Building strong communities through a well-trained workforce

A publication of the Municipal Electric Systems of Oklahoma June 2022

New membership dues go into effect July 1

Effective July 1, MESO members will see a new membership dues schedule.

First announced in March, the new dues formula is based on kilowatt usage with minimum and maximum dues amounts.

"Our membership dues formula benefits the members and the association," Tom Rider, General Manager, said.

"The formula provides a process for members to estimate what their future dues could be early in their budget development process," Rider added.

The dues formula is annual kilowatt usage x 0.000075. Additionally, there is an approved maximum annual three percent (3%) increase option. Before the 3 percent option is approved, the Board will consider a number of factors. The final dues for each member will be sent out by mid-March each year.

In approving the dues formula, the Board established maximum and minimum dues levels. For 2022, the maximum dues a member will pay is $15,000 and the minimum is $600.

"We believe this dues formula is most equitable for our members," Rider said. "Members who are experiencing growth, and its related income increase, could pay more while those who are experiencing a decline in usage could pay less."

MESO members from Public Power utilities outside of Oklahoma pay a fixed dues amount.

Questions about the new dues formula may be directed to Rider at tom@meso.org. Billing and payment questions may be directed to Deborah Miner-Gonzales, MESO Director of Administration and Finance, at deborah@meso.org.

Wanted: Training Hosts

As MESO moves its extended-length professional development training into a regional format, we're looking for Training Hosts.

Training Hosts are member municipalities with a facility conducive to effective training.

"To be considered, the meeting room should be large enough to hold 30 people comfortably at round tables or at table pods," said Tom Rider, General Manager. "Additionally, there must be several restaurants within the area since participants will have lunch on their own."

A member municipality selected to host training receives two complimentary registrations to the event they host.

For more information about becoming a Training Host click here or go to meso.org.

Contact Tom Rider, General Manager, at tom@meso.org or Cheryl Adams, Assistant General Manager, at cheryl@meso.org if you are interested in hosting a training.

In This Issue

Fairview to host first of MESO's Regional Supervisor Training Series

MESO's first regional Supervisor Short Course will be hosted by the City of Fairview with others to follow.

As a MESO membership benefit, each member municipality receives one free enrollment for the regional training in their area. Registration information will be sent to members in July.

The program will meet one day a week with six meeting dates. The course consists of 12 modules, two presented each training day.

The dates of the Fairview Course are September 13, 20, 27 and October 4, 11, 25.

For more information about the Supervisor Short Course or the topics covered, please contact Tom Rider at tom@meso.org.

Register today at meso.org

MESO Basic Lineman School

June 14-16 • Fairview, OK

Underground Residential Distribution (URD) Problem Solving 101

July 26-27 • Kingfisher, OK

GRDA & TPWA celebrate 75 years

GRDA and the Tahlequah Public Works Authority recently celebrated their 75-year partnership.

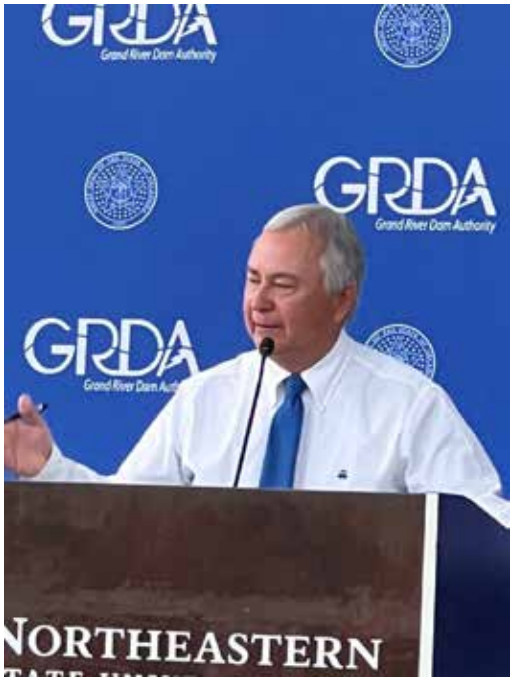
In remarks during the celebration, GRDA President/Chief Executive Officer Dan Sullivan said, “we exist to serve our customers and we appreciate those long-term commitments, relationships, and partnerships.”

A powerful history …

In 1902, Tahlequah’s population was approximately 1,800. It was at that time the Hocking Investments Company proposed to build an electric light plant and sell it to the City of Tahlequah.

The franchise was granted in October 1902 and then in October 1903, Tahlequah Power and Light was born. The original generators/dynamos burned coal to fuel generators that produced electricity. The site was located south of the Southeast corner of East Choctaw Street and South Water Ave.

In 1921, the new light plant was built in its present location on West Keetoowah Street. It also burned coal into the late 1920’s. At that time, the west end of the building was extended to house a new diesel engine to produce electricity. A second diesel engine was added in 1932.



Mike Doublehead, TPWA General Manager

In 1945, to supply an ever-increasing demand for electricity, Tahlequah started purchasing some electricity from the Grand River Dam Authority (GRDA), which was producing hydroelectricity at the Pensacola Dam (completed in 1940). In May 1947, the first of six contracts between GRDA and Tahlequah was signed, making Tahlequah GRDA’s fifth overall customer.

Since that time, Tahlequah and GRDA have remained public power partners, working together to provide all the benefits of public power to the citizens of Tahlequah.

Next month, GRDA will celebrate 75-year partnerships with Miami and Wagoner.

From the American Public Power Association – Distributed Energy Resources

DOE, National Labs Request NAESB To Set Standards For Distributed Resources

The Department of Energy (DOE), Lawrence Berkeley National Laboratory (LBNL), and Pacific Northwest National Laboratory (PNNL) have submitted a joint request for standards development to the North American Energy Standards Board (NAESB) seeking to harmonize grid service terminology and definitions supporting distributed energy resources offered by the organized markets and distribution systems.

The aim of the request is to create standardized, technology-neutral grid service definitions that can benefit both wholesale and retail electric market interactions.

The development of NAESB standards will promote more efficient wholesale and retail electric market operations while advancing market utilization of distributed energy resources, according to the request.

The parties submitted the request in support of the DOE’s Grid Modernization Laboratory Consortium’s efforts to modernize the nation’s electric grid.

“A lack of common industry terminology regarding grid services can be a roadblock to the interoperability of distributed energy resources and the development of other standardized practices,” Richard Brown, principal investigator for the Grid Modernization Laboratory at LBNL, and Steve Widergren, co-principal investigator at PNNL, said in a statement.

“NAESB standardization of grid service definitions could provide a foundation for a common framework that would simplify distributed energy resource integration and enable the comparison of grid service usage across the markets, leading to improved accuracy and consistency of information concerning

(see DOE, NATIONAL LABS REQUEST FOR STANDARDS, *page 8)*

Job Training & Safety

Underground Residential Distribution (URD) Problem Solving 101 training scheduled

The MESO Underground Residential Distribution (URD) Problem Solving 101 training will be July 26-27 in KIngfisher. Registration is open at meso.org.

The training is a two-day class designed to help Public Power professionals who work on URD System Faults.

Participants leave the training with improved skills in three areas: locating faulty cable using different methods, for example, radar and sonar equipment; testing isolated cable to ensure proper grounding; and, repairing damaged or faulty cable

The course schedule is Tuesday, July 26 – 8:30 a.m. to 4 p.m. (Registration begins at 8 a.m.) and Wednesday, July 27 – 8 a.m. to 4 p.m.

The registration fee for the training is $199 per person (includes lunches and book). The training will be held at 313 South 3rd Street, Kingfisher, Oklahoma.

Attendees work closely with professionals from other communities in both field and classroom settings. Both journeymen and apprentice lineworkers will gain valuable information to help deal with situations that will come up in their city.

Participants must bring a hard hat, work gloves, long-sleeved shirt, safety glasses (eye protection), hand tools (lineman pliers, 10” adjustable wrench, screwdriver and hammer), rubber gloves (with glove protectors), and utility uniform.

Tom Dougherty, MESO Director of Job Training and Safety, and Rusty Brown, Retired Line Foreman (Duncan) and MESO Safety Trainer are the instructors for the course.

GRDA and OMPA are sponsors of the training.

For more information about the training, contact Dougherty at tomd@meso.org. Registration questions may be directed to Deborah Miner-Gonzales, MESO Director of Administration and Finance at deborah@meso.org.

SAVE THE DATE!

2022 MESO Lineworkers Rodeo & Safety Training

September 21-22 • Edmond, OK

MESO Decision Makers Conference

November 2-3 • Midwest City, OK

MESO Affiliate/ Associate

Allgeier Martin Consulting Engineers
Altec
Arkansas Electric Cooperatives, Inc.
Automated Energy
Bashlin Industries
Bevins
Border States Electric
Buckingham Manufacturing
Clifford Power Systems, Inc.
Davis H Elliot
Deloney Company
EHV Solutions

Elgin B Robertson
Equity Technical Services

ESC Engineering
Evergy
GRDA
Green Equipment Company
GridLiance
Guernsey
Hometown Connections
Industrial Truck Equipment
INNER-TITE Corp
Innovative Systems LLC

Integrity Tools & Safety
Jelco

J.L. Matthews

Jones Power Products
K D Johnson Inc
Kiewit Infrastructure South Co.
LAPCO

Milwaukee Tool
mPower Innovations
Oberlender & Associates
Okie811
Oklahoma State University Institute of Technology

OMAG
OMPA
T&E
T&R Electric Supply Co
Techline Inc
TESCO
Ultimate Tool and Safety
Universal Field Services, Inc.
Utilismart Corporation
Utility Sales Agents of North Texas
Utility Sales Agents of Oklahoma

Utility Solutions, Inc.

Utility Technology Services
Wesco Distribution

See "Associates" @ meso.org

Job Training & Safety

MESO Basic Lineman School scheduled for June 14-16

The 2022 MESO Basic Lineman School will be held June 14-16, 2022 in Fairview, OK. Registration is open at meso.org.

This course includes classroom training sessions covering the basics of electricity, lively discussions, and a supporting workbook loaded with reference materials and classroom activities. Hands-on instruction is performed outdoors, where a variety of conventional and not-so-conventional equipment is placed in the hands of workshop participants.

This training will assist workers whose job assignments may require pole climbing, assisting journeymen, and operating mechanical equipment. While this course covers BASIC materials and is designed for Apprentice Linemen, professionals at any skill level or knowledge will benefit by participating.

Tom Dougherty, MESO Director of Job Training and Safety; Rusty Brown, Retired Line Foreman (Duncan) and MESO Safety Trainer; and Anthony Hale, Line Crew Superintendent, OMPA are the instructors for the course.

The registration fee for the training is $199 per person (includes lunches and book). The training will be held at the OMPA Fairview Field Office (2124 Commerce Street).

Training will begin at 8:30 a.m. each day. Participants are encouraged to arrive early, and lunch will be provided on-site. Training is expected to be completed by no later than 4 p.m. each day.

GRDA and OMPA are sponsors of the training.

For more information about the training, contact Dougherty at tomd@meso.org. Registration questions may be directed to Deborah Miner-Gonzales, MESO Director of Administration and Finance at deborah@meso.org.

From the Southwest Power Pool

SPP anticipates sufficient energy resources to keep the lights on throughout the summer

Southwest Power Pool, the grid operator responsible for coordinating electric reliability for a 14-state region in the central U.S., expects to have enough generating capacity to meet the regional demand for electricity through the summer season.

For the season lasting June – September 2022, SPP anticipates that the demand for electricity will peak at 51.1 gigawatts (GW) and also studied scenarios with higher-than-expected demand. Its diverse fleet of member utilities' conventional and renewable generating resources will be prepared to serve at least 55.5 GW, taking both planned and a margin of unplanned outages into consideration. SPP's all-time peak demand for electricity was 51 GW, which occurred July 28, 2021.

SPP's studies consider factors including:

- Planned and unplanned outages of both generating units and the high voltage transmission lines that deliver electricity from where it's produced to local distribution systems where it's delivered to homes, businesses, and industrial customers.
- Drought conditions that will impact the SPP footprint and are likely to lead to increased irrigation loads: Electricity is needed to power the equipment used to water crops, and decreases in precipitation generally lead to increased electricity use.
- Assumptions regarding availability of wind energy based on last year's minimum wind output.
- A "high load summer model" that assumes electricity use will peak above SPP's record demand. SPP's record peak demand is 51,037 megawatts (MW).

SPP assesses electricity supply and demand from a high-level, regional perspective and bases its studies on data provided by generator and transmission owners and member utilities who directly serve residential, commercial, and industrial customers.

While SPP anticipates sufficient resources to meet the demand across its 14-state balancing authority area, the summer seasonal assessment did identify potential local issues that it will address with the entities responsible for serving load in those areas. SPP will likewise address potential fuel-supply constraints with generator owners and operators on a case-by-case basis.

"SPP's job is to prepare for both expected and unexpected scenarios that could affect electric reliability across our region," said SPP Senior Vice President of Operations Bruce Rew. "We work closely with our member utilities to make sure our forecasts are as dependable as they can be, and then maintain contingency plans and monitor the regional grid around the clock so we can respond quickly and effectively if things don't go as planned. We know how much the 18 million people in our region depend on our services, and we do everything in our power to responsibly and economically keep the lights on."

On May 12, 2022, SPP declared a Resource Advisory effective May 13-14 in response to higher-than-normal temperatures and other factors.

The advisory required no action on behalf of the general public but is meant to raise awareness among generation and transmission operators regarding circumstances that could require action on their part to prevent impacts to regional reliability. When weather, fuel-supply or other conditions create potential impacts to reliability, SPP publishes updates at https://www.spp.org/grid-conditions. Individuals may also subscribe to email updates via SPP's Grid Conditions Exploder by creating an account at SPP.org .

About SPP: Southwest Power Pool, Inc. is a regional transmission organization: a not-for-profit corporation mandated by the Federal Energy Regulatory Commission to ensure reliable supplies of power, adequate transmission infrastructure and competitive wholesale electricity prices on behalf of its members. SPP manages the electric grid across 17 central and western U.S. states and provides energy services on a contract basis to customers in both the Eastern and Western Interconnections. The company's headquarters are in Little Rock, Arkansas. Learn more at SPP.org.

MESO held its Level 1 Climbing School in Cushing, Tuesday, May 10 and Wednesday, May 11

Lineworkers who participated in the Climbing School included:

Jesse Harris & Shane Vermillion – Altus
Seth Campbell & Joe Hargrove – Cushing
Justin Parker – MIami
Trevor Adkins – Pawhuska
Tavin Hunt & Chance McClendon – Stroud
Derek Hayes & Casey Walters – GRDA
Joseph Maschino & Ryland Stumpff – Kingfisher

Public Power Leaders meet with Governor

Municipal Utility Board -Pryor Creek's Assistant General Manager Travis Willis and General Manager Jared Crisp with Governor Kevin Stitt at a recent luncheon at the MidAmerica Expo Center.

From the American Public Power Association – Distributed Energy Resources

DOE Study Sees 1,400 GW Of Economic Wind Power Potential

By Peter Maloney

There are nearly 1,400 gigawatts (GW) of economic wind power capacity in the United States, an amount equal to more than half of the nation's current annual electricity consumption, according to a Department of Energy's (DOE) study.

The results of the Distributed Wind Energy Futures Study, which was conducted by the National Renewable Energy Laboratory (NREL), were detailed in two snapshots in time, 2022 and 2035, and done within the context of the Biden administration's established targets of 100 percent carbon dioxide free electricity supply by 2035 and net-zero greenhouse gas emissions economywide by 2050.

In the 2022 scenario, the economic potential for behind-the-meter wind installations is 919 GW, compared with 474 GW for front-of-the-meter installations.

However, "the economics of distributed wind are highly sensitive to policies, especially those that impact project-level costs," the study said. As an example, the authors said,

"If current tax credits and net-metering policies expire as scheduled, economic potential is estimated to drop between 2022 and 2035. However, if current tax credits and policies are extended and strategically expanded, economic potential increases by more than 80% for behind-the-meter applications and by a factor of nearly nine for front-of-the-meter application."

With future policy support and "more relaxed siting conditions," the economic potential of front-of-the-meter installations could increase to more than 4,000 GW and 1,700 GW for behind-the-meter installations in an "optimistic 2035 scenario," NREL said.

There are currently about 1.1 GW of distributed wind capacity in the United States.

The study identified the Midwest and the Heartland regions as having the largest potential for behind-the-meter wind power because of a combination of high wind speeds and sufficiently high retail electricity rates. Six states in those regions – Texas, Minnesota, Montana, Colorado, Oklahoma, and Indiana – have a combined wind power potential of 500 GW, the study said.

The Midwest and Heartland regions also have strong potential for front-of-the-meter wind power, estimated at over 300 GW in the top six states: Oklahoma, Nebraska, Illinois, Kansas, Iowa, and South Dakota.

Agricultural lands make up 70 percent of the total 2022 economic potential for behind-the-meter wind power and 97 percent of the total 2022 economic potential for front-of-the-meter wind power potential.

In addition, Kansas, Colorado, Texas, South Dakota, New Mexico, and Kentucky each have more than 900 megawatts (MW) of behind-the-meter economic wind power potential in 2022 on commercial and industrial lands, the study said.

Behind-the-meter economic wind power potential in 2022 on residential lands is greatest in New York, Minnesota, Kentucky, Texas, Oklahoma, and South Dakota, the study found.

In general, California and states in the Northeast have less profitable distributed wind power potential, except in certain locations where there are significant wind resources and higher retail electricity rates, NREL said.

DOE, National Labs Request for Standards (continued from page 3)

grid service performance and metrics," Brown and Widergren said.

According to the request, it proposes to build upon existing wholesale market structures by standardizing common grid service names, definitions, and performance characteristics that align with the market product taxonomies and definitions identified in the Federal Energy Regulatory Commission Electric Quarterly Reports.

Having NAESB standards for distributed energy resources would enable wholesale market operators to associate or classify existing market products with common grid services and support more efficient communications between market operators and market participants, such as generators, distribution system operators, and distributed energy resource aggregators, the request said.

Once developed, the standards applicable to the wholesale market would provide a foundation for the development of similar retail electric standards that would serve to assist emerging retail markets to integrate, with greater consistency, the flexibilities that can be realized from distributed energy resources.

Development of wholesale market standards is expected to begin on June 14, and development of retail market standards is expected to begin later this year.

From GRDA

GRDA Police offers water safety tips

Looking forward to lake time this summer fishing, boating, and floating? If so, the Grand River Dam Authority Police Department wants to remind you of some important information that can help promote a safe time on the water.

Whether visiting GRDA's Grand Lake, Lake Hudson, scenic Illinois River or any other lake, it is important to remember that enjoyable outings always start with boating — and floating — safe, smart and sober. GRDA has shared the following "Dos and Dont's" often, but as you head to the water, keep these in mind:

- Do wear a life jacket. For those floating the river, children 13 years of age and under are required to always wear a life jacket. On the lake, children 12 years of age and younger are required to wear a life jacket on vessels under 26 feet long. However, GRDA encourages all ages to always wear a life jacket.
- Don't drink and boat. Alcohol use continues to be the single leading factor contributing to boating accidents.
- Do know the water and environment.
- Do keep a good lookout while underway.
- Do shut engines off when people are in the water near your boat.
- Do observe the nautical "rules of the road."
- Do check the weather forecast before getting underway.
- Do keep a balanced load and trim boat.
- Don't overload the boat.
- Don't ride on the gunwale, bow, seat backs or any place that is not designated for sitting.
- Don't swim or boat alone. Stay within sight of companions.
- For those floating any river, do let the commercial float operator know if anyone in the party is a first-time or novice floater(s). They may be able to pair them with an experienced paddler/floater or float the person in a raft where there is a lesser chance for capsizing.
- Don't dive into the river from bridges, bluffs, stream banks and trees.
- Do respect the weather and the water. If tired while floating, take a break on the bank or on a gravel bar to rest.

For those planning on hitting the water on a personal watercraft, the GRDA Police also offers these important safety tips:

- Don't ride tired. PWC operation requires a real sense of balance. Tired operators do not have as much balance, which means less controlled operation.
- Watch the weight. Don't carry more passengers or weight than is recommended in the PWC's owner manual. The heavier the load, the harder it is to handle and turn the PWC.
- Watch out for others. Because lake traffic changes constantly, riders must always be aware of their surroundings.
- Know what the craft is capable of. Just because a person has ridden a PWC before, don't assume they are all the same. For the most part, they are very similar, but riders must be educated about the specifics of the craft they are operating.
- Know the location on the water. Watch out for hazards such as rocks, buoys, sandbars, and skiers. Even though PWCs are designed to operate in shallow waters, it is important to remember that shallow water can become no water in a hurry. Avoid such areas.
- Never drink and ride. PWC operation requires clear thinking, quick decisions, the ability to focus, depth perception, ability to judge speed and distance and ability to track moving objects. Alcohol impairs all these abilities while also affecting balance. Oftentimes, PWC injuries occur when people fall into the water and are too inebriated to climb back on board.
- Watch the speed. Many PWC accidents are a result of excessive speed. PWC operators must match their speed to their skills. Don't be overmatched by traveling too fast.

For more information about the GRDA Police Department, contact the department at 918-256-0911.