives that some proponents have raised as possible solutions to the issue of reliability and then on several of the more discreet proposals that more directly impact on reliability.

*Regional Transmission Organizations and Standard Market Design*

Some proponents of the FERC’s restructuring efforts are pushing mandatory Regional Transmission Organizations (“RTOs”) and Standard Market Design (SMD) as the cures for the yet-to-be-determined causes of the blackouts. I do not believe that such expansive overhauls are necessarily relevant and they are certainly not the answer. As noted above, the blackouts occurred in areas that have gone the farthest in implementing RTOs and SMD. The formation of
RTOs and the adoption of SMD do not add a single transmission line or a single kilowatt of new generation capacity, but will cost many millions of dollars to implement. RTOs and SMD may be helpful in some regions, and any area that desires to pursue such restructuring efforts should be allowed to do so. By the same token, RTOs and SMD do not appear to be necessary or beneficial for every part of the country. In that regard, I think it is safe to say that most of my fellow regulators in the Southeast have considerable doubts about the appropriateness of those policies for our region. Southeastern regulators have been considering these issues generally and in the context of the specific RTOs that have been proposed in the Southeast (i.e., SeTrans, GridSouth and GridFlorida). Also, SEARUC recently commissioned a cost-benefit analysis to determine if the benefits of RTOs and SMD outweighed the costs.\(^8\) The results of that study raise serious questions as to whether the benefits of forming an RTO and implementing SMD in this region would exceed the costs and risks. A more recent cost-benefit analysis performed by the Department of Energy raises similar questions about whether the implementation of RTOs and SMD would increase costs to retail customers in the Southeast.\(^9\) Moreover, even though DOE’s study suggests that there may be net savings from the implementation of SMD under optimal conditions; those savings are extremely modest – less than 1% on a nationwide basis – and take years to materialize. This strikes me as a very thin potential return for such a high-risk investment.

---


Furthermore, I am concerned that RTOs and SMD could have the unintended effect of harming reliability. FERC’s policy initiatives appear to be moving towards disaggregation (the separation of generation and transmission functions) and this raises the question as to whether such separation has an effect on reliability. Among other things, these FERC initiatives encourage long distance transfers of power. Because the ability to serve load becomes more susceptible to problems caused by the loss of critical transmission lines, these long distance transfers raise reliability concerns. In contrast, when generation is located near load, there is less distance for the power to travel before it reaches the load and hence less opportunity for problems.

I am also concerned that the FERC’s restructuring model usurps state jurisdiction over electric service, which would seriously impede the state commissions’ ability to exercise their statutory responsibility and to assure that retail customers in their states are served reliably and in a cost effective manner. This set of circumstances leaves state regulators with little authority vis-à-vis the RTO to address day-to-day issues much less to deal with extraordinary events such as the recent blackouts. While the FERC has indicated that state commissions might be able to play an advisory role in the new world of SMD and RTOs, this is a poor substitute for jurisdiction and direct accountability and gives Southeastern states serious concern.

Reliability Standards

A consensus is building within the electric industry to support federal legislation to establish mandatory, enforceable reliability standards through an industry-led, self-regulating organization (i.e., NERC). I support that effort; in particular I support the current electric reliability language in the House Energy Bill (HR 6, Section 216). NERC has developed an
appropriate set of planning and operating standards and those standards will most likely be further improved following the evaluation of the August 14th blackouts. While voluntary compliance with these standards has worked well in the Southeast, it is possible that some regions may need mandatory reliability rules to provide additional assurance of reliability.

As part of the effort to establish mandatory reliability standards, some have proposed that the FERC be authorized to review and enforce NERC’s reliability standards. While I recognize that some governmental authority probably needs to have oversight responsibility, I am concerned about such a proposal for two reasons. First, the FERC has no reliability expertise that I am aware of; thus, FERC would need to rely upon industry experts such as NERC who have traditionally been the ones in charge of reliability criteria. Second, the FERC must not be allowed to use any newfound reliability authority as a way to promote its regulatory agenda to restructure the wholesale market. For this reason, any federal legislation would need to be carefully structured to ensure that the FERC’s additional authority is limited to the promotion of reliability. Legislation must not allow FERC to use reliability authority to pursue the mandatory restructuring of markets across the nation. In particular, the FERC must not be allowed to use any such reliability legislation to try to force mandatory RTO participation or the adoption of SMD.

**Transmission Incentives**

To encourage transmission construction, some entities are recommending the adoption of incentive rates. In certain circumstances, incentive rates might be appropriate. For example, the adoption of accelerated depreciation for transmission construction would appear to be an appropriate catalyst to spur new investment. However, I do not believe as a general matter that
incentive rates are always necessary, at least not in the Southeast. As previously discussed, the utilities in the Southeast, with oversight from their state regulators, have done and continue to do an admirable job of ensuring that sufficient transmission investment is made to provide economical and reliable electric service to consumers. Importantly, this investment is being made under the traditional regulatory model of relying upon vertically-integrated utilities that receive a regulated return on their investment. Incentive rates should be directed at transmission projects that would not be constructed under the traditional model; otherwise such incentives will serve only to raise rates for consumers.

Another transmission-related incentive being discussed involves the tax treatment of transfers of transmission assets. Generally speaking, this provision would limit the tax exposure of utilities that transfer transmission assets to other entities. This provision may be desirable to remove an obstacle for utilities that are interested in transferring their transmission assets; it must be emphasized, however, that in many, if not most, states in the Southeast, any such transfer would require the approval of the state regulatory commission.

**Backstop Siting Authority**

Another proposal being discussed in response to the blackouts is to provide the FERC siting authority to allow it to authorize the construction of new transmission investment. This proposal raises serious concerns. As an initial matter, sufficient transmission lines have been and are being constructed to maintain reliable service to consumers in the Southeast. While some claim that problems arise when utilities try to build interstate transmission lines, it bears noting that many utilities in the Southeast are multi-state in nature and already work with different jurisdictions in planning and siting transmission facilities. In short, the siting of transmission
lines, like most land use issues, raises many local concerns. If a transmission line is not authorized by the state, there would likely be very good reasons for that decision – reasons that should not be easily discounted. For these reasons, any legislation to give the FERC “backstop” authority to site transmission must acknowledge the states’ primary role in the siting of transmission and carefully prescribe the FERC’s authority to overrule those decisions. This is especially true given the various efforts that are already underway to encourage greater coordination and cooperation among the states on planning and siting issues.

The above mentioned statements on federal siting authority are my own opinions but, as a member of NARUC, I feel obligated to state that NARUC respectfully opposes any provisions that contemplate federal siting authority for transmission (direct or backstop). NARUC believes that states should retain authority to site electric facilities. Congress should support the states’ authority to negotiate and enter into cooperative agreements or compacts with federal agencies and other states to facilitate the siting and construction of electric transmission facilities as well as to consider alternative solutions to such facilities, such as distributed generation and energy efficiency.

**CONCLUSION**

The actual cause or causes of the August 14th blackouts are as of yet unknown. What is certain is that this event provided all of us with a dramatic and unfortunate reminder of the vital importance of reliable electricity to all of our lives. As this Congress begins to understand better the actual causes of the blackouts and the appropriate responses it might take, I encourage you to keep the unpleasant memories of that day in the forefront of your minds as a reminder of how much we all risk in formulating our responses. Much is being done correctly and appropriately in all of the regions of the country and you should first “do no harm” to that which is working
effectively in the various regions. Only then should you undertake responses that will build upon that which is working in order to enhance the reliability of electric service to the entire nation.

The Southeast’s model for utility service is not the only such model that can work, and my testimony here today should not be interpreted as indicating otherwise. However, there can be no serious debate that the electric system in our region works and works well. It is a system that our citizens have invested in for decades and it has delivered on its purpose — producing highly reliable, reasonably priced power that meets the expectations and needs of our citizens. While not perfect, the system of regulation upon which our electric system is based is in large part responsible for this result. With that said, I understand that other regions of the country have problems that they are trying to solve and I support the Southeast helping in any way that we can, as long as that support is not a detriment to the reliable and efficient electric system we have built for the Southeast. We continue to believe that the balance of risks and tradeoffs associate with changing this system are best assessed by the policymakers closest to, and politically accountable for, the actual operations of the system. Accordingly, in order to ensure the continued provision of reliable service in our region, this Congress and federal regulators must avoid the precipitous implementation of policies which will disrupt the smooth functioning of our current system. By the same token, Congress and federal regulators can and should implement policies that are narrowly drawn, cost effective, reflective of the regional differences that exist, and which can improve upon the reliability and operation our electric system and that of other regions.

Thank you for the opportunity to be with you today and to provide my perspective on these important issues.