**Rock Energy** 

COOPER ATT



Shane L. Larson, Chief Executive Officer

## More Power to You MAINTAINING RELIABILITY VITAL AS GENERATION SOURCES CHANGE

Many aspects of the energy industry have evolved in recent years, but perhaps the biggest change is occurring in the resources used to produce your electricity.

The mix of energy sources for

generating electricity in the United States has changed over time, especially in recent years. Natural gas and renewable energy sources like wind and solar account for an increasing share of U.S. electricity generation, while coal-fired electricity generation has declined.

As you probably know, Rock Energy does not generate any electricity. Instead, we purchase it from Alliant Energy and distribute it to members like you. We are asked from time to time how much of that electricity is produced from renewable sources.

The graphic on this page shows that Alliant has been transitioning to a cleaner mix of renewable resources. Renewables accounted for just 5 percent of the energy mix in 2005, compared to 16 percent in 2017. By 2024, that number is expected to more than double when 33 percent of its electricity will be produced by renewable resources.

Nationwide, coal-fired power plants accounted for about 42 percent of total electricity generating capacity in 1990, according to data from the U.S. Department of Energy. By the end of 2017, that figure had decreased to 24 percent. Over the same period, the share of natural gas-fired electricity generating capacity more than doubled from 17 percent in 1990 to 42 percent in 2017.

Renewable electricity generation from sources other than hydropower has steadily increased, mainly because of additions to wind and solar generating capacity. Wind energy's share of total electricity generation in the United States grew from 0.2 percent in 1990 to about 8 percent in 2017. Solar power, while relatively small in terms of its share of total generation, has grown significantly from 314 megawatts in 1990 to about 26,665 megawatts at the end of 2017.

As the nation transitions to cleaner energy, reliability must be considered. Electricity produced at power plants fired by coal and natural gas are extremely dependable and easily controlled. If more electricity is needed, the plant increases production and burns more coal or natural gas.

Renewable energy, however, has a variability problem. The sun doesn't always shine, and the wind doesn't always blow. Technology is evolving to make battery storage more feasible and affordable to deal with the intermittency of wind and solar power.

Resiliency of the electric grid is one of the most popular concepts talked about in the industry today. Resiliency is many things: It's reliability in your electric service. It's our ability to efficiently restore your power. It's being able to meet the demands of new technology. And it's how we serve you with various generation sources without skipping a beat.

A resilient grid is flexible and adaptable by allowing different types of generation, such as wind, solar, coal, natural gas, and hydro, to work together seamlessly to provide you with safe and reliable power. It's how we deliver on our promise to improve the quality of life for our members.

In addition to the above considerations, price must be a factor in how the overall generation mix is deployed and retired. All utility-scale generation sources are significant, long-term investments that will impact consumers for decades; so each generation decision must be weighed carefully.

We truly appreciate the opportunity to serve your energy needs. If we can do anything to improve our service to you, please let us know.









#### 83rd Annual Meeting Monday, March 25 Eclipse Center, Beloit

Be sure to mark your calendar and join us for the meeting and dinner.







Look for complete details in next month's magazine.



Students participating in the 2018 Youth Leadership Congress at UW-River Falls learned about the value of cooperation.

### YOUTH PROGRAMS BUILD STRONG CITIZENS

Rock Energy Cooperative offers two opportunities for high school students to learn more about cooperatives and the political process while developing their leadership skills.

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The co-op will sponsor up to four high school juniors on the 2019 Youth Tour to Washington, D.C. The June 14–21 trip includes meetings with congressional representatives and tours of historic sites. More



than 1,000 students from host cooperatives across the nation participate in the tour every year.

Another program is open to current high school freshmen, sophomores, and juniors. The Wisconsin Energy Cooperative Association's Youth Leadership Congress will take place July 24–26 at UW-River Falls. The program introduces students to cooperative business basics, demonstrates the value of cooperation in everyday life, and offers sessions to help develop leadership skills.

Applicants for both programs must be children of Rock Energy members and reside in the co-op's service territory. The deadline to apply for the Washington trip is Feb. 28, and applications for the UW-River Falls event must be received by April 12.

Rock Energy now is accepting online applications. Just go to www.rock.coop and click on the Community & Youth tab. For more information, call Barbara Uebelacker, communications director, at 866-752-4550 or email her at BarbU@rock.coop.





# DO NOT TAMPER WITH YOUR ELECTRIC METER

Meter tampering can result in electric shock, is illegal and increases electricity rates for other co-op members.



Never break a meter seal.
Never open a meter base.
Never remove a meter or alter an entrance cable in any manner.

If you know or suspect that someone has tampered with their meter, please contact us immediately.



## **ELECTRICITY THEFT:** Not Worth the Risk

Every year, energy cooperatives across the country cope with thieves—folks who deliberately tamper with their meter to steal power.

Not only is this practice extremely dangerous, it's a serious crime that could result in hefty fines and jail time.

Power surging through a compromised meter can cause an electrical catastrophe, according to the Cooperative Research Network, a division of the National Rural Electric Cooperative Association.

A short circuit could produce an arc flash bright enough to cause blindness and powerful enough to launch fragments of shrapnel-like, red-hot debris. Serious injury or death from electrocution, explosion, or fire often results from meter tampering.

Electricity theft is not a victimless crime. Rock Energy Cooperative loses revenue and expends resources to investigate meter tampering. These costs are then passed on to the entire membership.

National estimates vary, but *The Washington Post* cited revenue protection officials who claim between \$1 billion and \$10 billion worth of electricity is stolen from utilities annually.

Since everyone pays for lost power, please let us know if you suspect meter tampering. Call 866-752-4550 to report possible theft of service. All information can be given anonymously.



Source: energy.gov

#### Shane Larson, CEO

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