

The Power Grid Needs Mandatory Reliability Standards and Infrastructure Investment

Opinion-Editorial

Steve Wright, Bonneville Power Administrator

Aug. 15, 2003

If past experience with major electricity outages is any guide, it likely will be weeks before all contributing factors are known about the Northeast outage. A major cascading electricity outage happens so quickly and is so complex that it takes some time to recreate the sequence of events affecting such a wide geographic area.

But while we may not know the specific initiating events, we have known for some time that there are significant national problems with our transmission grid and that action needs to be taken to address these problems. While the specific solutions to these issues vary by region, there are actions that will make it less likely a similar event will happen throughout the country and in the Pacific Northwest. Fundamentally, there are two actions we need to take. We need to make the reliability standards for market participants mandatory. And we need to enhance our electricity infrastructure.

1. Reliability standards. The current voluntary standards need to become mandatory. Anyone watching television in the last few days has seen that we have three interconnected grids in this country: one for the east up to the Rockies, one west of the Rockies and one that covers Texas. In an interconnected system bad things that happen on one system can cascade throughout the interconnected system.

The current system for maintaining reliability is based on standards with which utilities voluntarily comply. The introduction of competition in wholesale electric markets unfortunately has eroded the incentive to voluntarily comply. There is a trade-off between maintaining reliability and incurring costs. The pressure to skate on the edge or even not comply with reliability standards has increased dramatically. We need to move to make the voluntary standards mandatory with financial consequences for non-compliance. This issue has been thoroughly debated nationally, and a consensus has been reached about how to make this happen. But mandatory standards require federal legislation to create the teeth. This non-controversial legislation is being considered as part of the national energy bill being debated before the Congress. This legislation must be enacted quickly.

2. We also need infrastructure investment. It is common knowledge within the utility industry that for more than a decade there has been a lack of investment in transmission. There has been a great deal of dispute about how transmission systems should be operated as we attempt to create non-discriminatory access to assure that competitive wholesale power supply markets can work. The resulting uncertainty has made it difficult to attract capital to transmission investments.

In the Northwest, no major new transmission lines had been built since 1987 until earlier this year. In June, the Bonneville Power Administration broke ground on a new high

voltage line stretching from Spokane to Grand Coulee Dam that will help relieve congestion east to west in the region. Two weeks ago we broke ground on a new transmission line in the Puget Sound area that will relieve congestion north to south through the Seattle area and improve reliability for the Puget Sound load center.

Why are these lines being built now? The critical component was that earlier this year the Congress, at the behest of the Northwest Congressional delegation and the President, increased BPA's ability to borrow money from the U.S. Treasury by \$700 million. This increased access to capital has provided the capability to implement needed new construction. This increase came in response to the 2001 West Coast energy crisis which highlighted the lack of investment in our region's electricity infrastructure.

But we should not assume that the increase in borrowing authority will solve our transmission infrastructure problems in the Northwest.

We need to assure that our region's utilities are financially healthy enough to be able to access capital markets at reasonable cost. Legitimately so, the most important electricity issue in the region currently is rates, and everyone is committed to getting rates as low as possible. But in pursuing that effort, we must also keep in mind its potential impact on the ability to borrow money to invest in measures that will keep reliability high and keep costs lower in the future.

Second, we need to move further toward creating one-utility regional planning of our transmission system to assure that we are putting in place the least costly, least environmentally disruptive approach to meeting our power system delivery needs. Historically, utilities have planned to meet their transmission needs mostly in isolation. Moving to consolidate these efforts should create synergies and a greater opportunity to put in place least-cost solutions.

In thinking about least-cost solutions we also need to actively consider and implement where appropriate non-construction alternatives. For the last six months a group of knowledgeable stakeholders convened by BPA has been considering how and when alternatives such as conservation or price incentives should be used as an alternative to putting new wire in the air.

Third, we need to continue our efforts to get as much out of the existing system as we can, either through new technologies or through improved operational practices.

The past few days have reminded us that electricity is a fundamental and necessary element of our lives in the 21st century. From its initiation as a consumer good, electricity has helped improve the quality of life and increase productivity. With the advent of the computer age we have become increasingly dependent upon electricity. If we are going to continue to see improvements in our quality of life and productivity, we must put in place policies that will assure we have adequate electricity infrastructure and appropriate regulatory standards to meet our needs.