ENERGY IN WISCONSIN

A Primer for Policy Makers and Staff

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History of Wisconsin Utilities and Regulation

Since 1882, Wisconsin's investor owned utilities have supplied electricity to the communities they serve. In fact, the first power plant to be built in the U.S. is located in Appleton, Wisconsin on the Fox River. Since the turn of the last century, Wisconsin's energy providers have been regulated by the state, originally under legislation known as the 1907 Public Utilities Law. The law was passed because policy-makers and energy providers recognized that the availability of heat, light, and water service are central to modern life and were no longer merely options.

The features of this regulation generally include: a broad definition of "public utility"; centralized regulatory authority vested in the Public Service Commission (PSC); exclusive franchise status for public utilities; state control of rates; minimum service standards; eminent domain authority subject to state approval; and limitations on public utility ownership. This arrangement, often referred to as the "regulatory compact" can be summarized thus*: Utilities agree to provide safe, reliable, reasonably priced and environmentally responsible service, for which they are allowed to recover their costs, are given the exclusive right to serve customers in their service territories and can earn a reasonable return for their investments.*

This return, commonly referred to as Return on Equity or "ROE" should be high enough to attract potential investors, yet low enough to keep the price of energy services at a reasonable level.

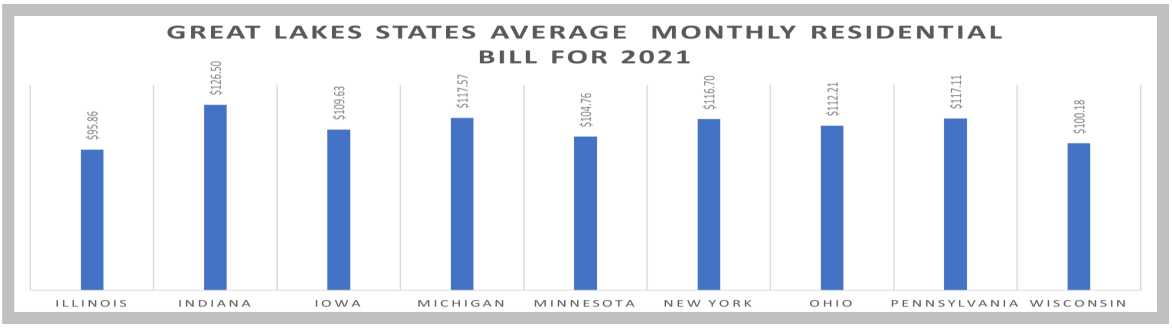
Customers benefit

by having a financially stable utility that has the earnings and cash flow sufficient to attract equity and debt on reasonable terms, and the resulting ability to provide safe, reliable, and affordable utility service. Receiving a reasonable authorized ROE and capital structure from PSC regulators is an important contributor to financial stability. The customer benefits that result from being served by a financially healthy utility outweigh the short-term "benefits" of a negative regulatory climate that heightens regulatory risk.

Seeking Balance

PSC Regulators are charged with balancing the interests of investors and customers, and utility management has a fiduciary responsibility to deploy investors' capital productively. Investors recognize the importance of regulatory and stakeholder relationships and expect utility management to provide safe, reliable, and affordable service to customers in order to preserve and enhance the value of their invested capital. In many ways, the interests of investors and customers are aligned and not in conflict and can become **more** aligned through regulatory policy. Regulators are most effective at serving customers when they harness investors' desire to provide capital rather than constrain it.

This regulated system has worked well and is the reason why national data show Wisconsin residential customers **pay significantly less on their average monthly bills when compared nationally and in the Great Lakes states**, yet consistently win national awards for reliable customer service.



Who is the WUA?

The WUA is the trade association that represents these gas and electric energy providers and it is under this regulated system that members of the Wisconsin Utilities Association operate, serving about 80% of the electric and natural gas customers in Wisconsin. They include Madison Gas and Electric, Xcel Energy, Alliant Energy, WEC Energy Group, American Transmission Company, Superior Water, Light & Power, City Gas of Antigo, Midwest Natural Gas and several associate members. The remaining customers are served by either co-ops in rural areas or municipal utilities.

Interactive Electric Service Territories Map

Interactive Natural Gas Service Territories Map

How the Electric and Natural Gas Systems Work

The electric system includes four key components

1

Generation

power plant at which the electricity is produced

2

Transmission

the large, high voltage wires that move the electricity from the plant to the area, or “load center” where it will be used

3

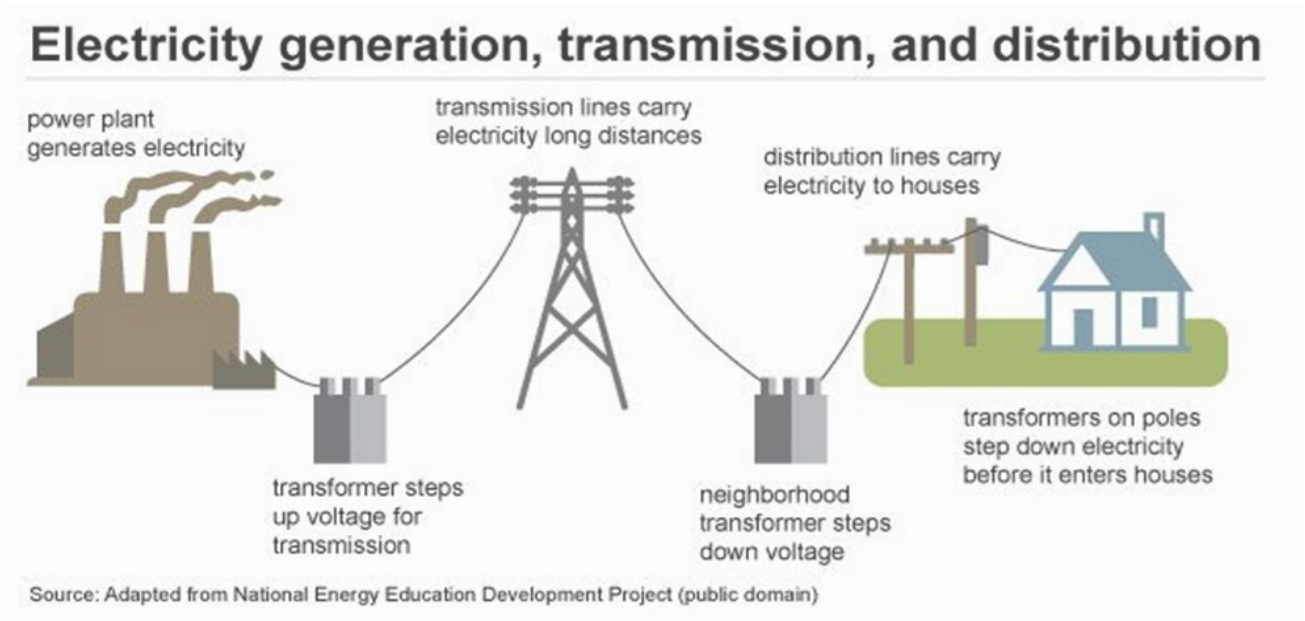
Substations

which can either increase or reduce the voltage

4

Distribution

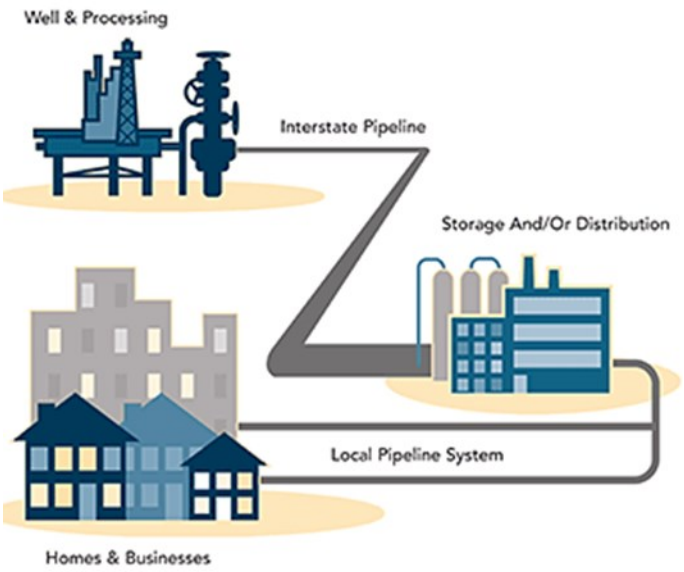
the smaller wires that deliver it to your home or business.



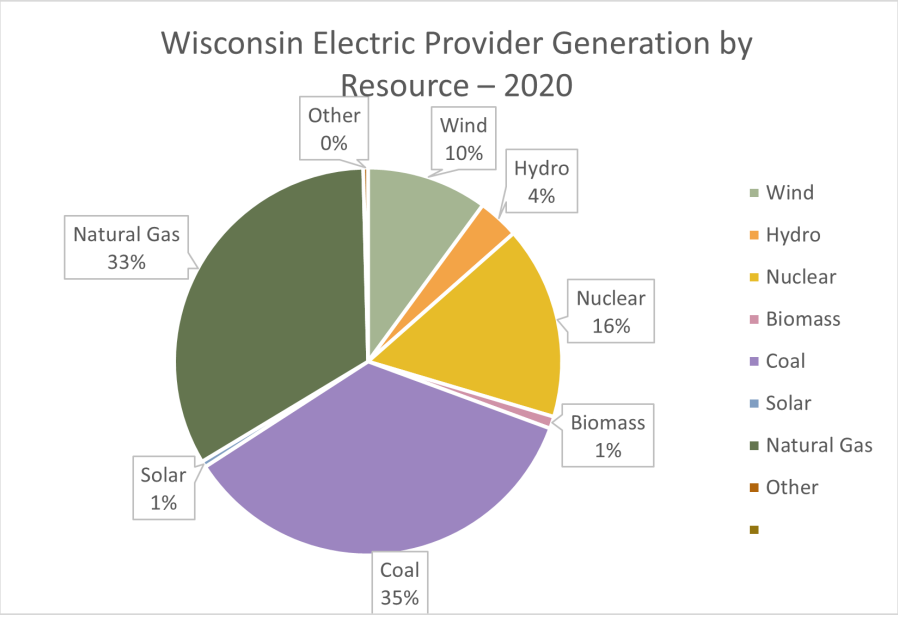
Natural Gas

Broadly similar to electricity, the natural gas system also features **production, distribution and transmission**; starting from the wells where it is produced, the processing plant where it is refined, the compressor station where it is compressed into a high-pressure stream, to the transmission system which moves it to underground storage.

From there it can be sent through the distribution system from which some is used to generate electricity and some to heat homes and businesses, as well as in certain industrial processes. However, unlike electricity, natural gas is not regulated by the PSC in the same way.



In fact, there is no governmental agency that regulates the price of natural gas production at the wellhead. The price of natural gas is simply passed through to customers and utilities do not profit from changes in the price. However, the Federal Energy Regulatory Commission does regulate the transmission of natural gas on interstate pipelines.



Central to the production of electricity and the policy surrounding it is the particular mix of fuels each energy provider uses.

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Energy Supply and the Energy Transition

Wisconsin's current electric supply reflects a generation transition that began in the 2010s. Declining costs for natural gas, wind, and solar generation encouraged providers to increase their use of those resources and decrease their use of higher-emission coal generation with the goal of enhancing affordability and environmental responsibility while maintaining adequacy and reliability. This transition is projected to continue and accelerate in the 2020s.

The transition is consistent with Wisconsin's Energy Priorities Law (Ch. 1.12 Wis.Stats) which states in part:

4) *PRIORITIES. In meeting energy demands, the policy of the state is that, to the extent cost-effective and technically feasible, options be considered based on the following priorities, in the order listed:*

(a) *Energy conservation and efficiency.*

(b) *Noncombustible renewable energy resources.*

(c) *Combustible renewable energy resources.*

(cm) *Advanced nuclear energy using a reactor design or amended reactor design approved after December 31, 2010, by the U.S. Nuclear Regulatory Commission.*

(d) *Nonrenewable combustible energy resources in the order listed:*

1. *Natural gas.*

2. *Oil or coal with a sulphur content of less than 1 percent.*

3. *All other carbon-based fuels.*

Accordingly, all Wisconsin investor-owned utilities have set goals of being 100% carbon neutral by 2050

Carbon Dioxide Reduction Goals of WI Electric Providers

Provider	2030 CO2	2050 CO2 Reduction
Northern States Power Company-Wisconsin (Xcel)	80%	100%
Madison Gas and Electric Company	80%	100%
Wisconsin Electric Power Company (We Energies)	80%	100%
Wisconsin Power and Light Company (Alliant)	50%	100%
Wisconsin Public Service Corporation	80%	100%

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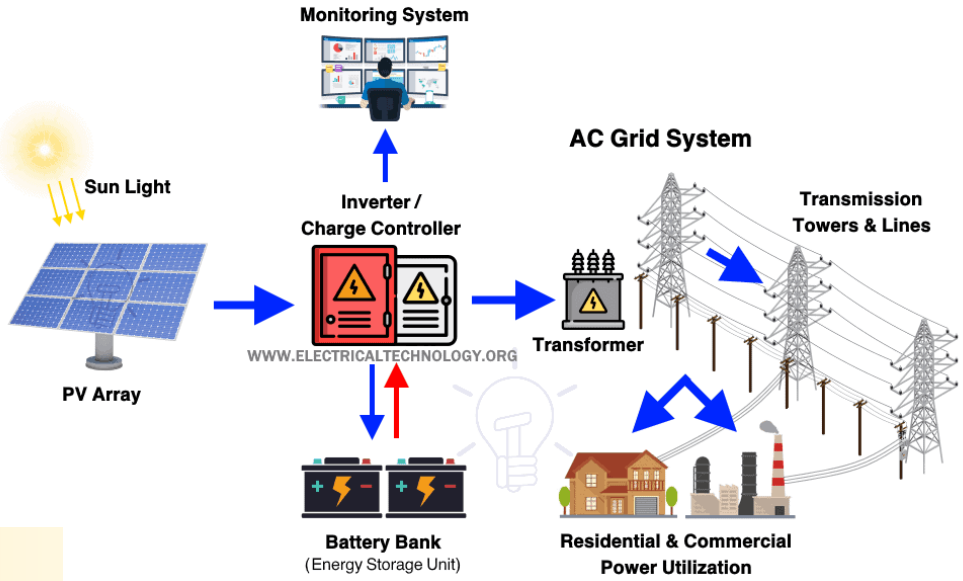
Key to this transition will be a balanced portfolio of generation sources with an increased reliance on renewables, supplemented by battery storage to keep the lights on when the sun isn't shining and the wind isn't blowing.



The WUA

is committed to maintaining the customer-focused advantages of our regulated system and improving upon our utilities' excellent record of safe, reliable and affordable energy is the goal of all public policy positions we take. For a current listing of legislative items of interest to the WUA, see our FYI Issue Tracking Summary, here: https://www.wiutilities.org/_files/ugd/2ea506_54842bb2356a445a818d7cac8dc52f6a.pdf

About Our Members:

Our members serve 2,512,749 Electric Customers and 2,000,518 Natural Gas Customers across Wisconsin. We employ 8,420 Wisconsinites, spend about $38 million annually with Minority Owned Businesses; $178 million with Women Owned Businesses; and $11 million with Veteran owned businesses.

WUA members pay about $214 million in Gross Receipts and Property Taxes and hold Assets totaling approximately $42 Billion. Our members contribute $25 million annually to charity and provide Energy assistance of over $91 million.

All major generating members of the WUA have carbon reduction goals averaging 73% by 2030 and all are planning net-zero carbon emissions by 2050.

For more information about the issues on which the WUA is engaged, contact:

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