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## WAPA announces proposed rate reduction for Pick-Sloan customers

The Western Area Power Administration (WAPA) has announced a proposed power rate decrease to its customers in the Pick-Sloan Missouri River Basin next year. This rate decrease would apply to all MRES members that have allocations of federal power from WAPA.

The reduction is the result of the fact that drought-related costs are scheduled to be fully repaid in 2018.

WAPA established a drought adder charge to repay costs incurred during periods of below-normal generation that resulted from drought conditions. During low-water years, when hydroelectric generation is not sufficient to meet WAPA's firm power commitments, WAPA is forced to purchase power that is more expensive than the hydropower it generates.

Based on the current and projected

water and storage conditions and resulting generation forecasts, the final Power Repayment Study for 2016 indicates that the remaining unpaid drought costs are scheduled to be fully repaid in 2018.

WAPA decreased its rate 15 percent in 2016 as the drought adder was close to being paid off. That resulted in cost savings of \$9 million for MRES members. While the drought adder component of the firm power rates will continue to exist, the actual amount charged could go to zero on January 1, 2018, which would result in an additional estimated rate decrease of almost \$8 million to MRES members.

However, WAPA also is proposing to eliminate the five-percent voltage discount for all customers. Among the MRES membership, most members still receive the discount at this time, but some of the larger Southwest Power Pool members who are now receiving transmission payments have lost the discount recently.

The proposed rate public process is scheduled to begin in late June with the publication of two *Federal Register* notices. Once the *Federal Register* notice on the proposed rate process is published, a 90-day public comment period will begin.

Information/comment forums will be held during the comment period. A public meeting is scheduled for July 27 in Sioux Falls. The final rates notice will be published in the *Federal Register* in October 2017, with the final rates taking effect Jan. 1, 2018. Once those final rates are published, a much more accurate estimate of the impact to an individual community can be determined.



# Ohio company suggests technology for alleviating sedimentation at Lewis and Clark Reservoir

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funds to alleviate sedimentationcaused problems on the Missouri River mainstem reservoirs.

The plan involves the use of collectors near the confluence of the Niobrara and Missouri Rivers that, according to the Kurtz Bros.' report, would reduce sedimentation coming from the Niobrara River by up to 60 percent. The Niobrara River contributes an estimated 45 percent of the sediment filling Lewis and Clark Lake, which is the Missouri River reservoir located above the Gavins Point Dam near Yankton, S.D.

"Harvesting sediment before it makes its way to Lewis and Clark will extend the reservoir's lifespan and would be an important step toward making the reservoir sustainable," said MSAC President Larry Weiss. In addition, the collection of sediment could provide borrow material for the future Highway 12 construction project nearby. That highway project is estimated to cost \$215 million and requires raising about 12 miles of roadway by 14 feet.

Jason Ziss, business developer with Kurtz Bros., describes sediment collectors as "speed bumps" in the river. Kurtz Bros. and another company, Streamside Technology, offer this method as a sustainable approach to sediment management that allows the natural energy of the waterway to self-harvest targeted sizes of bedload sediments (particles in the water that are transported along the bed).

"As bedload tumbling along the bottom of the river passes over an interceptor, the sediment will drop in the open grate hopper and be pumped on shore," Ziss said.

Kurtz Bros., in its description of the sediment collector technology explains how the system would work. "Water from the river is used to flush upward from the bottom of the hopper, raising the sediments, which are drawn with a pump as slurry through a pipe and fed to a screw conveyor on shore. Sands fall off the end of the screw conveyor through a sorter where it is stacked and made available to the

open market as a uniform sand or aggregate."

MSAC Executive Director Sandy Stockholm said the Kurtz Bros., report has created a great deal of optimism for Lewis and Clark Lake, which is approximately 30 percent full of sediment and is projected to be 50 percent full by 2045.

"We know there is a long way to go in seeing this idea implemented. However, knowing sediment collectors could provide a method of extending the lifespan of Lewis and Clark Lake, and a material that can be reused for other projects, gives it a lot of traction," Stockholm said. "Reusing sediment for beneficial uses, which right now creates problems for the Niobrara area and fuels river delta growth further into the lake, sounds like an incredibly responsible idea to pursue and explore."

# MRES Community Leader Award goes to two long-time officials

MRES honored two long-time leaders from member cities with the organization's Community Leader Award during the MRES Annual Meeting. The honorees are Dave Foltz of Rock Rapids, Iowa, and Jeff Russo of Lakota, N.D.

The award was established in 2003 to honor individuals from MRES member communities who have provided many years of leadership and service to their communities and utilities. Harold Schiebout of Sioux Center, who serves as chairman of the MRES Board of Directors, presented the awards.



Dave Foltz, of Rock Rapids, Iowa, right, accepts the Community Leader Award from MRES Board Chairman Harold Schiebout.



Lakota, N.D., Mayor Jeff Russo, left, accepts the Community Leader Award from MRES Board Chairman Harold Schiebout.

Foltz serves as chairman of the Rock Rapids Utilities Board of Trustees, and has been a member of that Board since 2006. From 2007 through 2011 and from 2013 to the present time, he has served as the Board's chairman.

"Dave has been a strong advocate for public power in Rock Rapids," Schiebout noted in presenting the award. "He is a

(Continued on back cover)

# Five re-elected to Board; officers re-elected

Five members of the MRES Board of Directors were re-elected to three-year terms during the organization's Annual Meeting May 11 in Sioux Falls.

They are Harold Schiebout, Sioux Center, Iowa; Vernell Roberts, Detroit Lakes, Minn.; Bill Schwandt, Moorhead, Minn.; Scott Hain, Worthington, Minn.; and Steve Meyer, Brookings, S.D.

At the Board's monthly meeting May 11, the existing slate of officers was re-elected. Officers are: Schiebout, chairman; Don Johnston, Flandreau, S.D., 1st vice chairman; Schwandt, 2nd vice chairman; James Hoye, Rock Rapids, Iowa, 3rd vice chairman; Norris Severtson, Lakota, N.D., 4th vice chairman; and Brad Roos, Marshall, Minn.; secretary-treasurer.

## Cyber Security will be a featured topic at MRES® Legal Seminar

MRES will host its annual Legal Seminar Thursday, Aug. 3 at the MRES Headquarters in Sioux Falls.

Featured topics include cyber security, drones, governance, and service territory.

Dustin Berger, an attorney with Holland & Hart, LLP, of Cheyenne, Wyo., is one of the featured speakers. His topic is titled: "A Deep Dive into Cyber Security: A Framework for Analysis, Privacy Issues, and Mitigating Risk with Insurance."

MRES Information Systems Manager Rich Kruthoff will present "Cyber Security Threats: Tips & Tools to Protect Your Business."

Andrew Wills, Government Relations director and counsel for the American Public Power Association, will take up "Flying Above the Rest: Navigating Federal Drone Regulations for Utility Operators."

Kathleen Brennan, an attorney with

McGrann Shea Carnival Straughn & Lamb Chartered of Minneapolis, will discuss "Exceptions to State Service Territory Laws."

MRES Legal Director Mrg Simon will conclude the seminar with her presentation, "Governing for Excellence: Counsel's Obligations Under Professional Rules and Best Practices.

Registration is due July 21 and can be completed online by going to the "Events" tab on the MRES website, www.mrenergy. com. Online registrants will receive a confirmation email from MRES. If you do not receive that email, try registering again or contact MRES Paralegal Tasha Altmann at tasha.altmann@mrenergy.com.

Room reservations can be made by calling the Holiday Inn and Suites at 605-275-4155. A special rate of \$89 plus tax is available by mentioning the MRES Legal

Seminar. The block of sleeping rooms will be held until July 19. The hotel is located at 3821 W. Avera Drive in Sioux Falls, across the street from MRES Headquarters.

Those planning to arrive in Sioux Falls Wednesday evening are invited to attend a casual dinner at The Market Eatery & Wine Bar, 196 East 6th Street, Suite 101, in downtown Sioux Falls beginning at 6 p.m. Guests are welcome. The evening dinner is at no charge for registrants, and \$25 for guests. Please note if you plan to attend so that reservations can be made.

FEES for the seminar are \$150 for lawyers and \$75 for non-lawyers. MRES is applying for 5.75 hours of regular continuing legal education credits and 1 hour of ethics credit in Iowa, Minnesota, and North Dakota and through the National Association of Legal Assistants.

# Interns receive DEED awards





Congratulations go to MRES interns Zach Andera and Amanda Schmunk for receiving awards from the American Public Power Association's Demonstration of Energy & Efficient Developments (DEED) program. Zach, a senior electrical engineering student at South Dakota State University, was awarded a DEED scholarship. Amanda, a third-year student at the University of South Dakota School of Law, was awarded, along with MRES, a grant to support her internship. In the left hand photo, Zach is pictured at right with MRES Transmission Services Manager Terry Wolf. In the right hand photo, Amanda is pictured at left with MRES Legal Director Mrg Simon.



# Editor's Note: This is the second in a series of articles dealing with the topic of Smart Grid and how its application can benefit MRES members.

Information technology has transformed our lives in many ways. Think of the advances in the past 10 to 20 years in telephone communications, Internet access, personal computing, television and entertainment, to name a few. Would you have imagined 10 years ago that a voice coming over your phone or car radio would tell you every turn to make while traveling? Now, Global Positioning System (GPS) navigation is considered commonplace and we expect it to be available everywhere.

The electric industry has been slower to modernize, but exciting new technologies paired with communication systems, can now provide benefits to customers, utilities, communities, and the nation. There are many reasons why these "Smart Grid Technologies" (SGT) should be considered by MRES members.

#### Benefits for the front office

Advanced Metering Infrastructure (AMI), often referred to as the backbone of the Smart Grid, can bring many billing, metering, and customer-service efficiencies to a utility. With AMI's ability to get instantaneous and accurate meter readings on demand, it provides much more than the cash register function that old meters delivered. AMI means no more estimated bills, no more rereads, and no special trips to read meters when customers move in or out.

In addition, AMI can significantly speed up the billing cycle, allowing a utility to produce bills immediately after collecting the reading, rather than waiting up to a month for all of the meters in town to be read. In turn, the faster billing cycle can improve the utility's cash flow and reduce the number of uncollectable accounts.

One of the favorite features for utilities is the ability of AMI to connect and disconnect meters from the utility office.

# Advanced Metering Infrastructure: What's in it for utilities?

Utility workers no longer need to put themselves in danger by physically visiting customer sites to shut off meters for non-payment.

Customer service representatives (CSRs) love the functionality of an AMI system too. Reports and a dashboard are immediately available to CSRs to answer billing questions, resolve high bill complaints,

instantaneously check customer usage, see power outages on a map, see dead meters, and identify water leaks, meter tampering, and energy theft. CSRs also can identify voltage problems and other power quality issues.

#### Benefits for rate making and analytics

The interval meter data produced by the AMI system gives the utility new information and tools to segment customers, to more accurately determine cost-ofservice, and to develop new rate options.

MRES plans to implement wholesale time-of-use rates, or a similar type of dynamic rate structure, by 2023. An AMI system would allow MRES

members to pass those rate signals along to their retail customers and more accurately match electricity charges to costs.

Time-of-use and time-of-generation data

will also be necessary in the future for the utility to accurately recover its costs from customers who have installed their own generation, such as solar panels.

#### Benefits for the distribution system

The AMI system can provide a wealth of operational data that utilities can use to make the distribution system more efficient and responsive. Not only does interval data come in from every meter in town, sensors can be placed throughout the distribution system to provide information on transformers, breakers, circuits, reclosers, etc. Reports can be generated daily or on-demand, alerting electrical staff to various problems throughout the system.

Reliability is one of critical foundations of a public power utility. AMI can enhance the utility's reliability in a number of ways. Outage management: The AMI system can provide line workers with real-time notification of outages when they occur, can identify the outage area, and, in some cases, can pinpoint the cause of the outage. This feature may not immediately seem worthwhile for small communities, but when a line worker gets that outage alert at 3:00 a.m., on a cold winter morning, and can drive straight to the outage to make repairs, it can save valuable time and work. When the problem has been repaired, the line worker also can easily verify on a map that power has been restored to all customers.

Power quality: If the utility is concerned about a power quality problem, the AMI system can give the utility the information it needs to provide better regulated power. For example, each meter throughout the system is also a voltage monitor. Over-voltage and under-voltage alarms, daily minimum and maximum readings, and on-demand and interval voltage data will allow the utility to optimize voltage throughout the

system. And, the utility can adjust voltage during peak times to

reduce peak demand,
while ensuring that no
customer receives
voltage below the
standard bandwidth.
Hand-in-hand
with voltage control,
comes volt-ampere
reactive (var) control
to help utilities monitor and

improve power factor while reducing the need for and/or optimizing capacitors. Maintaining a high power factor can help a utility maximize transformer and line utilization, improve voltage performance, and help defer the need for system improvements.

These are just a few of the many advantages of an AMI system that provides two-way communications between customer meters, sensors on the system, and the utility. MRES urges each member to start thinking about whether an AMI system would be a good investment for your utility, allowing you to improve efficiency, make better use of existing assets, and enhance reliability and power quality.

In the next edition of *MRES Today*, we'll discuss the value of AMI for customers.



Luverne, Minn., Mayor Pat Baustian speaks at a news conference announcing that trū Shrimp, a Balaton, Minn., company will build a shrimp production facility in Luverne. Seated to Mayor Baustian's right is trū Shrimp President and CEO Michael Ziebell. Seated to his left are Minnesota State Sen. Bill Weber and Lewis & Clark Regional Water System Executive Director Troy Larson.

# Company to develop shrimp production facilities in Luverne and Marshall

The trū Shrimp Company of Balaton, Minn., announced June 13 that it plans to build a \$50+ million shrimp production facility, "Luverne Bay Harbor" in Luverne, Minn., and develop a shrimp hatchery, "Marshall Cove Hatchery" in Marshall, Minn.

In Marshall, the company also plans to renovate a vacant USDA-approved processing facility to prepare the more than 8 million pounds of shrimp estimated to be produced by a single harbor annually. Both Luverne and Marshall are MRES members.

Finally, the company announced that construction of a training facility, "Balaton Bay Reef" in Balaton, will begin this summer. This facility, adjacent to the trū Shrimp Innovation Center and Laboratory, will be used to train personnel to work in the shrimp production harbors.

Construction of the Balaton training facility, and the Marshall hatchery and renovation of the processing facility is scheduled to begin this year. Groundbreaking for the Harbor in Luverne is scheduled for early 2018. Michael Ziebell, president and CEO of trū Shrimp, said construction of the facilities in both Marshall and Luverne are a major step toward developing a large-scale shrimp aquaculture industry in Minnesota.

"What is happening in Minnesota has not been done anywhere in the world," Ziebell said. "We are creating an industry that will supply the world with safe, clean, and abundant shrimp. There are 1.6 billion pounds of shrimp consumed annually in the U.S., and 80 percent of it is imported largely from Southeast Asia.

"We are often asked why raise shrimp in Minnesota, and the answer is because the feed is here. Economically and environmentally, it makes much more sense to raise shrimp near their food source than to ship feed to shrimp raised in coastal ponds thousands of miles from the U.S. market. Until now, the technology to effectively raise shrimp in the Midwest United States on a large scale did not exist; now it does and we have proven it," Ziebell said.

An economic impact study conducted by the University of Minnesota indicates that construction and operation of a single harbor would generate more than \$48 million in economic contribution. Construction is projected to result in \$14.5 million of labor income and support an estimated 330 jobs. Once the nineacre structure is built, it will continue to generate an estimated \$23 million in economic activity and provide employment directly and indirectly for 124 people.

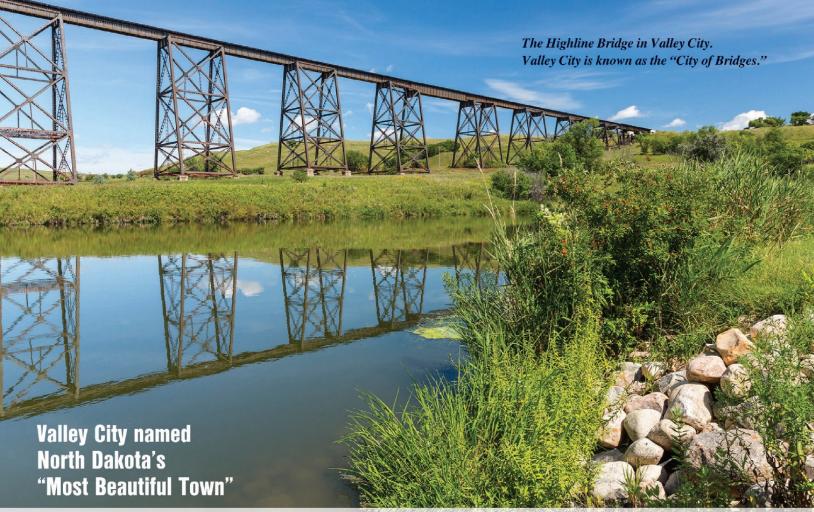
"This is a tremendous economic boon for Luverne and southwest Minnesota," said Luverne Mayor Pat Baustian. "It's also going to benefit the larger rural community. The shrimp are fed primarily soybeans, corn, and hard red wheat, which positively affects the bottom line of every farmer in Minnesota. Anytime we can help our local farmers is a plus for Main Street Luverne. When our farmers do well, the whole region does well."

Marshall Economic Development Authority Director Cal Brink said becoming the center of a new industry will generate additional high-skilled jobs in Marshall now and well into the future. "As trū Shrimp continues to grow and develop, Marshall will also

grow," Brink said. "It's a rare opportunity to become the center of a new source of protein production.

Immediate construction of the shrimp hatchery and renovation of an existing processing facility is a significant economic driver for Marshall."





Expedia, Inc., one of the world's leading travel companies, has named Valley City, N.D., as North Dakota's "Most Beautiful Town." The distinction was noted in a blog by Chloe Mulliner an Expedia Viewfinder author. Valley City is a member of MRES.

Mulliner noted that the mission was to pinpoint the most beautiful places to travel in every state that may not be on a traveler's radar. "Because beauty is impossible to define, we took into account all kinds of aesthetically pleasing characteristics, from historical attractions to natural landscapes," she wrote.

"We all know major places like New York City and San Francisco exude beauty, so we scoured through villages, towns, and cities to find lesser-known destinations that will make you sigh with wonder."

For North Dakota, that town is Valley City. Here is what she said about the community:

"Settled cozily along the Sheyenne River, pretty Valley City is home to 11 historic bridges, some of which date back as far as the 1890s. Take a tour of these celebrated arches, and then see what's in store at the Medicine Wheel Park. The 30 acres of serene parkland feature the impressive medicine wheel solar calendar, native burial grounds, and even a perennial garden. On your way out of town, take the Sheyenne River Valley National Scenic Byway for unbeatable views."

David Schelkopf, city administrator credited the citizens of Valley City. "They play a vital role in this achievement. Without their continued support and efforts, keeping Valley City a beautiful place would be impossible." Schelkopf also emphasized that the city's Parks and Recreation employees need to be recognized. "Every day, these employees show their dedication and apply their work experience, as they go about keeping the city beautiful.

"Of course it is always nice to have the natural beauty from the Sheyenne River Valley. It is a great canvas to work with," Schelkopf said.

Valley City is known as the "City of Bridges," and among those are the wooden Valley City State University Footbridge and the Highline Bridge. The Highline Bridge is one of the highest single track rail bridges in the nation and is a National Civil Engineering Landmark.





## APPA names RP3 and Safety Award honorees

Six MRES member municipal electric systems have been recognized by the American Public Power Association (APPA) as Reliable Public Power Providers (RP<sub>3</sub>). In addition, six member systems have earned APPA Safety Awards of Excellence for 2016.

The RP<sub>3</sub> program recognizes utilities that demonstrate high proficiency in four key disciplines: reliability, safety, work force development, and system improvement. Criteria within each of the four RP<sub>3</sub> areas are based upon sound business practices and recognized industry leading practices.

There are three designation levels for utilities of all sizes. These are: Diamond for utilities that earn 98 to 100 percent of the possible points, Platinum for utilities that earn 90 to less than 98 percent of the possible points, and Gold for utilities that earn 80 to less than 90 percent of the possible points.

MRES members that have earned these designations, which stay in effect for three years, are:

• Platinum Level

ALP Utilities, Alexandria, Minn.

Hutchinson Utilities Commission, Hutchinson, Minn.

Marshall Municipal Utilities, Marshall, Minn.

Moorhead Public Service, Moorhead, Minn., which earned the designation in 2016

• Gold Level

Detroit Lakes Public Utilities, Detroit Lakes, Minn.

The Safety Awards are given to public power systems that demonstrate outstanding records of worker safety based on work-related reportable injuries or illnesses and the number of worker-hours as defined by the federal Occupational Safety and Health Administration Members earning the award were:

- In Group A, for systems with fewer than 15,000 worker-hours of exposure

  Sioux Center Municipal Electric Utility, Sioux Center, Iowa, 1st place 0 incidents
- In Group B, for systems with 15,000 to 29,999 worker-hours of exposure **City of Pierre Electric Department**, Pierre, S.D., 1st Place 0 incidents **Worthington Public Utilities**, Worthington, Minn., 2nd Place 1.15 incident rate
- In Group C, for systems with 30,000 to 59,999 worker-hours of exposure **Denison Municipal Utilities.** Denison, Iowa, 1st Place 0 incidents
- In Group D, for systems with 60,000 to 109,999 worker-hours of exposure **Detroit Lakes Public Utilities**, Detroit Lakes, Minn., 1st Place 0 incidents **Marshall Municipal Utilities**, Marshall, Minn., 1st Place 0 incidents

MRES congratulates all of the award winners for their excellence in providing a high level of service to their communities and for their culture of safety.



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# MRES Community Leader Award goes to two long-time officials

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regular and active participant in the MRES Annual Meeting and also in the American Public Power Association's annual Legislative Rally."

"Dave has also participated in MRES Policy Makers Dinners and Area Meetings, and he is a strong advocate for the MRES Bright Energy Solutions energy-efficiency program."

In Rock Rapids, Foltz is a 20-year veteran of the fire department and he also serves as a referee for high school football.

Russo, who serves as Lakota's mayor, has served on the Lakota City Council since June 2002 and as mayor since October 2014.

"Mayor Russo is very involved with the day-to-day electric and general operations for Lakota Municipal Utilities and he stops by almost daily to visit with the staff," Schiebout said. "He has an open-door policy that allows the public to better understand Lakota's system and he always takes the opportunity to answer questions from citizens."

Russo also was praised for his service with the North Dakota National Guard and his commitment to having daily phone conversations with Lakota staff even while on active duty during the Dakota Access Pipeline protests.

In addition, Russo is a regular participant in MRES activities including Area Meetings and Legislative Dinners.

