

# ***Should regional high capacity transmission expansion continue to be Wisconsin's No. 1 energy investment?*** *La Crosse Tribune April 14, 2013 debate:*

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## **No. Energy efficiency best way to spend resources.**

Proposed high-voltage transmission expansion is the largest energy investment on the horizon in Wisconsin. Through 2021, we expect utilities to request approval for eight through-state high-voltage transmission lines, burdening ratepayers with about \$5 billion plus financing costs over 40 years.

Over the previous decade we invested \$3 billion in transmission. As we started paying down the debt, our electricity rates have climbed 65 percent and now rank highest in the Midwest.

In 2005, utilities argued these high capacity lines were needed to reduce "interstate transmission congestion costs," but that goal is met. By 2011 power was flowing freely and congestion was cut to 1/100 of the 2005 amount. Congestion costs have become a very minor factor.

Utilities say high-voltage transmission lines pay for themselves, but the record does not support the claim. Chances are even slimmer now with electricity use in Wisconsin and across the United State predicted to flatten out for the foreseeable future.

In contrast, states that have made energy efficiency their No. 1 investment are canceling power lines and power plant proposals. They also are reducing dependency on centralized power and creating four times as many sustained jobs, not jobs terminated when a power line is complete.

During last summer's heat-induced record demand, our robust grid met our domestic needs and was used by state utilities to sell high volumes of power to Michigan and Illinois at the same time. No businesses were asked to curtail use.

Keeping our lights on will depend much more on maintaining our smaller distribution lines at separate cost of about \$3 billion. Consumer and industrial user groups recommend it's time to hold off on big investments, not rush into more.

On a windy day, about 13 percent of the energy generated in the Midwest can be renewable, but utilities aren't guaranteeing the eight high-voltage transmission lines would reduce net carbon emissions. As of 2011, 74 percent of the power base-loaded into the regional grid is generated from coal. This power is less "green" than the 44 percent national coal generation average. Recent Environmental Protection Agency emission restrictions are expected to affect only 5 to 6 percent of regional coal power plants.

Under current Wisconsin policies, more interstate transmission means more green energy dollars shipped out of state. Until these and federal laws are changed to guarantee net carbon emission reduction in transmission proposals, the proposed network of fattened transmission pipes to higher-priced markets in the east will extend the life of coal power plants.

Wisconsin ratepayers are considering two different business approaches and goals. One would expand the market reach of regional utilities. The other would target improvements in homes, farms and businesses. Accelerated efficiency programs in New England are reducing operation costs, delivering greater emission reductions, sustaining in-state jobs and causing rates to drop. A similar program in Wisconsin could sustain more than 10,000 jobs every year with common results such as:

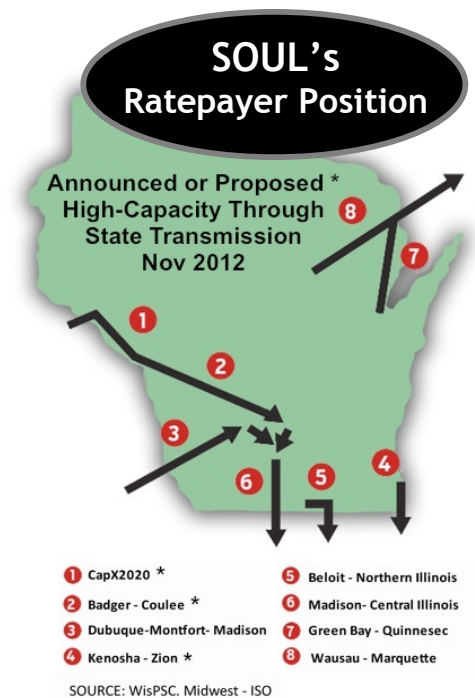
**\$3,500 home improvement:** Homeowner invests \$1,000; efficiency program pays \$2,500 for sealing leaks, insulation, upgraded lights and low-flow showerheads. Payback is four years, with \$12,500 savings and 81 megawatt hours of power removed from the grid over 50 years. (1 megawatt hour can power 50 homes for one day.)

**Poultry farm lighting upgrade:** Cost \$2,200; efficiency program pays \$800. Payback in first year with more than \$12,000 saved and 100 tons of carbon gases and 100 megawatt hours avoided over first five years.

**2kW rooftop solar array:** Homeowner pays \$3,600. efficiency program pays \$2,400. Savings: \$180/year. 63 megawatt hours and 5 metric tons of carbon emissions avoided over 25 years.

More than 90 Wisconsin municipalities have asked the Public Service Commission to analyze these options. Though third-party studies are common business practice, the PSC says it would need new laws to guide them.

Reducing energy dependency 20 to 50 percent project by project in our communities would make costly new power plants and ever-larger power lines obsolete. The choice is ours — our money is at stake. — **Rob Danielson**, Secretary, Town of Stark Energy Planning and Information Committee, Vernon County. Secretary, SOUL of Wisconsin.



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## **YES. Stronger Regional Grid Helps Cut Delivery Costs.**

Understanding how the electric transmission system works can be complicated, but it may help to think of it this way: The transmission system is similar to the Interstate Highway System — it serves as an efficient way to get from Point A to Point B, and it doesn't start and stop at state lines.

In electric system terms, Point A is where electricity is generated — at power plants — and Point B is where power is consumed. And in today's world, power plants and energy consumers may not be as close together as they used to be.

Today's transmission system operates on a regional scale, providing pathways to move the most cost-effective energy across state lines and among various energy markets — bringing reliability, economic and environmental benefits to electricity users, both locally and regionally.

All across the country, investments in regional transmission systems are helping reduce overall energy delivery costs. However, congestion on transmission systems — when transmission lines can't carry as much power as is desired at a point in time — increases costs to serve customers.

Due in part to our geography, Wisconsin has few interstate transmission connections. While we have made improvements to the system, additional connections are needed to provide reliability, economic and public policy benefits.

While there is sufficient generation within the state, the fact is the cost to produce electricity can be cheaper in neighboring states at certain times. An improved transmission grid with strategic connections to other energy markets can be the difference between dollars and cents. With improved access to neighboring energy markets via interstate transmission lines, local utilities can buy and sell electricity to help moderate costs. They can buy power when it's less expensive elsewhere and sell power if they have excess generation. Those savings can be passed on to electric ratepayers.

Many regional transmission projects pay for themselves over time. The regional grid operator, MISO, has designated a portfolio of multi-value projects — transmission projects that provide regional economic, reliability and public policy benefits.

These 17 MVPs — Badger Coulee among them — will create \$15.5 billion to \$49.2 billion in net present value economic benefits over a 20- to 40-year time frame. In total, the MVP project portfolio will deliver benefits in excess of 1.8 to 3 times its cost. That translates to \$23 in benefits from lowered delivered energy costs for an \$11 a year in investment from individual electric customers in 11 Midwestern states.

The nation's goals for energy independence and increased renewable energy usage also are driving transmission development. The regional grid serves as an efficient means to move renewable energy from the nation's resource-abundant areas to population centers that have a desire for clean, reliable and affordable energy.

Transmission is needed because investing in renewable resources to the west, in the nation's wind alley, instead of areas with lower quality wind resources, is more efficient due to higher availability of wind, and that translates into hundreds of millions of dollars in potential savings. Plus, the combination of high-quality wind with zero-emissions transmission is great for the environment.

There are other environmental benefits to investing in modern transmission lines. More efficient transmission lines can be compared to getting better gas mileage from your car. In simple terms, the wires on more efficient high-voltage power lines do not get as hot, which results in substantially lower electricity losses. Lower losses between generation sources and population centers means a reduction in the required electricity output to meet demand.

If the generation source is a coal plant, the result is environmental benefits in the form of lower carbon emissions. To date, ATC's system has reduced energy losses, saving more than 15 million megawatt hours of electricity — enough to power more than 36,000 homes — and eliminating more than 10 million tons of carbon emissions, averting the need for a 125-megawatt power plant.

The regional nature of the electric system is our present and future. On the path to future transmission development, all roads lead to reliability, economic and environmental benefits for energy consumers locally and regionally. - **Greg Levesque**, Environmental and Local Relations Manager for American Transmission Company, Pewaukee, WI.

