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## Hedging future blackouts

THE INVESTIGATION of the "Great Blackout of 2003" is proceeding slowly in Washington, led by an Energy Department that has advocated a deregulated electric industry selling power coast to coast on a transmission "highway."

Congress is also sorting through the testimony gathered in various hearings. The issue is being seized upon in the energy policy debate as an argument for whatever policy prescriptions anyone believed important prior to the event. Opponents of electricity deregulation cite the blackout as evidence that deregulation has failed. Bush administration spokesmen are promoting greater incentives to invest in the infrastructure and blaming environmental regulations and citizen opposition to power lines; utility executives call for streamlining the approval process. While we at Conservation Services Group, as providers of renewable energy and energy conservation programs, have our own biases, we believe that some perspectives are being lost in the stampede for easy answers.

The outage spread throughout the mutually dependent grids of northern Ohio, New York, southern Ontario, and eastern Michigan. The blackout was stopped by the electronic guardians at the gates of those adjoining grids. The New England, Quebec, and

anachronisms. We should build our interconnections between them only as fast as we build our firewalls. And we should be careful to weigh the risks of allowing dependency on distant generators against the price benefits.

■ Second, we need regulatory oversight of the owners of critical grid components to make sure that basic maintenance is being done and that financial problems of a firm are contained.

■ Third, promoting energy efficiency and distributed generation are key to ensuring a balance between supply and demand. Using energy efficient appliances, compact fluorescent lights, retrofitting one's home or business with insulation and air sealing, efficient cooling equipment, and other measures can significantly reduce the electric grid's heavy load. Conservation slows the growth in demand and creates the margin of time that allows the grid to be upgraded where needed. Small scale generating technology that uses either renewable sources (such as solar panels, landfill gas, or

wind turbines) or conventional fuels for micro-turbines or fuel cells has created the opportunity to build new generating capacity very close to the customers, bypassing the transmission grid entirely. Less reliance on a complex system means less chance of

**A 'national' grid could have caused a bigger**

the blackout might have spread farther.

Unfortunately most observers are trapped by their reliance on the model of large-scale power generation and a transmission system to balance power needs nationally. Their plans rely on massive investment in more transmission lines and more reliance on large central generating plants and a complex balancing of regional needs. This is the policy that is building a "Rube Goldberg" system of high tension power lines all over the country that are hard to understand or manage and are prone to human error, sabotage, corporate mismanagement, and technological breakdown.

We do need strategic upgrades to the electric grid and incentives for doing them. However, the current drumbeat for massive investment in a national electric grid overhaul will only lead us to continue a 1950s solution to a 21st-century problem.

To prevent "blackouts" here and nationally, we need several policies.

■ First, self-sufficient, compartmentalized grids are reliability hedges, not

the damage. While competitive electric markets have not delivered on the promise of cheap energy, they also were not the direct cause of the problem, and they can produce the benefit of consumer choice if properly structured to avoid manipulation.

■ Fifth, Congress should focus on this problem, enact this sort of approach, and separate it from other, unrelated issues like drilling for oil on the north slope of Alaska, promoting bio-fuels, or the hydrogen economy.

We predict that you will not hear these solutions from the Bush Energy Department or the Congress. However, we believe this is the only strategy that will avoid massive rate hikes and "solutions" that make our energy system more vulnerable to breakdown or attack.

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