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MRES

A NEWSLETTER OF

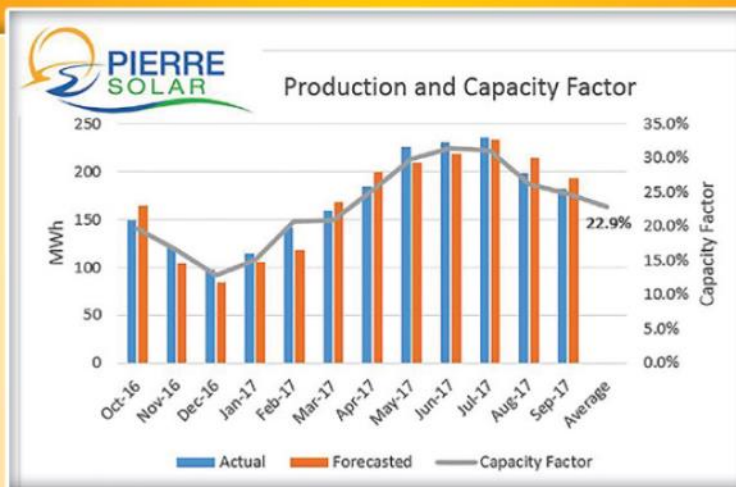
MISSOURI RIVER ENERGY SERVICES

Pierre Solar Project marks first anniversary of production

The Pierre Solar Project has passed the one-year mark for operation and overall production has been very close to projections.

The winter months proved to be brighter, sunnier, and less snowy than expected, so production was higher than projected during those months. Conversely, the summer months of August and September were cloudier than average and production fell below projections.

Despite the seasonal fluctuations, overall production at the facility was about 1.4 percent higher than the forecast for the 12-month period as the project produced 2,043 megawatt-hours



of energy. The average capacity factor for the period was 22.9 percent and the plant was available to produce energy 99.99 percent of the time.

The August solar eclipse was somewhat uneventful. Because of heavy cloud cover, it was hard to attribute impacts directly to the eclipse. The project was producing about 70 kilowatts at the start of the eclipse, dropped to 50 kilowatts for about two minutes, and then

climbed for the next two hours as the clouds gave way. However, the morning clouds were so thick that day, the system actually shut off. That was the first time the operator had experienced a full shutdown with this project.

Former Board member Bill Tobin, of Rock Rapids, Iowa, dies at 85

Longtime MRES Board member William "Bill" Tobin died Tuesday, Sept. 26 in Rock Rapids, Iowa, at the age of 85.

Bill was born Aug. 3, 1932 in Mitchell, S.D. He graduated from Notre Dame High School in Mitchell in 1950. He earned bachelor's and master's degrees from the University of South Dakota in Vermillion.

He was drafted during the Korean War and served two years in the Army Signal Corps with the Army of Occupation in Germany and was honorably discharged Sept. 1, 1955.

Bill married Ruth Bartlett on June 6, 1959 at St. James Catholic Church in Chamberlain, S.D. They made their home in Rock Rapids, Iowa, where they raised their seven children. Bill taught mathematics at Central Lyon for seven years, followed by a 32-year career as an administrator with the City of Rock Rapids and the Rock Rapids Municipal Utilities. He retired in 1998.

While in his leadership roles in Rock Rapids, he served on the MRES Board of Directors from 1972 to 1979 and again, from 1987 to 2000. Even following his retirement, Bill was a regular attendee at MRES Annual Meetings.

Survivors include his wife of 58 years, Ruth, his seven children, seven grandchildren, and three great-grandchildren. All of us at MRES extend our heartfelt sympathies to Bill's family and friends.



William "Bill" Tobin

Detroit Lakes community solar garden is up and running

A new community solar garden has begun producing energy in Detroit Lakes, Minn. The 29.3-kilowatt project became operational Oct. 2.

Detroit Lakes Public Utilities customers can purchase up to six 450-watt panels. The contract for ownership is 20 years and it is estimated that each panel will produce between 540 and 635 kilowatt-hours per year. That production will be credited to the customer's monthly electric bill. Customers who purchase panels also may be eligible for a 30-percent federal tax credit.

The solar garden consists of two 40-panel arrays. Detroit Lakes Public Utilities General Manager Vernell Roberts noted

that additional arrays could be added at the site in the future when sign-ups make it financially feasible to do so. By the time the project went online, 40 customers had signed up, Roberts said.

Josh Mason, energy services specialist for the utility, said that a maximum purchase of six panels "could produce close to 40 percent of a customer's yearly energy needs." He also said that investing in the solar garden project is an easy way for customers to get into solar energy without the effort and expense of installing panels on the roofs of their homes or garages.

MRES asks FERC to reconsider decision on grandfathered agreement carve-out

MRES has requested a rehearing from the Federal Energy Regulatory Commission (FERC) following a FERC decision that is estimated to cost MRES between \$4 million and \$6 million per year.

The FERC decision came in a case concerning an agreement between Basin Electric Power Cooperative (BEPC) and Nebraska Public Power District (NPPD), known as GFA 496. The BEPC/NPPD agreement was executed in 1977 so that the owners of the Laramie River Station (LRS) could move their respective shares of LRS power to their load.

Prior to Oct. 1, 2015 – the date on which MRES joined the Southwest Power Pool (SPP) – that agreement did not allow NPPD to collect congestion costs and losses. However, since MRES joined SPP, NPPD has been charging MRES for congestion and losses and MRES estimates that those charges are between \$4 million and \$6 million per year.

MRES has been using the SPP market since 2014, but prior to joining, it had done so as a non-member. However, in 2015, the Western Area Power Administration (WAPA) joined SPP. WAPA provides a significant share of the MRES members' power supply and, by joining SPP, WAPA also placed its share

of the Integrated System transmission facilities into the SPP transmission network. Because MRES uses these facilities to deliver power to its members, MRES was effectively forced to join SPP as well.

Under the SPP tariff, market congestion and market loss charges are now being assessed. "We tried to settle this before we joined SPP but were not allowed to do that since we weren't yet in the SPP market," said MRES Power Supply and Operations Director Ray Wahle. "Then, once we joined SPP, FERC said we submitted our GFA carve-out request too late." The GFA 496 carve-out, if granted, would keep in place the

terms of the agreement that were in effect before MRES began participating in the SPP market.

Another Missouri Basin Power Project participant, the Lincoln Electric System, was granted GFA carve-out status for its share of LRS. Even though FERC staff had recommended approval of the GFA 496 carve-out, FERC commissioners said the SPP tariff was not sufficiently clear and that, because of the MRES timing in joining SPP, the MRES case was different than the Lincoln Electric System case.

While there is no firm timing for a decision from FERC on the rehearing, MRES estimates that it could take 6-12 months.



Massive CapX2020 effort is completed

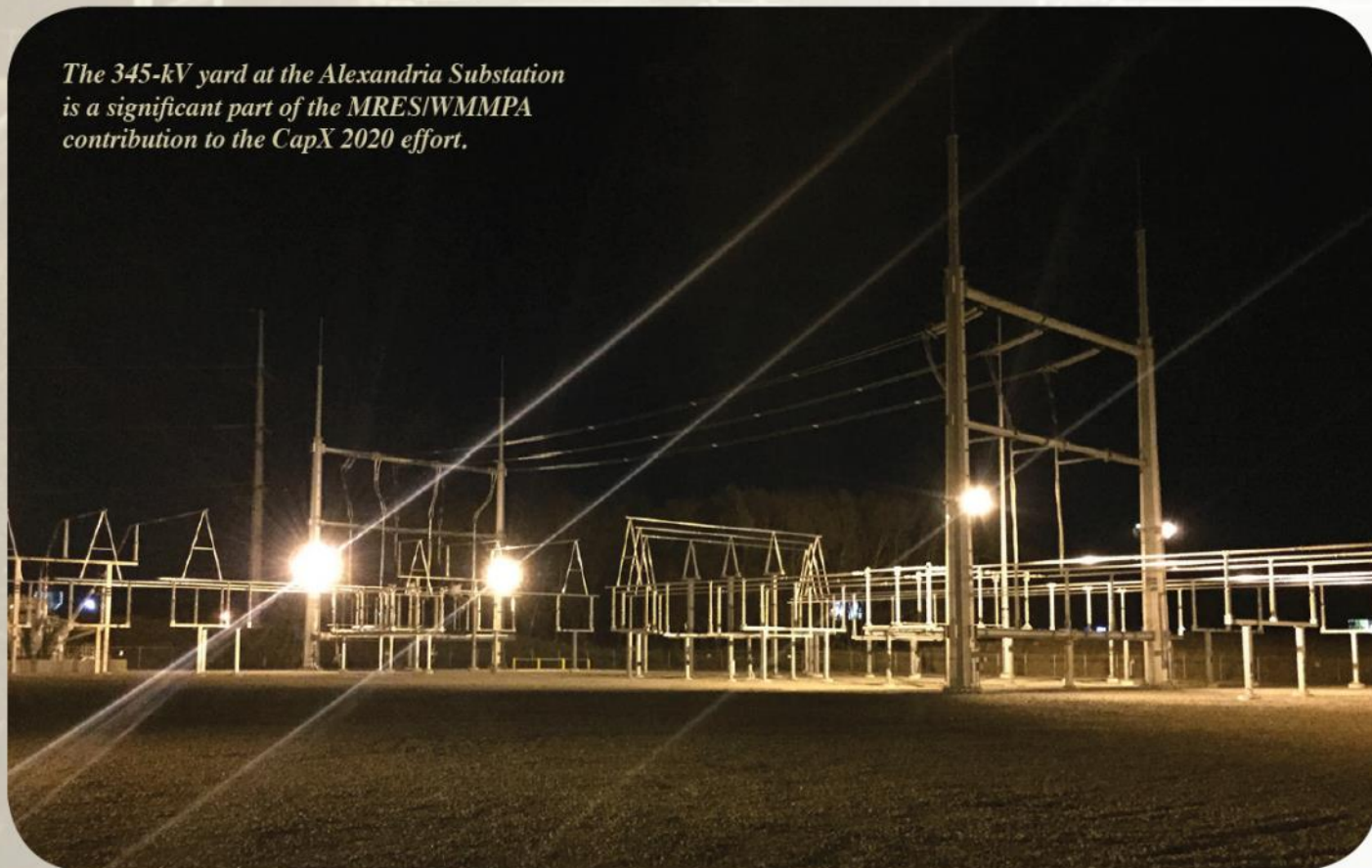
As of Sept. 8, all of the CapX2020 transmission lines are up and running. The project, which involved a total investment of \$2 billion, took the 11 participating utilities 13 years to complete.

The final project to be completed was a 70-mile, 345-kilovolt line from Big Stone South to Brookings County in South Dakota. In addition to enhancing reliability throughout the region, the CapX project will connect 3,600 megawatts of wind power, which is enough to power more 1.5 million homes.

MRES participated in two of the five CapX projects – the 250-mile 345-kilovolt Brookings County-Hampton line in South Dakota and Minnesota, and the 240-mile 345-kilovolt Fargo-St. Cloud-Monticello line in North Dakota and Minnesota. Both of these projects were energized in the spring of 2015.

In all, the project participants built 800 miles of transmission lines, the largest transmission infrastructure in the region in more than 40 years. It encompasses parts of four states – Minnesota, North Dakota, South Dakota, and Wisconsin.

The 345-kV yard at the Alexandria Substation is a significant part of the MRES/WMPA contribution to the CapX 2020 effort.



Rates and budgets approved for 2018; power supply rates to remain unchanged

The MRES Board of Directors has approved rates and budgets for the coming year.

There will be no increase in power supply rates for 2018, and, the long-term power supply cost forecast indicates that these rates will not be increased in 2019 or 2020 either.

However, there will be some increases in various transmission service rates, which are passed through to members on their MRES bills.

As for the budget, operating revenues are expected to be \$260 million for 2018 while operating expenses are projected to be \$208 million.

It is expected that the Western Minnesota Municipal Power Agency, which is the owner of power supply and transmission facilities that serve MRES members, will need to issue about \$100 million in debt during 2018, mostly for the Red Rock Hydroelectric Project.



MRES distribution maintenance workers help out in Florida following Hurricane Irma

MRES Electrical Distribution Superintendent Jeff Bechthold and Apprentice Line Worker Clayton Welch, who is a member of MRES line crew serving Jackson, Minn., left Rochester, Minn., Sept. 9 along with a convoy of other public power line crews from throughout Minnesota to help line crews from across the nation repair and rebuild electric infrastructure throughout the southeastern U.S., in the aftermath of Hurricane Irma.

The MRES duo arrived in Kissimmee, Fla., Sept. 11 and began work Sept. 12. They left Kissimmee Sept. 14 and worked in Lake Worth, Fla., until Sept. 19, before returning home Sept. 21.

A typical work day in both locations began at 5:30 a.m., and lasted until about 9:30 p.m., in hot, muggy conditions. The majority of their work involved setting poles and stringing wire.

While the work days were long and difficult, Bechthold explained that it also was rewarding. “We couldn’t have asked for anyone better to be around than the people in Florida,” he said. “They brought us water and snacks and were very thankful. People would drive around to find you to thank you. A 90-year-old man told us we could delay restoring his power because other people needed it more.”

The American Public Power Association coordinated the overall operation, while the Minnesota Municipal Utilities Association coordinated four groups out of Minnesota. In addition to manpower, each group brought some its own distribution maintenance vehicles and other equipment.

This was Bechthold’s second hurricane. He also helped following Hurricane Sandy, which struck the U.S. Eastern seaboard in 2012. It was the first such experience for Welch.

Other MRES members also sent crews and equipment including Alexandria, Marshall, Moorhead, and St. James, Minn.; and Denison, Lake Park, and Sioux Center, Iowa.



“A typical work day in both locations began at 5:30 a.m., and lasted until about 9:30 p.m., in hot, muggy conditions.”

Residents of Lake Worth put up a homemade sign thanking the lineworkers from Minnesota who helped after Hurricane Irma.

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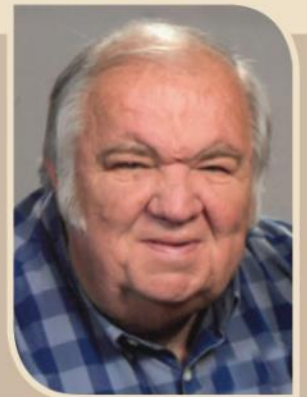
MRES Community Leader award recipient Jim Hermanson dies

James Hermanson, who earned the MRES Community Leader Award in 2014, has died at the age of 68.

Hermanson served as mayor of Henning, Minn., a member of MRES, from 2007 until his passing. Prior to that, he served on the Henning City Council from 1976 to 2007.


In recognizing Hermanson with the Community Leader Award, his long-term service to Henning was acknowledged. During his tenure, Henning established a gas utility and Hermanson was instrumental in bringing upgrades to the community's electric distribution system. He also was an active promoter of business development and re-development.

MRES extends its sympathies to Jim's wife Diane, their children, and other family members and friends.



James Hermanson

Group from membership working with MRES staff to develop Value of Public Power program



MRES is working to develop a program aimed at promoting the value of public power. This effort comes on the heels of a directive from the MRES Board of Directors that established the concept as an organizational strategic initiative.

A group of individuals from member communities and utilities who have responsibility for local marketing and communications efforts are working with MRES Member Services and Communications (MSC) Director Joni Livingston and other MSC department staff members to develop programs and materials that will help bring the message home.

"This member focus group is providing us with a great deal of input about things they believe will work well in their communities and about the most effective types of messaging and media we should be using to convey that," Livingston said. "Together, we are all working with Henkin & Schultz, a Sioux Falls marketing and advertising firm that will develop the actual pieces our members can use."

The focus group has held several meetings via conference call and there also has been a meeting to review and critique drafts of materials that Henkin & Schultz has been developing.