

Threat of Power Shortages Generating New Urgency

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One in an occasional series

Electric power has already become painfully expensive in Washington and its suburbs. Now, local utilities say, it could become something even worse: scarce.

With its humming data centers and air-conditioned mansions, the region is using 18 percent more electricity than in 2001. And as demand has gone up, so have prices. Some homeowners have seen their rates jump by half or more.

Utility and government officials say the region has to face the idea that its demand for electricity could overtake the supply. In a little more than three years, they say, lights could flicker off in rolling blackouts.

To avert such shortages, electric companies have proposed a transmission line through the [Loudoun](#) countryside, a third nuclear reactor in [Calvert County](#) and other controversial projects. Even if the projects are built, they won't come online for years. Environmentalists say the region could solve many of its problems simply by conserving energy.

This year, leaders in [Maryland](#), [Virginia](#) and the District will all face crucial decisions affecting the power supply. The main question: Given that Washington loves electric power as much as other types of power, could the region make do with less of it?

"We cannot do nothing," said Jone-Lin Wang, a Washington-based senior director at the analysis firm Cambridge Energy Research Associates. "If you do nothing, and the demand for power continues to grow, then we don't have enough supply."

This year, local governments have been wrestling with questions about how to get electricity, how to save it and how much it should cost. The [D.C. Council](#) is considering an investment in solar and wind power. In Maryland, Gov. [Martin O'Malley](#) (D) and the General Assembly are seeking ways to keep rates down.

And in Virginia, power giant Dominion has battled environmental groups over plans for a line connecting the region with power from the Midwest. The project's opponents say it will cut an ugly swath through Appalachian vistas. They also say the power company is exaggerating the need for the project and ignoring ways to save energy and money.

"They have absolutely no interest in anything that will reduce demand," said Christopher Miller, president of the [Piedmont Environmental Council](#), a group opposed to the line. Because the power companies are pushing ahead with the proposal anyway, he said, "something that a lot of people value for its open space and beauty is being put at risk."

For many residents, the best clue that the region is having power problems comes in a little envelope every month. The region's major electric utilities have raised their rates an average of 52 percent since 2001, with the largest increases coming in Maryland. [Baltimore Gas and Electric](#) rates rose 74 percent in that time; Pepco's Maryland rates, 78 percent; and [Southern Maryland Electric Cooperative](#) rates, 157 percent

In the District, Pepco rates went up 49 percent. "You spend less on other things and you save less," said Ann Loikow, a retiree in the District, whose December electricity bill was \$58 more last year than the year before. She added, "I find myself rarely going into stores except for groceries and hardware."

Loikow's Pepco bill isn't her only reminder of rising energy costs. Her December gas bill was about \$26 more than it was in 2006. Washington Gas rates increased an average of 43 percent from 2002 to 2007.

The story behind the electricity price increases begins in the late 1990s, when Virginia, Maryland and the District loosened their controls on the power industry. As in many other states, the idea was to let customers choose among power suppliers, creating competition that would push prices down.

But instead, rates have gone up.

Power companies say they have been hit with higher costs, which had to be passed on to customers. The prices of natural gas and coal have increased sharply. And because the region needed to import electricity from other areas, utilities had to pay the power-line equivalent of highway tolls.

Some consumer advocates contend that the power companies have abused their new freedom, raising prices to boost profits.

"We have invested time and money in this for seven years," said Paula Carmody, director of the Maryland Office of the People's Counsel, which advocates for residential ratepayers. "And the end result is we have some of the highest rates in the nation."

The region's increasing energy needs are attributable, in part, to its increasing population. But Washington area residents and businesses also seem to be using many more kilowatts per capita than in the past.

In [Northern Virginia](#), for instance, 22 computer data centers have been built, and 24 more are on the way, according to Dominion. Those hives of computer servers are often the size of a small [Wal-Mart](#), and the company says they use about 25 times as much power.

Across the region, new homes are often wired with high-tech, high-energy entertainment systems, as media-room gadgets creep out into bedrooms and kitchens.

"Imagine getting woken up by your favorite song in the morning, going downstairs . . . and looking at the security cameras and then, from that same panel, you're turning on your wall-mounted TV," said Mo Saad, an assistant manager at the MyerEmco AudioVideo store in [Tysons Corner](#).

"It's a lifestyle," Saad said, in which homeowners expect to be surrounded by electronics. "It's everywhere."

The growth in electricity demand has some serious environmental downsides. In Appalachia, some of the area's coal has been extracted through "mountaintop removal mining," burying mountain streams and causing major damage to the landscape.

And the region's emissions of carbon dioxide -- a major greenhouse gas -- have grown rapidly, because of its heavy reliance on coal-burning power plants.

"Increasing electricity almost inevitably leads to more global-warming emissions," said Frank O'Donnell, of the District-based group Clean Air Watch.

Now come stepped-up warnings of serious power shortages. In December, a study by the [Maryland Public Service Commission](#) found that the state might face rolling blackouts as early as 2011 or 2012. Power could be shut down for perhaps an hour at a time in certain areas, probably on hot days when air conditioners strain the grid.

Virginia officials have agreed with utilities that more power plants or transmission lines will be needed in that state in the next decade. The D.C. Department of the Environment has not yet evaluated utilities' predictions of power shortfalls, an official said last week.

Power companies are pressing for a wave of projects. Natural gas plants have been proposed near Waldorf and [Front Royal](#), Va. Constellation Energy wants to add a third reactor at the [Calvert Cliffs nuclear](#) power plant.

And three power transmission lines have also been proposed in the area. One would begin in [Prince William County](#), jog over to Southern Maryland and then cross the [Chesapeake Bay](#) to the Eastern Shore. The others would link the region with power plants in southwestern [Pennsylvania](#) and [West Virginia](#).

Environmental groups say the region should try harder to save energy before it goes out looking for more.

Activists say that customers could save energy by lowering their thermostats two degrees in the winter and raising them two degrees in summer; that they could buy efficient appliances and power-saving compact fluorescent bulbs; and that they could turn off computers and other electronic equipment when not using them.

On a larger scale, activists want utilities to install so-called "smart meters," which send alerts to customers, encouraging them to cut electricity usage when demand and, therefore, rates are high.

A program in the District is about to test remotely operated systems that, if customers consented, would enable Pepco to turn off air conditioners for short periods on hot days.

"The cheapest power plant out there," said Johanna Neumann, a staff member of the activist group Maryland PIRG, "is the one you never have to build."

Virginia and Maryland have proposed ways of cutting back energy use in their states. But state officials, like the utilities, say they are skeptical that such programs can eliminate the area's thirst for more power.

"We do not believe that conservation alone is going to get us where we need to be," said L. Preston Bryant Jr., the Virginia secretary of natural resources.

But many consumers say they are eager to try. In the District's [Mount Pleasant](#) neighborhood, for instance, a group of homeowners has proposed saving energy, and generating their own, by putting solar panels on roofs.

"Every time you want to make power, you don't have to build another coal-fired power plant," said Anya Schoolman, who heads the Mount Pleasant Solar Cooperative. "I just think it's time for a different way to do business."

Staff writer Steven Mufson and staff researcher Meg Smith contributed to this report.