

SOUL OF WISCONSIN

Restoring Ratepayer Energy Priorities

MREA - June 2015

Understanding the Consequences and Responses to Wisconsin Utilities' Excessive Spending

As Missouri, Illinois, Arkansas and New York were turning down proposals for imposing and unjustifiable high capacity transmission projects over the past 5 months, Wisconsin's Public Service Commission (PSC) quietly required Wisconsin and regional electric customers to assume two billion in utility debt with the approvals of the Badger-Coulee and Bay Lake transmission lines.

The ramifications of these additions are small compared to the billions of debt we have accumulated and utility planning that doubles it. Utilities and state regulators appear intent to risk the state's energy economy by promoting waste and undercutting the competitiveness of Wisconsin's businesses and the right to pursue personal and community energy goals. The large fee and rate increases ratepayers have been burdened with since 2012 are the tip of the iceberg.

Contrary to market principles paraded before congress through the 1990's when locally utilities were forced to merge into a massive sales network, the people who paid every nickel of the unprecedented expansion have not saved a single one. Between law protected secrecy, incomplete news reporting and state utility commissions not obligated by law to make timely announcements, customers are the very last parties to learn that utilities *already* came acourtin'.

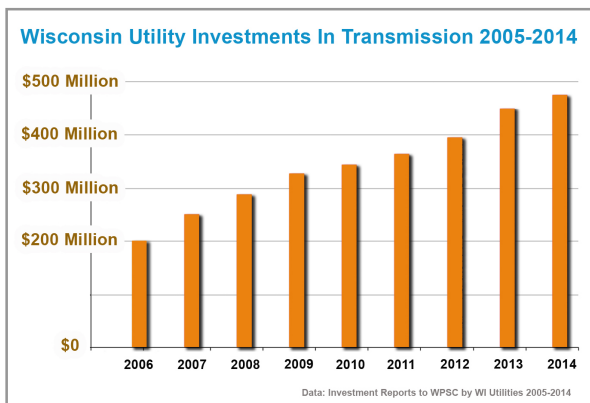
Here is what does not happen: Your newspaper *never* receives a press release from the state utility regulators informing you that your utility is asking them to evaluate the need for a billion dollar energy project. You do not receive word from the media, the PSC or state or local representatives when it becomes glaringly clear that the proposal is threatening your energy rights and its time for you to speak up. The first clue that your dollars *have already been committed* to the project typically comes in a news story often implying your energy needs have forced the utility to ask the PSC for fee and rate hikes. Unless you hire law and engineering firms, you may never learn about your right to participate in technical hearings concerning need for the proposed project. (About \$500,000 will come in very handy).



Our present energy saga is more tragically ironic than even Samuel Clemmons could imagine: Customers pay utilities to prevent Customers from painting their own fence—to be able to prudently manage the needs of their own houses and businesses.

Worst of all, extensive injustices can cause one to think there is nothing one can do about it. One does not have to hold the answer. Asking questions with an open mind and not being afraid to keep learning is the greatest pleasure and power given to humanity.

Wisconsin utilities were legally enabled to begin their current spending binge in 1998 when WI state legislators adopted laws that ceased competitive bidding between supply side and demand side energy investments. No longer were proposals for new power plants and transmission lines required to economically compete with alternative solutions that can dramatically shrink all underlying need for these very expensive additions. By 2006, as most states were investing more and more dollars on energy efficiency that places no debt on consumers and saves them money, Wisconsin utilities had added numerous power plants and were expanding the transmission system with a trajectory of spending increases that makes the housing bubble look tentative.

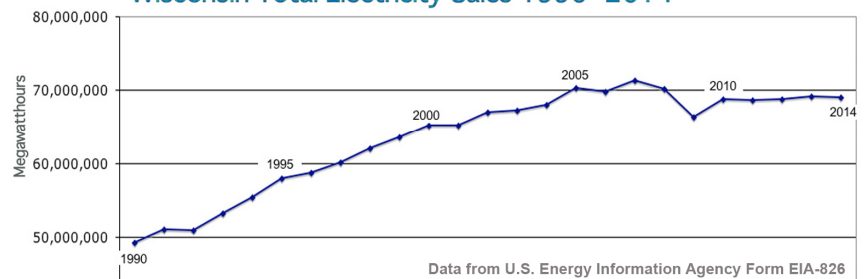


The utility debt we have acquired bears little resemblance to home and car loans. Since the late 1990s, special provisions designed by utilities under the auspices of the Federal Energy Regulatory Commission protect utilities from financial risk. Mortgages for utility purchases have mandatory high interest rates in the in the range of 10% -%12 and guarantee profits for investors even if the utility project is mothballed before the loan is paid off. No such protections are reserved for electric customers who are obligated by state utility regulators (PSC) to pay the loan when the project is “permitted.” Mortgages for large transmission lines provide an excellent illustration of how easy it has become for ratepayers to come out on the short end (and how easy it is for lawmakers to get confused).

On the surface of state laws, the WI PSC can only approve a high capacity power line *if it pays for itself* through small energy savings over a very long time, specifically, forty years. The very substantial, 40 year, cost of line with financing, operation and maintenance included is roughly five times the “project” cost utility public relations materials (and news writers) confusingly cite. This cost is paid through utilities to investors through charges attached to *each unit of energy sold*. But unlike the fixed monthly payment amounts you can count on when you sign a home mortgage, the prospect of energy savings depends on there being *more and more energy units to attach costs to*. The mortgage calculations also assume population growth—that there will be steadily increasing number of users all using increasing amounts of power. This method of meeting legal standards by assuming steady rates of growth was marginally accurate in the last century; clearly it no longer applies to the energy environment today.

The U.S. Department of Energy credits, “slower population growth, market saturation of electricity-intensive appliances, improvements in the efficiency of household appliances, and a shift in the economy toward a larger share of consumption in less energy-intensive industries” for energy use generally leveling off. Use in Wisconsin has been flat since 2010 and is lower today than it was in 2005.

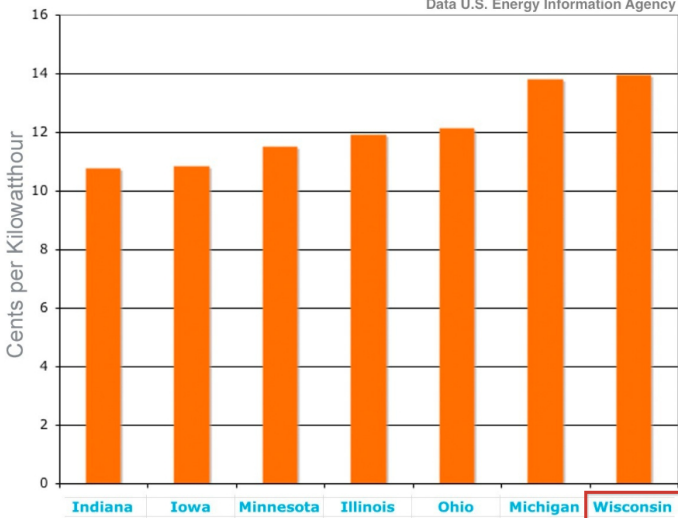
Wisconsin Total Electricity Sales 1990 -2014



Average Retail Price of Electricity

Residential Customers - March 2015

Data U.S. Energy Information Agency



energy sold. In their estimates the nominal price per kilowatt-hour in 2035, it increases nearly 40% when the rate of energy growth is only one-fifth of one percent lower.

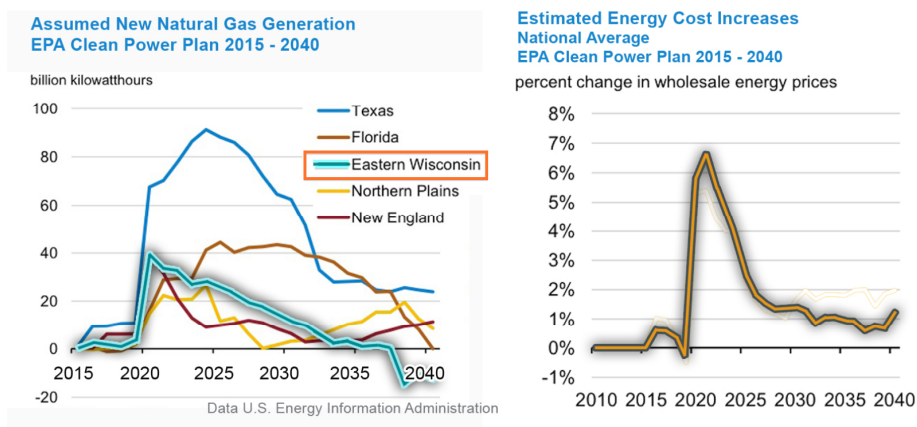
Instead of pausing to account for these historical changes during the review of the Badger-Coulee transmission line as requested by more than 1000 informed ratepayers, nationally recognized engineers and the Environmental Law and Policy Center, Wisconsin’s Commissioners elected to turn a blind eye. This decision and others like it risk electricity cost increases that will make Wisconsin’s region-leading rates and fees of today look like a terrific bargain by the end of the decade. In their approval, Commissioners read from the utilities’ optimistic use projections and ignored that their own staff had asked for more realistic numbers which utilities refused to provide. Dismissing the intent of the legal stipulation to provide ratepayers “reasonably commensurate return,” the Commissioners ignored evidence that the Paddock-Rockdale transmission line approved by the Commission in 2009 is likely losing money today because energy use is dramatically lower than utilities projected.

Forecasting by the U.S. Energy Information Administration shows that lower energy use exacerbates the negative impacts of debt because the costs become distributed across fewer units of

What Goodies remain on Utilities’ Shopping Lists?

As long as utilities are guaranteed, long term, high interest profit and risk no losses, it would be very un-business-like for them to not seek as many of these highly attractive mortgages as they can. Therefore, if one knows what capital assets utilities are seeking, it’s easier to read between the lines in utility public relations materials, proposals and interpret stances regulatory agencies are taking. Here are some items on Wisconsin utility capital wish lists.

- More Large Transmission Lines.** Since 2012, utilities have been awarded three major transmission lines and they have announced interests in four more in Wisconsin and fifteen in other states. SOUL estimates that the debt assumed by Wisconsin ratepayers for these projects would exceed six billion dollars or about \$4 dollars month per household for the next 40 years. The long-term costs of these projects, alone, are about four times the amount we invest in our region trailing energy efficiency program, Focus on Energy. Don't forget: Efficiency spending lowers the costs of running our homes and businesses, it removes demand from electrical infrastructure, it reduces carbon emissions most cost-effectively, it adds no burden of debt and it does not chain us to our decisions for 40 years.
- Replace Smaller Transmission Lines.** Many smaller transmission and distribution lines are 40 to 70 years old and many of these also qualify as capital investments. Should energy use, somehow, begin to increase at much faster pace, the additional load would accelerate *replacement* of these lines. To prevent costly replacement when load management and repairs will suffice, ratepayer dollars should be focused on prolonging the lifespan of these aging facilities. New York state recently ordered a utility to apply \$200 million dollars towards energy efficiency, demand management and distributed solar instead of building a new \$1 billion substation. California is avoiding the construction of entire power plants with the same approach. Engineer Bill Powers elucidated *No Wire Alternatives* for Badger-Coulee where \$20 million in solar, energy efficiency and load management incentives eliminate the potential need for the billion dollar transmission line. Utilities invert this reality. They argue that if a large transmission line is installed *before* precautions are taken to address the smaller facilities, that costly replacement will not be required. Obviously, every existing line and substation requires attention. Making decisions today that avoid costs in the future is exactly what the PSC is chartered to do. Unless ratepayers start exposing this utility double-dipping *at the expense* of developing energy efficiency and local solar, it will continue.
- Natural Gas Power Plants.** From the 1930s through the 90's utilities used promises of cheaper power to expand their assets. We know how that worked out. In the late 70's, utility began promising carbon emission reduction through remote wind farms and transmission. The result: 6% wind power. Through the Badger Coulee review process we learned that utilities' planning actually expects emissions to continue to rise-- even if a 25% national renewable energy requirement should fall in place. On the surface, what we told about the the EPA's *Clean Power Plan* sounds great. It encourages states (with little or no recourse to force compliance) to create a plan of action to reduce emissions by 30% by 2030. The EPA suggests that more states follow measures used by states like Massachusetts who are already on track to meet the goal: high doses of energy efficiency, load management, in-state renewables and blend in remote renewables and natural gas generation. If we examine the capital implications, what has been confusing narrative in Wisconsin makes perfect sense. In January, the chair of the WI PSC vociferously opposes the EPA's request on grounds of excessive costs. Utility investors are told at their May meeting that the Clean Power Plan will mandate expensive renewables. The stage has been set for capital additions. WI utilities can request a fleet of new natural gas power plants and blame the EPA. What evidence do we have? Eastern Wisconsin is prominent among areas earmarked for key natural gas generation development and the associated cost increases in explicit EPA forecasting. Where did these suggestions to add capital come from? The WI PSC refused to submit a plan. Will Wisconsin's utilities work to oppose the EPA's suggestion of making energy efficiency spending priority #1? Remember, before 1998, comparing the cost of benefits of efficiency first was required by law.



"[S]trong evidence suggests that becoming too reliant on natural gas poses numerous complex risks, including persistent price volatility, climate-changing emissions from combustion and the leakage of methane, and water and air pollution from natural gas production. ..Where natural gas

comes up short, renewable energy and energy efficiency can deliver. Shifting to these clean, low-carbon power sources is a swift and cost-effective way to achieve the deep cuts in carbon emissions needed to tackle the climate crisis, diversify the electricity mix, and create healthier, more productive communities."

-The Natural Gas Gamble , Union of Concerned Scientists, March 2015

Tapping the Empowerment of Your Home

Wisconsin ratepayers channel fewer pennies into energy efficiency each month than we did in 2007. Over the same time period, energy efficiency investment across the U.S. increased 300%. Energy efficiency and conservation practices keep our utility bills low and increase our leverage to reject unneeded capital projects.

Acting on principle of efficiency and conservation does not require grand policy changes; it requires improving awareness, getting some positive results and patiently sharing the techniques with others. Many Wisconsinites instinctually conserve. When energy prices began to escalate in 2002, the average WI household used about 700 kWh per month while the average household in Iowa used 800 kWh. Wisconsin's rates went up over 50% and Iowa's went up 30%. The average household in Iowa today uses about 840 kWh today while our average in Wisconsin still hovers right at 700 kWh.

Energy wasters are certain they are not wasting energy. Asking skeptics if they know many kWh's their house uses each month can lead to major reductions. Studies have shown that household energy use tends to drop 8-15% when someone makes it their job to keep an ongoing ledger of monthly energy use. A 13% reduction is equivalent to adding 6 solar panels to a home with normal energy use. Click on the Wisconsin Meter Watch button on SOUL's website for free energy use tracking tools and email when you are ready for more ideas.

There's no better proof that energy reduction is causing utilities fits than their recent "rate restructuring" schemes. Essentially they are trying to recover shortages on mortgages and discourage *all* ways we can lower use. Soaring rates were getting pretty embarrassing so utilities asked for fee increases. In the last round starting in 2012, The PSC granted utilities about \$9.2 billion over 40 years-- \$12 billion if XCEL's current fee increase is approved and Alliant's pending request is on par with the other utilities'.

In 2014, the PSC hearing rooms were filled like never before. The Commissioners were barely able to withstand the concerns voiced. Those questions need to stay in the news. When utilities come back in two years to ask for more of our saved energy dollars, motivated and generous minded humans are capable of very resourceful and compelling responses. Profound improvements in state energy policy will happen eventually because utility-dictated energy investments are economically unsustainable.

Of course, the only way out of debt is to cease borrowing and this is a topic all state lawmakers are very willing to talk about. SOUL will gladly help you and a neighbor/friend prepare for a visit and provide a volunteer to come along. One does not have to know all the facts or be a gifted speaker to put one's energy goals into words.

Legislators are very aware of the powers Wisconsin utilities have amassed. They welcome learning about your energy goals and how they fit and don't fit with the state's. Lawmakers have heard utility lobbyists repeat catchy generalities over and over, but they hear little, clear explanation. Focus on a problem to be addressed and resist the temptation to place blame. Everyone protects his or her opinion to great length when it is challenged, that is time better spent.

After visits from two or three small groups of constituents asking questions like these: How do we reduce our utility debt? How can I get rebate help for this farm equipment? Is the PSC really conducting cost benefit analysis of energy efficiency when they look at a transmission line?...your legislator will be calling you for more clarification and ideas.

And for the planet's sake, if you have energy goals that your utility is not helping you with, don't be afraid to meet with them in person. Four, patient and informed ratepayers can turn dreams of a community solar array into reality. Go in with the mindset of becoming better informed and empower your utility to help. Politely ask for more explanation when a factor is raised that you do not fully understand. Plan a follow-up meeting. As for looming debt, make it very clear that you are not trying to skirt your obligations. Your goal is a fair financial arrangement that benefits everyone, including you.

